Appendix F

Energy

West Campus Upper Plateau

ENERGY ANALYSIS

MARCH JOINT POWER AUTHORITY (MARCH JPA)

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LIST OF ABBREVIATED TERMS

%	Percent
(1)	Reference
AQIA	*West Campus Upper Plateau Air Quality Impact Analysis*
BACM	Best Available Control Measures
BTU	British Thermal Units
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
County	County of Riverside
CPEP	Clean Power and Electrification Pathway
CPUC	California Public Utilities Commission
DMV	Department of Motor Vehicles
EIA	Energy Information Administration
EPA	Environmental Protection Agency
EMFAC	EMissions FACtor
FAA	Federal Aviation Administration
FERC	Federal Energy Regulatory Commission
GHG	Greenhouse Gas
GWh	Gigawatt Hour
HHDT	Heavy-Heavy Duty Trucks
hp-hr-gal	Horsepower Hours Per Gallon
I-215	Interstate 215
IEPR	Integrated Energy Policy Report
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
kBTU	Thousand-British Thermal Units
kWh	Kilowatt Hour
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT1/LHDT2	Light-Heavy Duty Trucks
March ARB	March Air Reserve Base

March JPA	March Joint Powers Authority
MCY	Motorcycles
MDV	Medium Duty Trucks
MH	Motor Homes
MHDT	Medium-Heavy Duty Trucks
MMcfd	Million Cubic Feet Per Day
mpg	Miles Per Gallon
MPO	Metropolitan Planning Organization
MW	Megawatt
OBUS	Other Buses
PG&E	Pacific Gas and Electric
Project	West Campus Upper Plateau
PV	Photovoltaic
SBUS	School Buses
SCAB	Southern California Air Basin
SCE	Southern California Edison
SDAB	San Diego Air Basin
SoCalGas	Southern California Gas
sf	Square Feet
TEA-21	Transportation Equity Act for the 21st Century
U.S.	United States
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *West Campus Upper Plateau Project Energy Analysis* is summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the 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?	5.0	*Less Than Significant*	*n/a*
Energy Impact #2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	5.0	*Less Than Significant*	*n/a*

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
- AB 1493 Pavley Regulations and Fuel Efficiency Standards
- California's Renewables Portfolio Standard (RPS)
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)

Consistency with the above regulations is discussed in detail in section 5 of this EA.

ES.3 PROJECT MITIGATION MEASURES (MM)

The following measures (MM GHG-1 through MM GHG-11) were identified in the *West Campus Upper Plateau Greenhouse Gas Analysis Report* (2). Although these measures are designed to

reduce Project GHG emissions, they would also assist in the reduction of energy usage. As a conservative measure, to provide a worst-case disclosure of the Project's impacts, no credit has been assumed from MM GHG-2 through MM GHG-11.

MM GHG-1

Prior to issuance of each building permit, the applicant will provide March JPA with sufficient evidence demonstrating solar photovoltaic (PV) electricity generation sufficient to generate at least 30% of the building's power requirements will be installed as part of the building permit or has already been installed under a previously issued building permit for the Project.

MM GHG-2

The Project will install Energy Star certified light bulb and light fixtures.

MM GHG-3

The Project will install duct insulation to a minimum level of and modestly enhanced window insulation consistent with the Riverside County CAP criteria.

MM GHG-4

Consistent with the CAP criteria, the Project will include the following design elements: Construction of modest cool roof, defined as Cool Roof Rating Council (CRRC) Rated 0.15 aged solar reflectance and 0.75 thermal emittance; Use of heating, ventilation, and air conditioning (HVAC) equipment with a season energy efficiency ratio (SEER) of 14 or higher; Installation of water heaters with an energy factor of .92 or higher; All rooms will have some form of daylighting (e.g., skylights or windows); At least 50% of artificial lighting unit fixtures will be high efficacy.

MM GHG-5

The Project will provide enhanced insulation (rigid wall insulation R-13, roof/attic R-38).

MM GHG-6

The Project will provide greatly enhanced window insulation (0.28 or less U-factor, 0.22 or less solar heat gain coefficient [SHGC]).

MM GHG-7

The Project will provide blower door home energy rating system (HERS) verified envelope leakage or equivalent.

MM GHG-8

The Project will provide circuitry and capacity for installation of at least 20 EV charging stations consistent with the County's CAP.

MM GHG-9

The Project will provide improved efficiency heating, ventilation, and air conditioning (HVAC) (energy efficiency ratio [EER] 14/78% annual fuel utilization efficiency [AFUE] or 8 heating seasonal performance factor [HSPF]).

MM GHG-10

The Project will provide high efficiency water heaters (0.72 Energy Factor).

MM GHG-11

The Project will ensure that all rooms daylighted.

MM GHG-12

The Project will provide water efficient toilets (1.5 gallons per minute [gpm]).

MM GHG-13

The Project will provide waterless urinals.

MM GHG-14

The Project will provide water efficient faucets (1.28 gpm).

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1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed West Campus Upper Plateau Project (Project). The purpose of this report is to ensure that energy implication is considered by the March JPA, 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 Project site is located on either side of Barton Street and Cactus Avenue in the jurisdiction of the March JPA and unincorporated Riverside County, as shown on Exhibit 1-A. Interstate 215 (I-215) is located approximately 2.5 miles east of the Project site via Cactus Avenue, Alessandro Boulevard, and Van Buren Boulevard.

1.2 PROJECT DESCRIPTION

The proposed Project (as shown on Exhibit 1-B) has been analyzed consisting of the following uses:

- Building B – 1,250,000 square feet (SF) of high-cube fulfillment center warehouse use
- Building C – 587,000 SF of high-cube fulfillment center warehouse use
- Industrial Area – 725,561 SF of high-cube fulfillment center warehouse use
- Industrial Area – 500,000 SF of high-cube cold storage warehouse use
- Business Park Area – 1,280,403 SF of business park use
- Mixed Use Area – 160,921 SF of retail use (25%)
- Mixed Use Area – 482,765 SF of business park use (75%)
- 42.20 Acre Active Park (with sports fields)
- 18.08 Acres of Public Park
- The proposed Project also includes approximately 445-acre Conservation Area

According to the *West Campus Upper Plateau Traffic Analysis*, the proposed Project is anticipated to generate a total of 35,314 two-way vehicle trips per day including 33,260 two-way passenger vehicle trips and 2,054 two-way truck trips per day (in actual vehicles) (3).

The existing March JPA General Plan land use designation for the site is Business Park and Park/Recreation/Open Space. A preliminary land use plan for the proposed Project is shown on Exhibit 1-B. For the purposes of this analysis, it is assumed that the Project would be developed in two phases with an anticipated Opening Year of 2028.

EXHIBIT 1-B: LOCATION MAP

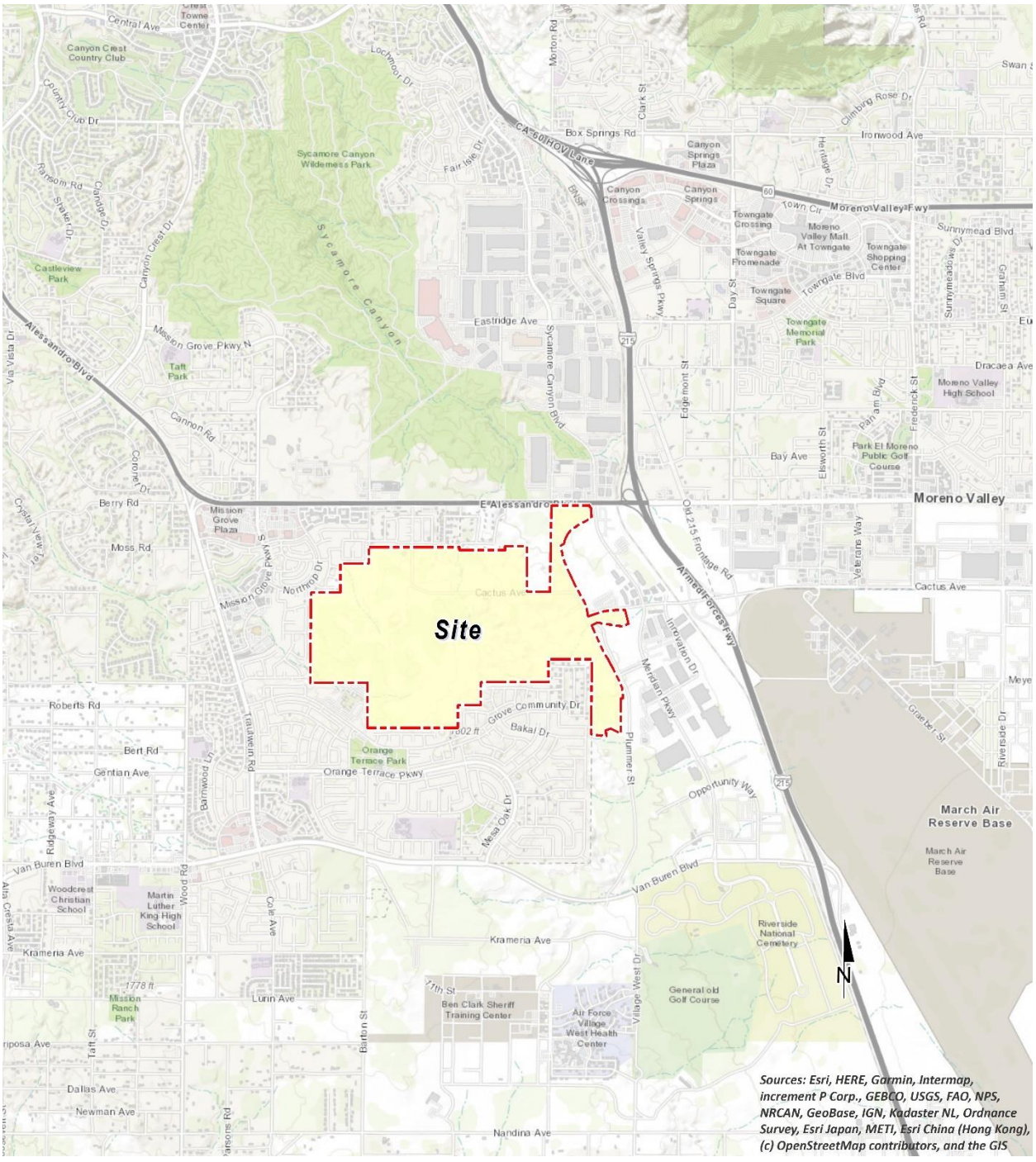
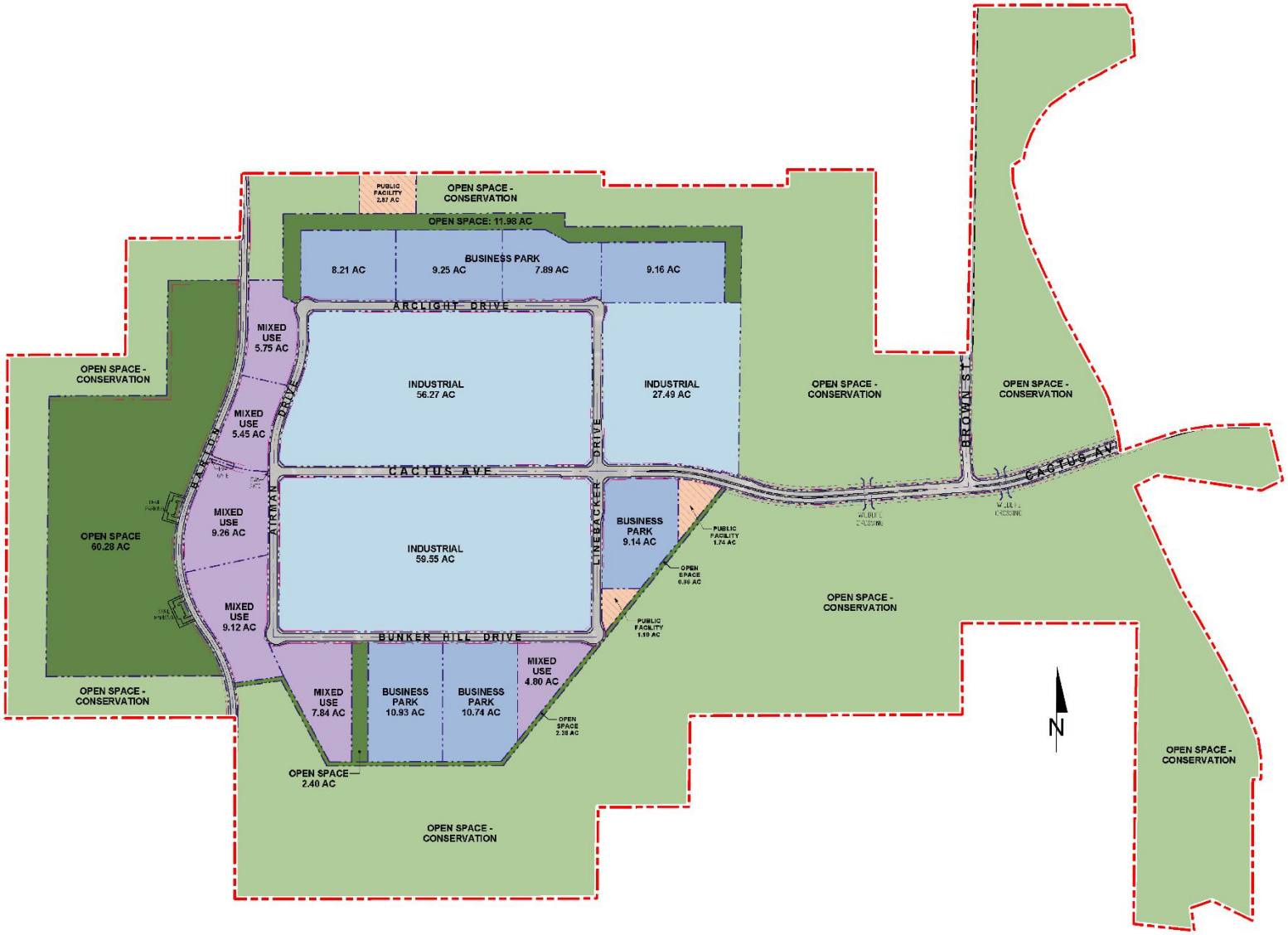


EXHIBIT 1-B: SITE PLAN



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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 2019, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2021 and included (4):

- As of 2019, approximately 7,802 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2019, approximately 662 million barrels of petroleum
- As of 2019, approximately 2,144 billion cubic feet of natural gas
- As of 2019, approximately 1 million short tons of coal

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 CEC's 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 (5)
- 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 (5)
- Data from the Department of Energy states that approximately 3.9 billion gallons of diesel fuel were consumed in 2019 (6)

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 39.3% transportation
- Approximately 23.2% industrial
- Approximately 18.7% residential
- Approximately 18.9% commercial (7)

In 2020, total system electric generation for California was 272,576 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 190,913 GWh which accounted for approximately 70% of the electricity it uses; the rest was imported from the Pacific Northwest (15%) and the U.S. Southwest (15%) (8). Natural gas is the main source for electricity generation at 42.97% of the total in-state electric generation system power as shown in Table 2-1.

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

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Percent of Imports	Total California Energy Mix	Total California Power Mix
Coal	317	0.17%	194	6,963	7,157	8.76%	7,474	2.74%
Natural Gas	92,298	48.35%	70	8,654	8,724	10.68%	101,022	37.06%
Oil	30	0.02%	-	-	0	0.00%	30	0.01%
Other (Waste Heat/Petroleum Coke)	384	0.20%	125	9	134	0.16%	518	0.19%
Nuclear	16,280	8.53%	672	8,481	9,154	11.21%	25,434	9.33%
Large Hydro	17,938	9.40%	14,078	1,259	15,337	18.78%	33,275	12.21%
Unspecified	-	0.00%	12,870	1,745	14,615	17.90%	14,615	5.36%
Non-Renewable and Unspecified Totals	127,248	66.65%	28,009	27,111	55,120	67.50%	182,368	66.91%
Biomass	5,680	2.97%	975	25	1,000	1.22%	6,679	2.45%
Geothermal	11,345	5.94%	166	1,825	1,991	2.44%	13,336	4.89%
Small Hydro	3,476	1.82%	320	2	322	0.39%	3,798	1.39%
Solar	29,456	15.43%	284	6,312	6,596	8.08%	36,052	13.23%
Wind	13,708	7.18%	11,438	5,197	16,635	20.37%	30,343	11.13%
Renewable Totals	63,665	33.35%	13,184	13,359	26,543	32.50%	90,208	33.09%
System Totals	***190,913***	***100.00%***	***41,193***	***40,471***	***81,663***	***100.00%***	***272,576***	***100.00%***

Source: California Energy Commission's 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 (9):

- California was the seventh-largest producer of crude oil among the 50 states in 2019, and, as of January 2020, it ranked third in oil refining capacity. Foreign suppliers, led by Saudi Arabia, Iraq, Ecuador, and Colombia, provided more than half of the crude oil refined in California in 2019.
- California is the largest consumer of both jet fuel and motor gasoline among the 50 states and accounted for 17% of the nation's jet fuel consumption and 11% of motor gasoline consumption in 2019. The state is the second-largest consumer of all petroleum products combined, accounting for 10% of the U.S. total. In 2018, California's energy consumption was the second highest among the states, but its per capita energy consumption was the fourth-lowest due in part to its mild climate and its energy efficiency programs.
- In 2019, California was the nation's top producer of electricity from solar, geothermal, and biomass energy and the state was second in the nation in conventional hydroelectric power generation.
- In 2019, California was the fourth largest electricity producer in the nation, but the state was also the nation's largest importer of electricity and received about 28% of its electricity supply from generating facilities outside of California, including imports from Mexico.

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 CalEEMod Version 2022.1. 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 Coast Air Basin (SCAB) and the San Diego Air Basin (SDAB) 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 2021 IEPR's provides information and policy recommendations on advancing a clean, reliable, and affordable energy system.

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 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 (11).

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, utilities 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 site 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).

TABLE 2-2: SCE 2020 POWER CONTENT MIX

Energy Resources	2020 SCE Power Mix
Eligible Renewable	**30.9%**
Biomass & Waste	0.1%
Geothermal	5.5%
Eligible Hydroelectric	0.8%
Solar	15.1%
Wind	9.4%
Coal	**0.0%**
Large Hydroelectric	**3.3%**
Natural Gas	**15.2%**
Nuclear	**8.4%**
Other	**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 and 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 commercials 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 (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) 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." (13)

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.

Based on information provided by the Project applicant, no natural gas would be used as a result of the project, and as such use of natural gas is not considered in the analysis.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. The Department of Motor Vehicles (DMV) identified 35.8 million registered vehicles in California (14), and those vehicles consume an estimated 17.4 billion gallons of fuel each year[1]. Gasoline (and other vehicle fuels) are

[1] Fuel consumptions estimated utilizing information from EMFAC2021.

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 26.4 million passenger vehicles and light trucks, and almost 8.8 million medium- and heavy-duty vehicles (14). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 10% of the nation's total consumption. The state is the largest U.S. consumer of motor gasoline and jet fuel, and 85% of the petroleum consumed in California is used in the transportation sector (15).

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2019, about 37% of the natural gas delivered to consumers went to the state's industrial sector, and about 28% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the state's utility-scale electricity generation in 2019. The residential sector, where two-thirds of California households use natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 12% of the deliveries to end users and the transportation sector consumed the remaining 1% (15).

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3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States 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)

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)

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 § 25301[a]). The CEC prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2021 IEPR was adopted February 22, 2022, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2021 IEPR provides

the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the state is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs. Additionally, the 2021 IEPR provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the state is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs (16).

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

CCR Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: 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.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that will be effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (17). The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items (18):

NONRESIDENTIAL MANDATORY MEASURES

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).

- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty EV supply equipment for warehouses, grocery stores, and retail stores.
- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per Table 5.106.8 (5.106.8).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1. 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reuse or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
    - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
    - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor- mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
    - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).
    - Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- Outdoor potable water uses in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent (5.304.1).

- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 sf or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (GPD) (5.303.1.1 and 5.303.1.2).
- Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).
- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

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.

3.2.5 California's Renewables Portfolio Standard (RPS)

First established in 2002 under Senate Bill (SB) 1078, California's Renewables Portfolio Standards (RPS) required retail sellers of electric services to increase procurement from eligible renewable resources to 20% of total retail sales by 2017 (20). The program was accelerated in 2015 with SB 350 which mandated a 50% RPS by 2030. SB 350 includes interim annual RPS targets with three-year compliance periods and requires 65% of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 was signed into law, which increases the RPS to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045 (20).

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 RPS discussed above, 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 CPUC, the CEC, and local publicly owned utilities.

- Reorganize the ISO to develop more regional electricity 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).

3.2.7 COUNTY OF RIVERSIDE CAP

The County of Riverside adopted the Updated CAP on December 17, 2019. The CAP was designed under the premise that the County of Riverside, and the community it represents, is uniquely capable of addressing emissions associated with sources under Riverside County's jurisdiction, and that Riverside County's emission reduction efforts should coordinate with the state strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner.

CAP measure R2-CE1, includes on-site renewable energy production and is required for any tentative tract map, plot plan, or conditional use permit that proposes to add more than 75 new dwelling units of residential development or one or more new buildings totaling more than 100,000 gross square feet (sf) of commercial, office, industrial, or manufacturing development. Renewable energy production shall be onsite generation of at least 20% of energy demand for commercial, office, industrial or manufacturing development, meet or exceed 20% of energy demand for multi-family residential development, and meet or exceed 30% of energy demand for single-family residential development (21).

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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* (1), 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

In addition, Appendix F of the *State CEQA Guidelines* (22) states that the means of achieving the goal of energy conservation include the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

4.2 METHODOLOGY

Information from the CalEEMod Version 2022.1 outputs for the *West Campus Upper Plateau Air Quality Impact Analysis* (Urban Crossroads, Inc.) (AQIA) (23) was utilized in this analysis, detailing Project-related construction equipment, transportation energy demands, and facility energy demands.

4.2.1 CALEEMOD

In May 2022, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod Version 2022.1. 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. Outputs from the annual construction and operational model runs are provided in Appendices 4.1 through 4.2.

4.2.2 EMISSION FACTORS MODEL

On May 2, 2022, the EPA approved the 2021 version of the EMissions FACtor model (EMFAC2021) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2021 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 EMFAC2021 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 through 2025 analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project.

4.2.3 CONSTRUCTION DURATION

Construction is expected to commence in June 2023 and will end in October 2027. 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, impacts would be reduced since emission factors for construction decrease as time passes due to emission regulations becoming more stringent[2]. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (26).

TABLE 4-1: CONSTRUCTION DURATION

Phase	Construction Activity	Start Date	End Date	Days
Phase 1	Mass Grading	6/1/2023	3/5/2024	199
	Blasting & Rock Handling	6/1/2023	3/5/2024	199
Phase 2	Remedial Grading	3/6/2024	6/6/2024	67
	Building Construction (Including Off-site)	6/7/2024	10/15/2026	615
	Architectural Coating	8/1/2026	10/5/2027	307
	Paving	8/9/2027	10/5/2027	42

4.2.4 CONSTRUCTION EQUIPMENT

Site specific construction fleet may vary due to specific project needs at the time of construction. A detailed summary of construction equipment assumptions by phase is provided at Table 4-2.

TABLE 4-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Phase	Construction Activity	Equipment	Amount	Hours Per Day	Horsepower	Load Factor
Phase 1	Mass Grading	Rubber Tired Dozers	8	8	670	0.40
		Scrapers	16	8	570	0.48
		Rubber Tired Dozers	1	8	425	0.40
		Off-Highway Trucks	3	8	500	0.38
		Tractors/Loaders/Backhoes	1	8	425	0.37
		Excavators	4	8	400	0.38
		Rubber Tired Dozers	2	8	670	0.40

[2] 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.

Phase	Construction Activity	Equipment	Amount	Hours Per Day	Horsepower	Load Factor
	Blasting & Rock Handling	Tractors/Loaders/Backhoes	2	8	400	0.37
		Off-Highway Trucks	3	8	425	0.38
		Rubber Tired Dozers	1	8	600	0.40
		Bore/Drill Rig	3	8	360	0.50
Phase 2	Remedial Grading	Rubber Tired Dozers	4	8	670	0.40
		Scrapers	8	8	570	0.48
		Rubber Tired Dozers	1	8	425	0.40
		Off-Highway Trucks	3	8	500	0.38
		Tractors/Loaders/Backhoes	1	8	425	0.37
		Excavators	2	8	400	0.38
	Building Construction	Cranes	2	8	231	0.29
		Crawler Tractors	3	8	212	0.43
		Forklifts	6	8	89	0.20
		Generator Sets	2	8	84	0.74
		Welders	2	8	46	0.45
	Architectural Coating	Air Compressors	2	8	78	0.48
	Paving	Pavers	4	8	130	0.42
		Paving Equipment	4	8	132	0.36
		Rollers	4	8	80	0.38

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. 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 (27). The proposed Project is evaluated to include the development of the following uses:

- Building B – 1,250,000 square feet (SF) of high-cube fulfillment center warehouse use
- Building C – 587,000 SF of high-cube fulfillment center warehouse use
- Industrial Area – 725,561 SF of high-cube fulfillment center warehouse use
- Industrial Area – 500,000 SF of high-cube cold storage warehouse use

- Business Park Area – 1,280,403 SF of business park use
- Mixed Use Area – 160,921 SF of retail use (25%)
- Mixed Use Area – 482,765 SF of business park use (75%)
- 42.20 Acre Active Park (with sports fields)
- 18.08 Acres of Public Park
- The proposed Project also includes approximately 445-acre Conservation Area
- Associated parking and other asphalt surfaces.

Based on information provided in the AQIA, construction activities are anticipated to occur over the course of 32 months (23). The power cost was multiplied by the building square footage and the construction duration to determine the on-site electricity usage during the construction of the Project which is estimated to be approximately $2,017,457.25.

TABLE 4-3: CONSTRUCTION POWER COST

Land Use	**Power Cost** (per 1,000 SF of construction per month)	**Size** (1,000 SF)	**Construction Duration** (months)	**Project Construction Power Cost**
Building B: High-Cube Fulfillment	$2.41	1,250.000	52	$156,650.00
Building C: High-Cube Fulfillment	$2.41	587.000	52	$73,562.84
Remaining Industrial: High-Cube Fulfillment	$2.41	725.561	52	$90,927.30
High-Cube Cold Storage Warehouse	$2.41	500.000	52	$62,660.00
Business Park	$2.41	1,280.403	52	$160,460.10
Business Park (Mixed-Use, 75%)	$2.41	482.765	52	$60,500.11
Retail (Mixed-Use, 25%)	$2.41	160.921	52	$20,166.62
Active Park	$2.41	1,838.232	52	$230,367.23
Public Park	$2.41	787.564	52	$98,697.52
Balance	$2.41	8,486.000	52	$1,063,465.52
			CONSTRUCTION POWER COST	***$2,017,457.25***

The SCE's general service rate schedule were used to determine the Project's electrical usage. As of January 1, 2022, SCE's general service rate is $0.13 per kilowatt hours (kWh) of electricity for industrial services (28). As shown on Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 15,316,256 kWh.

TABLE 4-4: CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
Building B: High-Cube Fulfillment	$0.13	1,189,265
Building C: High-Cube Fulfillment	$0.13	558,479
Remaining Industrial: High-Cube Fulfillment	$0.13	690,308
High-Cube Cold Storage Warehouse	$0.13	475,706
Business Park	$0.13	1,218,191
Business Park (Mixed-Use, 75%)	$0.13	459,308
Retail (Mixed-Use, 25%)	$0.13	153,102
Active Park	$0.13	1,748,916
Public Park	$0.13	749,298
Balance	$0.13	8,073,683
CONSTRUCTION ELECTRICiTY USAGE (kWh)		***15,316,256***

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. Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-5. Eight-hour daily use of all equipment is assumed. 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 (29). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the region[3]. As presented in Table 4-5, Project construction activities would consume an estimated 1,200,840 gallons of diesel fuel.

[3] Based on Appendix A of the CalEEMod User's Guide, Construction consists of several types of off-road equipment. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel.

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)
Phase 1								
Mass Grading	199	Rubber Tired Dozers	670	8	8	0.40	17,152	184,500
		Scrapers	570	16	8	0.48	35,021	376,710
		Rubber Tired Dozers	425	1	8	0.40	1,360	14,629
		Off-Highway Trucks	500	3	8	0.38	4,560	49,051
		Tractors/Loaders/Backhoes	425	1	8	0.37	1,258	13,532
		Excavators	400	4	8	0.38	4,864	52,321
Blasting & Rock Handling	199	Rubber Tired Dozers	670	2	8	0.40	4,288	46,125
		Tractors/Loaders/Backhoes	400	2	8	0.37	2,368	25,472
		Off-Highway Trucks	425	3	8	0.38	3,876	41,693
		Rubber Tired Dozers	600	1	8	0.40	1,920	20,653
		Bore/Drill Rigs	360	3	8	0.50	4,320	46,469
Phase 2								
Remedial Grading	67	Rubber Tired Dozers	670	4	8	0.40	8,576	31,059
		Scrapers	570	8	8	0.48	17,510	63,416
		Rubber Tired Dozers	425	1	8	0.40	1,360	4,925
		Off-Highway Trucks	500	3	8	0.38	4,560	16,515
		Tractors/Loaders/Backhoes	425	1	8	0.37	1,258	4,556
		Excavators	400	2	8	0.38	2,432	8,808
Building Construction	615	Cranes	231	2	8	0.29	1,072	35,631
		Crawler Tractors	212	3	8	0.43	2,188	72,731
		Forklifts	89	6	8	0.20	854	28,403
		Generator Sets	84	2	8	0.74	995	33,062
		Welders	46	2	8	0.45	331	11,010

Activity/Duration	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Architectural Coating	307	Air Compressors	78	2	8	0.48	599	9,941
Paving	42	Pavers	130	4	8	0.42	1,747	3,967
		Paving Equipment	132	4	8	0.36	1,521	3,452
		Rollers	80	4	8	0.38	973	2,209
CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								***1,200,840***

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.

4.3.3 ON-ROAD TRIPS

Construction generates on-road vehicle emissions from vehicle usage for workers, hauling, and vendors commuting to and from the site. The number of worker and vendor trips are presented below in Table 4-6.

TABLE 4-6: CONSTRUCTION TRIPS AND VMT

Phase	Construction Activity	Worker Trips Per Day	Vendor Trips Per Day
Phase 1	Mass Grading	83	114
	Blasting & Rock Handling	28	114
Phase 2	Remedial Grading	48	38
	Building Construction	1,902	352
	Architectural Coating	380	176
	Paving	30	24

4.3.4 CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT for the Project, the construction worker trips would generate an estimated 24,289,668 VMT during the 52 months of construction (23). Based on CalEEMod methodology, it is assumed that 50% of all vendor trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1[4]), and 25% are from light-duty-trucks (LDT2[5]). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the AQIA.

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2021 version of the EMFAC developed by CARB. EMFAC2021 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). EMFAC2021 was run for the LDA, LDT1, and LDT2 vehicle class within the Riverside County sub-area for the 2023 through 2027 calendar years. Data from EMFAC2021 is shown in Appendix 4.3.

Table 4-7 provides the estimated annual fuel consumption from Project construction worker trips. Based on Table 4-7, it is estimated that 851,467 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

[4] 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.

[5] 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

Year	Phase	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2023	LDA							
	Phase 1	Mass Grading	152	42	18.5	116,698	30.60	3,813
		Blasting & Rock Handling	152	14	18.5	39,368	30.60	1,286
	LDT1							
	Phase 1	Mass Grading	152	21	18.5	58,349	24.15	2,416
		Blasting & Rock Handling	152	7	18.5	19,684	24.15	815
	LDT2							
	Phase 1	Mass Grading	152	21	18.5	58,349	23.88	2,443
		Blasting & Rock Handling	152	7	18.5	19,684	23.88	824
2024	LDA							
	Phase 1	Mass Grading	47	42	18.5	36,084	31.51	1,145
		Blasting & Rock Handling	47	14	18.5	12,173	31.51	386
	Phase 2	Remedial Grading	67	24	18.5	29,748	31.51	944
		Building Construction	148	951	18.5	2,603,838	31.51	82,645
	LDT1							
	Phase 1	Mass Grading	47	21	18.5	18,042	24.62	733
		Blasting & Rock Handling	47	7	18.5	6,087	24.62	247
	Phase 2	Remedial Grading	67	12	18.5	14,874	24.62	604
		Building Construction	148	476	18.5	1,301,919	24.62	52,875
	LDT2							
	Phase 1	Mass Grading	47	21	18.5	18,042	24.57	734

Year	Phase	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
		Blasting & Rock Handling	47	7	18.5	6,087	24.57	248
	Phase 2	Remedial Grading	67	12	18.5	14,874	24.57	605
		Building Construction	148	476	18.5	1,301,919	24.57	52,983
2025	LDA							
	Phase 2	Building Construction	261	951	18.5	4,591,904	32.49	141,331
	LDT1							
	Phase 2	Building Construction	261	476	18.5	2,295,952	25.14	91,326
	LDT2							
	Phase 2	Building Construction	261	476	18.5	2,295,952	25.29	90,782
2026	LDA							
	Phase 2	Building Construction	206	951	18.5	3,624,261	33.43	108,401
		Architectural Coating	109	190	18.5	383,135	33.43	11,459
	LDT1							
	Phase 2	Building Construction	206	476	18.5	1,812,131	25.70	70,505
		Architectural Coating	109	95	18.5	191,568	25.70	7,453
	LDT2							
	Phase 2	Building Construction	206	476	18.5	1,812,131	26.01	69,674
		Architectural Coating	109	95	18.5	191,568	26.01	7,366
2027	LDA							
	Phase 2	Architectural Coating	198	190	18.5	695,970	34.29	20,299
		Paving	42	15	18.5	11,655	34.29	340
	LDT1							

Year	Phase	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
	Phase 2	Architectural Coating	198	95	18.5	347,985	26.22	13,273
		Paving	42	8	18.5	5,828	26.22	222
	LDT2							
	Phase 2	Architectural Coating	198	95	18.5	347,985	26.63	13,069
		Paving	42	8	18.5	5,828	26.63	219
TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION								***851,467***

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 FUEL ESTIMATES

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction) would generate an estimated 3,258,268 VMT along area roadways for the Project over the duration of construction activity (23). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHDT) and 50% are from heavy-heavy duty trucks (HHDT). These assumptions are consistent with the CalEEMod defaults utilized within the within the AQIA (23). Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2021. EMFAC2021 was run for the MHDT and HHDT vehicle classes within the Riverside County sub-area for the 2023 through 2027 calendar years. Data from EMFAC2021 is shown in Appendix 4.3.

Based on Table 4-8, it is estimated that 450,251 gallons of fuel will be consumed related to construction vendor and hauling trips (MHDTs and HHDTs) during full construction of the Project.

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.

TABLE 4-8: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES

Year	Phase	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2023	MHDT							
	Phase 1	Mass Grading	152	57	10.2	88,373	8.42	10,494
		Blasting & Rock Handling	152	57	10.2	88,373	8.42	10,494
	HHDT							
	Phase 1	Mass Grading	152	57	10.2	88,373	6.04	14,625
		Blasting & Rock Handling	152	57	10.2	88,373	6.04	14,625
2024	MHDT							
	Phase 1	Mass Grading	47	57	10.2	27,326	8.49	3,217
		Blasting & Rock Handling	47	57	10.2	27,326	8.49	3,217
	Phase 2	Remedial Grading	67	19	10.2	12,985	8.49	1,529
		Building Construction	148	176	10.2	265,690	8.49	31,281
	HHDT							
	Phase 1	Mass Grading	47	57	10.2	27,326	6.12	4,464
		Blasting & Rock Handling	47	57	10.2	27,326	6.12	4,464
	Phase 2	Remedial Grading	67	19	10.2	12,985	6.12	2,121
		Building Construction	148	176	10.2	265,690	6.12	43,407
2025	MHDT							
	Phase 2	Building Construction	261	176	10.2	468,547	8.60	54,477
	HHDT							
	Phase 2	Building Construction	261	176	10.2	468,547	6.22	75,358

Year	Phase	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2026	MHDT							
	Phase 2	Building Construction	206	176	10.2	369,811	8.72	42,385
		Architectural Coating	109	88	10.2	97,838	8.72	11,214
	HHDT							
	Phase 2	Building Construction	206	176	10.2	369,811	6.33	58,459
		Architectural Coating	109	88	10.2	97,838	6.33	15,466
2027	MHDT							
	Phase 2	Architectural Coating	198	88	10.2	177,725	8.87	20,028
		Paving	42	12	10.2	5,141	8.87	579
	HHDT							
	Phase 2	Architectural Coating	198	88	10.2	177,725	6.45	27,551
		Paving	42	12	10.2	5,141	6.45	797
TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION								***450,251***

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 (BACM). For example, CCR Title 13, Motor Vehicles, section 2449(d)(2) 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)(2) requires medium and large fleets adopt a written idling policy informing operators that idling is limited to 5 consecutive minutes or less. Equipment rental agreements must also inform renters/lessees of this idling restriction. 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 local 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. The VMT per vehicle class can be determined by evaluated in the vehicle fleet mix and the total VMT.

As with worker and vendors trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021 developed by CARB (25). EMFAC2021 was run for the Riverside County (SC) area for the 2028 calendar year. Data from EMFAC2021 is shown in Appendix 4.3.

As summarized on Table 4-9 the Project will result in an annual VMT of 197,875,733 and an estimated annual fuel consumption of 8,550,693 gallons of fuel.

TABLE 4-9: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (ALL VEHICLES)

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	35.14	94,870,676	2,699,534
LDT1	26.76	6,920,065	258,550
LDT2	27.23	40,633,485	1,492,172
MDV	21.91	29,887,173	1,363,905
LHDT1	17.78	3,771,078	212,154
LHDT2	16.65	1,079,596	64,839
MHDT	9.09	3,206,017	352,829
HHDT	6.60	12,830,848	1,944,575
OBUS	7.04	27,546	3,912
UBUS	5.12	17,935	3,504
MCY	42.30	4,314,362	101,996
SBUS	6.50	62,696	9,652
MH	5.90	254,258	43,073
TOTAL (ALL VEHICLES)		***197,875,733***	***8,550,693***

4.4.2 FACILITY ENERGY DEMANDS

IMPACTS WITHOUT MITIGATION

Project building operations activities would result in the consumption of electricity. Electricity would be supplied to the Project by SCE. Annual electricity demands of the Project are summarized in Tables 4-10.

TABLE 4-10: PROJECT ANNUAL ENERGY DEMAND SUMMARY – WITHOUT MITIGATION

Land Use	Electricity Demand (kWh/year)
	Unmitigated
Building B: High-Cube Fulfillment	2,900,497
Building C: High-Cube Fulfillment	1,362,073
Remaining Industrial: High-Cube Fulfillment	1,683,590
High-Cube Cold Storage	19,920,000
Business Park	12,272,774
Business Park (Mixed-Use, 75%)	4,627,344
Retail (Mixed-Use, 25%)	1,951,952
Active Park	1,144,757
Public Park	
TOTAL PROJECT ENERGY DEMAND	***45,863,514***

IMPACTS WITH MITIGATION

MM GHG-1

Prior to issuance of each building permit, the applicant will provide March JPA with sufficient evidence demonstrating solar photovoltaic (PV) electricity generation sufficient to generate at least 30% of the building's power requirements will be installed as part of the building permit or has already been installed under a previously issued building permit for the Project.

After implementation of the quantified MM GHG-1, energy usage associated with the operation of the Project are estimated to be 30,563,167 kWh/year.

TABLE 4-11: PROJECT ANNUAL ENERGY DEMAND SUMMARY – WITH MITIGATION

Land Use	Electricity Demand (kWh/year)
	Unmitigated
Building B: High-Cube Fulfillment	2,461,788
Building C: High-Cube Fulfillment	1,156,056

Remaining Industrial: High-Cube Fulfillment	1,428,942
High-Cube Cold Storage	9,033,455
Business Park	10,249,596
Business Park (Mixed-Use, 75%)	3,864,522
Retail (Mixed-Use, 25%)	1,224,052
Active Park	1,144,757
Public Park	
TOTAL PROJECT ENERGY DEMAND	***30,563,167***

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., Title 24, California Green Building Standards Code).

ENHANCED VEHICLE FUEL EFFICIENCIES

Project annual fuel consumption estimates presented previously in Table 4-9 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 $2,017,457.25. 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 15,316,256 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 1,200,840 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)(2) 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. BACMs inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by local 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 851,467 gallons of fuel. Additionally, fuel consumption from construction vendor and hauling trips (MHDTs and HHDTs) would total approximately 450,251 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 (16). 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 an estimated 8,550,693 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 industrial uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) 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 industrial land uses.

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. 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 County 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: 30,563,167 kWh/year of electricity. The Project proposes conventional industrial uses reflecting 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 industrial land use projects of similar scale and configuration.

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

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5 CONCLUSIONS

5.1 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.

5.2 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 ISTEA

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 ISTEA because SCAG is not planning for intermodal facilities on or through the Project site.

CONSISTENCY WITH TEA-21

The Project site is located along 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 would be provided to the Project by SCE. SCE's *Clean Power and Electrification Pathway* (CPEP) 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.

Additionally, the Project will comply with the applicable Title 24 standards which would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. As such, development of the proposed Project would support the goals presented in the 2020 IEPR.

CONSISTENCY WITH STATE OF CALIFORNIA ENERGY PLAN

The Project site is located along major transportation corridors with proximate 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 2019 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2020. It should be noted that the analysis herein assumes compliance with the 2019 Title 24 Standards. It should be noted that the CEC anticipates that nonresidential buildings would use approximately 30% less energy compared to the prior code (19). The Project would not interfere with implementation of Title 24.

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 industrial developments and would include several measures designed to reduce energy consumption.

FEASIBLE RENEWABLE ENERGY FEATURES

Pursuant to MM GHG-1, the Project will install approximately solar PV to offset approximately 30% of the Project's energy demand. Additionally, MM GHG-2 through GHG-14 are identified in the *West Campus Upper Plateau Greenhouse Gas Analysis Report* (2). As previously stated, though these measures are designed to reduce Project GHG emissions, they would also assist in the reduction of energy usage.

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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7 CERTIFICATIONS

The contents of this energy analysis report represent an accurate depiction of the environmental impacts associated with the proposed West Campus Upper Plateau. 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 – California Air Resources Board • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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APPENDIX 4.1:

CALEEMOD ANNUAL CONSTRUCTION EMISSIONS MODEL OUTPUTS

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14064 West Campus Upper Plateau Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14064 West Campus Upper Plateau Construction
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	10.0
Location	33.90704595345207, -117.30995400292802
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5480
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Office Park	1,763	1000sqft	40.5	1,763,170	0.00	—	—	—
Regional Shopping Center	161	1000sqft	3.69	160,920	0.00	—	—	—

Unrefrigerated Warehouse-No Rail	2,563	1000sqft	58.8	2,562,560	0.00	—	—	—
Refrigerated Warehouse-No Rail	500	1000sqft	11.5	500,000	0.00	—	—	—
City Park	60.3	Acre	60.3	0.00	2,625,801	0.00	—	—
Other Asphalt Surfaces	8,486	1000sqft	195	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.2	173	55.4	477	0.92	1.89	34.4	34.7	1.89	11.9	13.7	—	103,047	103,047	4.04	3.58	150	103,737
Mit.	12.2	33.4	55.4	477	0.92	1.89	34.4	34.7	1.89	11.9	13.7	—	103,047	103,047	4.04	3.58	150	103,737
% Reduced	—	81%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.6	173	55.9	474	0.92	1.89	34.4	34.7	1.89	11.9	13.7	—	102,920	102,920	4.05	3.63	3.89	103,584
Mit.	11.6	33.3	55.9	474	0.92	1.89	34.4	34.7	1.89	11.9	13.7	—	102,920	102,920	4.05	3.63	3.89	103,584

% Reduced	—	81%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.16	88.5	23.4	199	0.39	0.79	19.8	20.0	0.79	5.09	5.75	—	43,109	43,109	1.70	1.87	39.8	43,391
Mit.	7.16	12.6	23.4	199	0.39	0.79	19.8	20.0	0.79	5.09	5.75	—	43,109	43,109	1.70	1.87	39.8	43,391
% Reduced	—	86%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.31	16.1	4.27	36.3	0.07	0.14	3.61	3.65	0.14	0.93	1.05	—	7,137	7,137	0.28	0.31	6.59	7,184
Mit.	1.31	2.31	4.27	36.3	0.07	0.14	3.61	3.65	0.14	0.93	1.05	—	7,137	7,137	0.28	0.31	6.59	7,184
% Reduced	—	86%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	9.94	9.73	55.4	477	0.92	1.89	28.2	30.1	1.89	11.9	13.7	—	103,047	103,047	4.04	1.88	26.9	103,737
2024	11.8	10.7	26.5	209	0.39	0.80	27.9	28.2	0.80	6.66	6.94	—	43,503	43,503	1.74	2.62	139	44,464
2025	11.3	9.38	25.1	187	0.13	0.28	27.9	28.2	0.28	6.66	6.94	—	42,773	42,773	1.56	2.62	129	43,723
2026	12.2	169	31.2	211	0.17	0.37	34.4	34.7	0.37	8.24	8.61	—	52,568	52,568	1.90	3.58	150	53,833
2027	2.65	173	10.4	68.7	0.09	0.20	7.08	7.27	0.20	1.73	1.93	—	16,403	16,403	0.40	1.12	32.3	16,779
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	9.90	9.68	55.9	474	0.92	1.89	28.2	30.1	1.89	11.9	13.7	—	102,920	102,920	4.05	1.88	0.70	103,584

2024	11.2	10.1	55.4	474	0.92	1.89	28.2	30.1	1.89	11.9	13.7	—	102,805	102,805	4.05	2.63	3.62	103,469
2025	10.1	8.86	26.5	152	0.13	0.28	27.9	28.2	0.28	6.66	6.94	—	40,617	40,617	1.60	2.62	3.34	41,442
2026	11.6	168	33.0	171	0.17	0.37	34.4	34.7	0.37	8.24	8.61	—	50,047	50,047	1.02	3.63	3.89	51,158
2027	2.56	173	10.8	62.1	0.09	0.20	7.08	7.27	0.20	1.73	1.93	—	15,961	15,961	0.41	1.12	0.84	16,306
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.15	4.05	23.4	199	0.39	0.79	11.8	12.6	0.79	4.96	5.75	—	43,109	43,109	1.70	0.79	4.87	43,391
2024	6.59	6.09	22.8	167	0.24	0.50	17.0	17.5	0.50	5.09	5.59	—	37,984	37,984	1.50	1.41	26.4	38,466
2025	7.16	6.28	19.5	113	0.09	0.20	19.8	20.0	0.20	4.73	4.92	—	29,233	29,233	1.14	1.87	39.8	29,860
2026	6.00	52.6	17.0	92.3	0.08	0.18	17.5	17.7	0.18	4.20	4.38	—	25,719	25,719	0.52	1.78	32.8	26,295
2027	1.12	88.5	4.55	18.7	0.03	0.06	3.57	3.63	0.06	0.87	0.93	—	6,133	6,133	0.13	0.54	7.02	6,304
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.76	0.74	4.27	36.3	0.07	0.14	2.16	2.30	0.14	0.91	1.05	—	7,137	7,137	0.28	0.13	0.81	7,184
2024	1.20	1.11	4.16	30.4	0.04	0.09	3.10	3.19	0.09	0.93	1.02	—	6,289	6,289	0.25	0.23	4.37	6,369
2025	1.31	1.15	3.55	20.6	0.02	0.04	3.61	3.65	0.04	0.86	0.90	—	4,840	4,840	0.19	0.31	6.59	4,944
2026	1.10	9.60	3.11	16.8	0.02	0.03	3.20	3.23	0.03	0.77	0.80	—	4,258	4,258	0.09	0.29	5.43	4,353
2027	0.21	16.1	0.83	3.41	0.01	0.01	0.65	0.66	0.01	0.16	0.17	—	1,015	1,015	0.02	0.09	1.16	1,044

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	9.94	9.73	55.4	477	0.92	1.89	28.2	30.1	1.89	11.9	13.7	—	103,047	103,047	4.04	1.88	26.9	103,737
2024	11.8	10.7	26.5	209	0.39	0.80	27.9	28.2	0.80	6.66	6.94	—	43,503	43,503	1.74	2.62	139	44,464
2025	11.3	9.38	25.1	187	0.13	0.28	27.9	28.2	0.28	6.66	6.94	—	42,773	42,773	1.56	2.62	129	43,723
2026	12.2	29.6	31.2	211	0.17	0.37	34.4	34.7	0.37	8.24	8.61	—	52,568	52,568	1.90	3.58	150	53,833

2027	2.65	33.4	10.4	68.7	0.09	0.20	7.08	7.27	0.20	1.73	1.93	—	16,403	16,403	0.40	1.12	32.3	16,779
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	9.90	9.68	55.9	474	0.92	1.89	28.2	30.1	1.89	11.9	13.7	—	102,920	102,920	4.05	1.88	0.70	103,584
2024	11.2	10.1	55.4	474	0.92	1.89	28.2	30.1	1.89	11.9	13.7	—	102,805	102,805	4.05	2.63	3.62	103,469
2025	10.1	8.86	26.5	152	0.13	0.28	27.9	28.2	0.28	6.66	6.94	—	40,617	40,617	1.60	2.62	3.34	41,442
2026	11.6	29.0	33.0	171	0.17	0.37	34.4	34.7	0.37	8.24	8.61	—	50,047	50,047	1.02	3.63	3.89	51,158
2027	2.56	33.3	10.8	62.1	0.09	0.20	7.08	7.27	0.20	1.73	1.93	—	15,961	15,961	0.41	1.12	0.84	16,306
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.15	4.05	23.4	199	0.39	0.79	11.8	12.6	0.79	4.96	5.75	—	43,109	43,109	1.70	0.79	4.87	43,391
2024	6.59	6.09	22.8	167	0.24	0.50	17.0	17.5	0.50	5.09	5.59	—	37,984	37,984	1.50	1.41	26.4	38,466
2025	7.16	6.28	19.5	113	0.09	0.20	19.8	20.0	0.20	4.73	4.92	—	29,233	29,233	1.14	1.87	39.8	29,860
2026	6.00	10.9	17.0	92.3	0.08	0.18	17.5	17.7	0.18	4.20	4.38	—	25,719	25,719	0.52	1.78	32.8	26,295
2027	1.12	12.6	4.55	18.7	0.03	0.06	3.57	3.63	0.06	0.87	0.93	—	6,133	6,133	0.13	0.54	7.02	6,304
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.76	0.74	4.27	36.3	0.07	0.14	2.16	2.30	0.14	0.91	1.05	—	7,137	7,137	0.28	0.13	0.81	7,184
2024	1.20	1.11	4.16	30.4	0.04	0.09	3.10	3.19	0.09	0.93	1.02	—	6,289	6,289	0.25	0.23	4.37	6,369
2025	1.31	1.15	3.55	20.6	0.02	0.04	3.61	3.65	0.04	0.86	0.90	—	4,840	4,840	0.19	0.31	6.59	4,944
2026	1.10	1.99	3.11	16.8	0.02	0.03	3.20	3.23	0.03	0.77	0.80	—	4,258	4,258	0.09	0.29	5.43	4,353
2027	0.21	2.31	0.83	3.41	0.01	0.01	0.65	0.66	0.01	0.16	0.17	—	1,015	1,015	0.02	0.09	1.16	1,044

3. Construction Emissions Details

3.1. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.08	7.08	36.8	368	0.69	1.42	—	1.42	1.42	—	1.42	—	74,824	74,824	3.04	0.61	—	75,081
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	8.36	8.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.08	7.08	36.8	368	0.69	1.42	—	1.42	1.42	—	1.42	—	74,824	74,824	3.04	0.61	—	75,081
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	8.36	8.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.96	2.96	15.4	154	0.29	0.59	—	0.59	0.59	—	0.59	—	31,335	31,335	1.27	0.25	—	31,443
Dust From Material Movement	—	—	—	—	—	—	8.27	8.27	—	3.50	3.50	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.54	0.54	2.81	28.1	0.05	0.11	—	0.11	0.11	—	0.11	—	5,188	5,188	0.21	0.04	—	5,206
Dust From Material Movement	—	—	—	—	—	—	1.51	1.51	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.44	0.44	7.48	0.00	0.00	0.07	0.07	0.00	0.00	0.00	—	1,212	1,212	0.05	0.04	5.20	1,231
Vendor	0.19	0.11	4.18	1.30	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,581	3,581	0.08	0.53	9.97	3,751
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.42	0.51	5.67	0.00	0.00	0.07	0.07	0.00	0.00	0.00	—	1,114	1,114	0.05	0.04	0.13	1,127
Vendor	0.18	0.10	4.38	1.34	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,583	3,583	0.08	0.53	0.26	3,744
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.21	2.49	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	472	472	0.02	0.02	0.94	479
Vendor	0.08	0.04	1.84	0.55	0.01	0.02	0.09	0.11	0.02	0.03	0.05	—	1,500	1,500	0.03	0.22	1.81	1,569
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.45	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	78.2	78.2	< 0.005	< 0.005	0.16	79.3
Vendor	0.01	0.01	0.34	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	248	248	0.01	0.04	0.30	260
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Grading (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.08	7.08	36.8	368	0.69	1.42	—	1.42	1.42	—	1.42	—	74,824	74,824	3.04	0.61	—	75,081
Dust From Material Movemen:	—	—	—	—	—	—	19.7	19.7	—	8.36	8.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.08	7.08	36.8	368	0.69	1.42	—	1.42	1.42	—	1.42	—	74,824	74,824	3.04	0.61	—	75,081
Dust From Material Movemen:	—	—	—	—	—	—	19.7	19.7	—	8.36	8.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.96	2.96	15.4	154	0.29	0.59	—	0.59	0.59	—	0.59	—	31,335	31,335	1.27	0.25	—	31,443
Dust From Material Movemen:	—	—	—	—	—	—	8.27	8.27	—	3.50	3.50	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.54	2.81	28.1	0.05	0.11	—	0.11	0.11	—	0.11	—	5,188	5,188	0.21	0.04	—	5,206
Dust From Material Movement	—	—	—	—	—	—	1.51	1.51	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.44	0.44	7.48	0.00	0.00	0.07	0.07	0.00	0.00	0.00	—	1,212	1,212	0.05	0.04	5.20	1,231
Vendor	0.19	0.11	4.18	1.30	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,581	3,581	0.08	0.53	9.97	3,751
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.42	0.51	5.67	0.00	0.00	0.07	0.07	0.00	0.00	0.00	—	1,114	1,114	0.05	0.04	0.13	1,127
Vendor	0.18	0.10	4.38	1.34	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,583	3,583	0.08	0.53	0.26	3,744
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.21	2.49	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	472	472	0.02	0.02	0.94	479
Vendor	0.08	0.04	1.84	0.55	0.01	0.02	0.09	0.11	0.02	0.03	0.05	—	1,500	1,500	0.03	0.22	1.81	1,569
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.45	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	78.2	78.2	< 0.005	< 0.005	0.16	79.3
Vendor	0.01	0.01	0.34	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	248	248	0.01	0.04	0.30	260

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.08	7.08	36.8	368	0.69	1.42	—	1.42	1.42	—	1.42	—	74,812	74,812	3.03	0.61	—	75,069
Dust From Material Movemen	—	—	—	—	—	—	19.7	19.7	—	8.36	8.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.90	4.68	46.8	0.09	0.18	—	0.18	0.18	—	0.18	—	9,516	9,516	0.39	0.08	—	9,549
Dust From Material Movemen	—	—	—	—	—	—	2.51	2.51	—	1.06	1.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	0.85	8.54	0.02	0.03	—	0.03	0.03	—	0.03	—	1,576	1,576	0.06	0.01	—	1,581

Dust From Material Movemen	—	—	—	—	—	—	0.46	0.46	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.40	0.47	5.21	0.00	0.00	0.07	0.07	0.00	0.00	0.00	—	1,091	1,091	0.05	0.04	0.12	1,105
Vendor	0.15	0.10	4.20	1.28	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,542	3,542	0.08	0.53	0.26	3,703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.70	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	141	141	0.01	0.01	0.26	143
Vendor	0.02	0.01	0.53	0.16	< 0.005	0.01	0.03	0.03	0.01	0.01	0.02	—	450	450	0.01	0.07	0.55	471
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	23.3	23.3	< 0.005	< 0.005	0.04	23.6
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	74.6	74.6	< 0.005	0.01	0.09	78.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.08	7.08	36.8	368	0.69	1.42	—	1.42	1.42	—	1.42	—	74,812	74,812	3.03	0.61	—	75,069
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	8.36	8.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.90	4.68	46.8	0.09	0.18	—	0.18	0.18	—	0.18	—	9,516	9,516	0.39	0.08	—	9,549
Dust From Material Movement	—	—	—	—	—	—	2.51	2.51	—	1.06	1.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	0.85	8.54	0.02	0.03	—	0.03	0.03	—	0.03	—	1,576	1,576	0.06	0.01	—	1,581
Dust From Material Movement	—	—	—	—	—	—	0.46	0.46	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.40	0.47	5.21	0.00	0.00	0.07	0.07	0.00	0.00	0.00	—	1,091	1,091	0.05	0.04	0.12	1,105
Vendor	0.15	0.10	4.20	1.28	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,542	3,542	0.08	0.53	0.26	3,703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.70	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	141	141	0.01	0.01	0.26	143
Vendor	0.02	0.01	0.53	0.16	< 0.005	0.01	0.03	0.03	0.01	0.01	0.02	—	450	450	0.01	0.07	0.55	471
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	23.3	23.3	< 0.005	< 0.005	0.04	23.6
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	74.6	74.6	< 0.005	0.01	0.09	78.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.85	9.61	96.1	0.18	0.37	—	0.37	0.37	—	0.37	—	19,446	19,446	0.79	0.16	—	19,512

Dust From Material Movemen	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.85	9.61	96.1	0.18	0.37	—	0.37	0.37	—	0.37	—	19,446	19,446	0.79	0.16	—	19,512
Dust From Material Movemen	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.77	4.03	40.3	0.08	0.15	—	0.15	0.15	—	0.15	—	8,144	8,144	0.33	0.07	—	8,172
Dust From Material Movemen	—	—	—	—	—	—	2.14	2.14	—	1.10	1.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	0.73	7.35	0.01	0.03	—	0.03	0.03	—	0.03	—	1,348	1,348	0.05	0.01	—	1,353
Dust From Material Movemen	—	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.15	2.49	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	404	404	0.02	0.01	1.73	410
Vendor	0.19	0.11	4.18	1.30	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,581	3,581	0.08	0.53	9.97	3,751
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.17	1.89	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	371	371	0.02	0.01	0.04	376
Vendor	0.18	0.10	4.38	1.34	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,583	3,583	0.08	0.53	0.26	3,744
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.83	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	157	157	0.01	0.01	0.31	160
Vendor	0.08	0.04	1.84	0.55	0.01	0.02	0.09	0.11	0.02	0.03	0.05	—	1,500	1,500	0.03	0.22	1.81	1,569
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	26.1	26.1	< 0.005	< 0.005	0.05	26.4
Vendor	0.01	0.01	0.34	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	248	248	0.01	0.04	0.30	260
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.85	1.85	9.61	96.1	0.18	0.37	—	0.37	0.37	—	0.37	—	19,446	19,446	0.79	0.16	—	19,512
Dust From Material Movemen	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.85	9.61	96.1	0.18	0.37	—	0.37	0.37	—	0.37	—	19,446	19,446	0.79	0.16	—	19,512
Dust From Material Movemen	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.77	4.03	40.3	0.08	0.15	—	0.15	0.15	—	0.15	—	8,144	8,144	0.33	0.07	—	8,172
Dust From Material Movemen	—	—	—	—	—	—	2.14	2.14	—	1.10	1.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	0.73	7.35	0.01	0.03	—	0.03	0.03	—	0.03	—	1,348	1,348	0.05	0.01	—	1,353
Dust From Material Movemen	—	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.15	2.49	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	404	404	0.02	0.01	1.73	410
Vendor	0.19	0.11	4.18	1.30	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,581	3,581	0.08	0.53	9.97	3,751
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.17	1.89	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	371	371	0.02	0.01	0.04	376
Vendor	0.18	0.10	4.38	1.34	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,583	3,583	0.08	0.53	0.26	3,744
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.83	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	157	157	0.01	0.01	0.31	160
Vendor	0.08	0.04	1.84	0.55	0.01	0.02	0.09	0.11	0.02	0.03	0.05	—	1,500	1,500	0.03	0.22	1.81	1,569
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	26.1	26.1	< 0.005	< 0.005	0.05	26.4
Vendor	0.01	0.01	0.34	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	248	248	0.01	0.04	0.30	260
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.85	9.61	96.1	0.18	0.37	—	0.37	0.37	—	0.37	—	19,454	19,454	0.79	0.16	—	19,521
Dust From Material Movement	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	1.22	12.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,475	2,475	0.10	0.02	—	2,483
Dust From Material Movement	—	—	—	—	—	—	0.65	0.65	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	410	410	0.02	< 0.005	—	411
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.16	1.74	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	364	364	0.02	0.01	0.04	368
Vendor	0.15	0.10	4.20	1.28	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,542	3,542	0.08	0.53	0.26	3,703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	46.9	46.9	< 0.005	< 0.005	0.09	47.5
Vendor	0.02	0.01	0.53	0.16	< 0.005	0.01	0.03	0.03	0.01	0.01	0.02	—	450	450	0.01	0.07	0.55	471
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.76	7.76	< 0.005	< 0.005	0.01	7.87
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	74.6	74.6	< 0.005	0.01	0.09	78.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.85	9.61	96.1	0.18	0.37	—	0.37	0.37	—	0.37	—	19,454	19,454	0.79	0.16	—	19,521

Dust From Material Movemen	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	1.22	12.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,475	2,475	0.10	0.02	—	2,483
Dust From Material Movemen	—	—	—	—	—	—	0.65	0.65	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	410	410	0.02	< 0.005	—	411
Dust From Material Movemen	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.16	1.74	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	364	364	0.02	0.01	0.04	368
Vendor	0.15	0.10	4.20	1.28	0.03	0.05	0.21	0.26	0.05	0.08	0.13	—	3,542	3,542	0.08	0.53	0.26	3,703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	46.9	46.9	< 0.005	< 0.005	0.09	47.5
Vendor	0.02	0.01	0.53	0.16	< 0.005	0.01	0.03	0.03	0.01	0.01	0.02	—	450	450	0.01	0.07	0.55	471
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.76	7.76	< 0.005	< 0.005	0.01	7.87
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	74.6	74.6	< 0.005	0.01	0.09	78.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.93	3.93	20.5	205	0.38	0.79	—	0.79	0.79	—	0.79	—	41,586	41,586	1.69	0.34	—	41,729
Dust From Material Movement	—	—	—	—	—	—	10.7	10.7	—	4.62	4.62	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.93	3.93	20.5	205	0.38	0.79	—	0.79	0.79	—	0.79	—	41,586	41,586	1.69	0.34	—	41,729

Dust From Material Movemen	—	—	—	—	—	—	10.7	10.7	—	4.62	4.62	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.72	3.76	37.6	0.07	0.14	—	0.14	0.14	—	0.14	—	7,634	7,634	0.31	0.06	—	7,660
Dust From Material Movemen	—	—	—	—	—	—	1.97	1.97	—	0.85	0.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.69	6.85	0.01	0.03	—	0.03	0.03	—	0.03	—	1,264	1,264	0.05	0.01	—	1,268
Dust From Material Movemen	—	—	—	—	—	—	0.36	0.36	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.23	3.97	0.00	0.00	0.04	0.04	0.00	0.00	0.00	—	684	684	0.03	0.02	2.71	694
Vendor	0.05	0.03	1.34	0.42	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,180	1,180	0.03	0.18	3.32	1,236
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.25	0.23	0.27	3.00	0.00	0.00	0.04	0.04	0.00	0.00	0.00	—	628	628	0.03	0.02	0.07	636
Vendor	0.05	0.03	1.40	0.43	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,181	1,181	0.03	0.18	0.09	1,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.58	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	117	117	0.01	< 0.005	0.22	118
Vendor	0.01	0.01	0.26	0.08	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	—	217	217	< 0.005	0.03	0.26	227
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	19.3	19.3	< 0.005	< 0.005	0.04	19.6
Vendor	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.9	35.9	< 0.005	0.01	0.04	37.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.93	3.93	20.5	205	0.38	0.79	—	0.79	0.79	—	0.79	—	41,586	41,586	1.69	0.34	—	41,729
Dust From Material Movement	—	—	—	—	—	—	10.7	10.7	—	4.62	4.62	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.93	3.93	20.5	205	0.38	0.79	—	0.79	0.79	—	0.79	—	41,586	41,586	1.69	0.34	—	41,729
Dust From Material Movement	—	—	—	—	—	—	10.7	10.7	—	4.62	4.62	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.72	3.76	37.6	0.07	0.14	—	0.14	0.14	—	0.14	—	7,634	7,634	0.31	0.06	—	7,660
Dust From Material Movement	—	—	—	—	—	—	1.97	1.97	—	0.85	0.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.69	6.85	0.01	0.03	—	0.03	0.03	—	0.03	—	1,264	1,264	0.05	0.01	—	1,268
Dust From Material Movement	—	—	—	—	—	—	0.36	0.36	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.23	3.97	0.00	0.00	0.04	0.04	0.00	0.00	0.00	—	684	684	0.03	0.02	2.71	694
Vendor	0.05	0.03	1.34	0.42	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,180	1,180	0.03	0.18	3.32	1,236
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.23	0.27	3.00	0.00	0.00	0.04	0.04	0.00	0.00	0.00	—	628	628	0.03	0.02	0.07	636
Vendor	0.05	0.03	1.40	0.43	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,181	1,181	0.03	0.18	0.09	1,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.58	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	117	117	0.01	< 0.005	0.22	118
Vendor	0.01	0.01	0.26	0.08	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	—	217	217	< 0.005	0.03	0.26	227
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	19.3	19.3	< 0.005	< 0.005	0.04	19.6
Vendor	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.9	35.9	< 0.005	0.01	0.04	37.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,199	5,199	0.21	0.04	—	5,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,199	5,199	0.21	0.04	—	5,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.26	2.01	15.0	0.02	0.05	—	0.05	0.05	—	0.05	—	2,116	2,116	0.09	0.02	—	2,123
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.37	2.73	< 0.005	0.01	—	0.01	0.01	—	0.01	—	350	350	0.01	< 0.005	—	352
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	10.7	9.75	9.18	159	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	27,376	27,376	1.15	0.94	109	27,794
Vendor	0.49	0.32	12.4	3.85	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,929	10,929	0.24	1.64	30.8	11,453
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	10.1	9.16	10.8	120	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	25,159	25,159	1.20	0.94	2.82	25,473
Vendor	0.47	0.31	13.0	3.94	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,936	10,936	0.24	1.65	0.80	11,433
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.11	3.71	4.40	51.4	0.00	0.00	0.63	0.63	0.00	0.00	0.00	—	10,372	10,372	0.49	0.38	19.1	10,517
Vendor	0.19	0.13	5.27	1.59	0.03	0.06	0.26	0.32	0.06	0.10	0.16	—	4,450	4,450	0.10	0.67	5.39	4,656

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.68	0.80	9.39	0.00	0.00	0.12	0.12	0.00	0.00	0.00	—	1,717	1,717	0.08	0.06	3.16	1,741
Vendor	0.04	0.02	0.96	0.29	0.01	0.01	0.05	0.06	0.01	0.02	0.03	—	737	737	0.02	0.11	0.89	771
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,199	5,199	0.21	0.04	—	5,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,199	5,199	0.21	0.04	—	5,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.26	2.01	15.0	0.02	0.05	—	0.05	0.05	—	0.05	—	2,116	2,116	0.09	0.02	—	2,123
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.05	0.37	2.73	< 0.005	0.01	—	0.01	0.01	—	0.01	—	350	350	0.01	< 0.005	—	352
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	10.7	9.75	9.18	159	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	27,376	27,376	1.15	0.94	109	27,794
Vendor	0.49	0.32	12.4	3.85	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,929	10,929	0.24	1.64	30.8	11,453
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	10.1	9.16	10.8	120	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	25,159	25,159	1.20	0.94	2.82	25,473
Vendor	0.47	0.31	13.0	3.94	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,936	10,936	0.24	1.65	0.80	11,433
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.11	3.71	4.40	51.4	0.00	0.00	0.63	0.63	0.00	0.00	0.00	—	10,372	10,372	0.49	0.38	19.1	10,517
Vendor	0.19	0.13	5.27	1.59	0.03	0.06	0.26	0.32	0.06	0.10	0.16	—	4,450	4,450	0.10	0.67	5.39	4,656
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.68	0.80	9.39	0.00	0.00	0.12	0.12	0.00	0.00	0.00	—	1,717	1,717	0.08	0.06	3.16	1,741
Vendor	0.04	0.02	0.96	0.29	0.01	0.01	0.05	0.06	0.01	0.02	0.03	—	737	737	0.02	0.11	0.89	771
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,198	5,198	0.21	0.04	—	5,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,198	5,198	0.21	0.04	—	5,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.45	3.53	26.3	0.04	0.09	—	0.09	0.09	—	0.09	—	3,713	3,713	0.15	0.03	—	3,725
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.64	4.79	0.01	0.02	—	0.02	0.02	—	0.02	—	615	615	0.02	< 0.005	—	617
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	10.2	8.51	8.32	147	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	26,806	26,806	1.11	0.94	98.5	27,214
Vendor	0.49	0.23	11.8	3.68	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,769	10,769	0.24	1.64	30.6	11,294
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.99	8.01	9.18	111	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	24,643	24,643	1.15	0.94	2.55	24,955
Vendor	0.47	0.22	12.4	3.78	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,777	10,777	0.24	1.64	0.79	11,271
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.36	5.66	7.11	83.8	0.00	0.00	1.11	1.11	0.00	0.00	0.00	—	17,826	17,826	0.82	0.67	30.3	18,078
Vendor	0.34	0.17	8.83	2.66	0.06	0.11	0.45	0.57	0.11	0.17	0.28	—	7,695	7,695	0.17	1.17	9.46	8,057
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.16	1.03	1.30	15.3	0.00	0.00	0.20	0.20	0.00	0.00	0.00	—	2,951	2,951	0.14	0.11	5.02	2,993
Vendor	0.06	0.03	1.61	0.49	0.01	0.02	0.08	0.10	0.02	0.03	0.05	—	1,274	1,274	0.03	0.19	1.57	1,334
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,198	5,198	0.21	0.04	—	5,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,198	5,198	0.21	0.04	—	5,216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.45	3.53	26.3	0.04	0.09	—	0.09	0.09	—	0.09	—	3,713	3,713	0.15	0.03	—	3,725
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.64	4.79	0.01	0.02	—	0.02	0.02	—	0.02	—	615	615	0.02	< 0.005	—	617
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	10.2	8.51	8.32	147	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	26,806	26,806	1.11	0.94	98.5	27,214
Vendor	0.49	0.23	11.8	3.68	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,769	10,769	0.24	1.64	30.6	11,294
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.99	8.01	9.18	111	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	24,643	24,643	1.15	0.94	2.55	24,955
Vendor	0.47	0.22	12.4	3.78	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,777	10,777	0.24	1.64	0.79	11,271
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.36	5.66	7.11	83.8	0.00	0.00	1.11	1.11	0.00	0.00	0.00	—	17,826	17,826	0.82	0.67	30.3	18,078
Vendor	0.34	0.17	8.83	2.66	0.06	0.11	0.45	0.57	0.11	0.17	0.28	—	7,695	7,695	0.17	1.17	9.46	8,057

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.16	1.03	1.30	15.3	0.00	0.00	0.20	0.20	0.00	0.00	0.00	—	2,951	2,951	0.14	0.11	5.02	2,993
Vendor	0.06	0.03	1.61	0.49	0.01	0.02	0.08	0.10	0.02	0.03	0.05	—	1,274	1,274	0.03	0.19	1.57	1,334
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,198	5,198	0.21	0.04	—	5,215
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,198	5,198	0.21	0.04	—	5,215
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.35	2.78	20.7	0.03	0.07	—	0.07	0.07	—	0.07	—	2,929	2,929	0.12	0.02	—	2,939
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.06	0.51	3.78	0.01	0.01	—	0.01	0.01	—	0.01	—	485	485	0.02	< 0.005	—	487
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.95	8.05	7.46	137	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	26,231	26,231	1.11	0.90	88.9	26,616
Vendor	0.49	0.23	11.3	3.51	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,596	10,596	0.24	1.64	29.0	11,119
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.53	7.59	8.32	104	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	24,120	24,120	0.38	0.94	2.31	24,412
Vendor	0.47	0.21	11.8	3.60	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,604	10,604	0.24	1.64	0.75	11,098
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.79	4.25	5.13	61.1	0.00	0.00	0.87	0.87	0.00	0.00	0.00	—	13,766	13,766	0.21	0.53	21.6	13,952
Vendor	0.27	0.12	6.68	2.00	0.04	0.09	0.36	0.45	0.09	0.13	0.22	—	5,974	5,974	0.13	0.92	7.02	6,259
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.87	0.78	0.94	11.1	0.00	0.00	0.16	0.16	0.00	0.00	0.00	—	2,279	2,279	0.04	0.09	3.58	2,310
Vendor	0.05	0.02	1.22	0.37	0.01	0.02	0.07	0.08	0.02	0.02	0.04	—	989	989	0.02	0.15	1.16	1,036
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,198	5,198	0.21	0.04	—	5,215
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.63	4.94	36.8	0.05	0.12	—	0.12	0.12	—	0.12	—	5,198	5,198	0.21	0.04	—	5,215
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.35	2.78	20.7	0.03	0.07	—	0.07	0.07	—	0.07	—	2,929	2,929	0.12	0.02	—	2,939
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.51	3.78	0.01	0.01	—	0.01	0.01	—	0.01	—	485	485	0.02	< 0.005	—	487
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.95	8.05	7.46	137	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	26,231	26,231	1.11	0.90	88.9	26,616
Vendor	0.49	0.23	11.3	3.51	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,596	10,596	0.24	1.64	29.0	11,119
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.53	7.59	8.32	104	0.00	0.00	1.55	1.55	0.00	0.00	0.00	—	24,120	24,120	0.38	0.94	2.31	24,412
Vendor	0.47	0.21	11.8	3.60	0.08	0.16	0.63	0.79	0.16	0.24	0.40	—	10,604	10,604	0.24	1.64	0.75	11,098
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.79	4.25	5.13	61.1	0.00	0.00	0.87	0.87	0.00	0.00	0.00	—	13,766	13,766	0.21	0.53	21.6	13,952
Vendor	0.27	0.12	6.68	2.00	0.04	0.09	0.36	0.45	0.09	0.13	0.22	—	5,974	5,974	0.13	0.92	7.02	6,259
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.87	0.78	0.94	11.1	0.00	0.00	0.16	0.16	0.00	0.00	0.00	—	2,279	2,279	0.04	0.09	3.58	2,310
Vendor	0.05	0.02	1.22	0.37	0.01	0.02	0.07	0.08	0.02	0.02	0.04	—	989	989	0.02	0.15	1.16	1,036
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.43	34.6	0.05	0.09	—	0.09	0.09	—	0.09	—	4,937	4,937	0.20	0.04	—	4,954
Paving	—	12.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.43	34.6	0.05	0.09	—	0.09	0.09	—	0.09	—	4,937	4,937	0.20	0.04	—	4,954
Paving	—	12.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.28	3.98	0.01	0.01	—	0.01	0.01	—	0.01	—	568	568	0.02	< 0.005	—	570
Paving	—	1.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.1	94.1	< 0.005	< 0.005	—	94.4
Paving	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.10	1.99	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	406	406	< 0.005	0.01	1.26	412
Vendor	0.03	0.01	0.74	0.23	0.01	0.01	0.04	0.05	0.01	0.02	0.03	—	709	709	0.02	0.11	1.81	743
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.12	1.51	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	373	373	0.01	0.01	0.03	378

Vendor	0.03	0.01	0.78	0.24	0.01	0.01	0.04	0.05	0.01	0.02	0.03	—	710	710	0.02	0.11	0.05	742
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	43.5	43.5	< 0.005	< 0.005	0.06	44.1
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	81.6	81.6	< 0.005	0.01	0.09	85.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.20	7.20	< 0.005	< 0.005	0.01	7.30
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.5	13.5	< 0.005	< 0.005	0.01	14.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.43	34.6	0.05	0.09	—	0.09	0.09	—	0.09	—	4,937	4,937	0.20	0.04	—	4,954
Paving	—	12.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.43	34.6	0.05	0.09	—	0.09	0.09	—	0.09	—	4,937	4,937	0.20	0.04	—	4,954
Paving	—	12.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.28	3.98	0.01	0.01	—	0.01	0.01	—	0.01	—	568	568	0.02	< 0.005	—	570
Paving	—	1.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.1	94.1	< 0.005	< 0.005	—	94.4
Paving	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.10	1.99	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	406	406	< 0.005	0.01	1.26	412
Vendor	0.03	0.01	0.74	0.23	0.01	0.01	0.04	0.05	0.01	0.02	0.03	—	709	709	0.02	0.11	1.81	743
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.12	1.51	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	373	373	0.01	0.01	0.03	378
Vendor	0.03	0.01	0.78	0.24	0.01	0.01	0.04	0.05	0.01	0.02	0.03	—	710	710	0.02	0.11	0.05	742
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	43.5	43.5	< 0.005	< 0.005	0.06	44.1
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	81.6	81.6	< 0.005	0.01	0.09	85.4

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.20	7.20	< 0.005	< 0.005	0.01	7.30
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.5	13.5	< 0.005	< 0.005	0.01	14.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.34	4.89	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Architectural Coatings	—	158	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.34	4.89	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Architectural Coatings	—	158	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.10	1.46	—	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	—	—	—	—	—	—
Architectural Coatings	—	47.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.27	—	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	—	—	—	—	—	—
Architectural Coatings	—	8.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.79	1.61	1.49	27.3	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	5,246	5,246	0.22	0.18	17.8	5,323
Vendor	0.24	0.11	5.66	1.75	0.04	0.08	0.32	0.40	0.08	0.12	0.20	—	5,298	5,298	0.12	0.82	14.5	5,559
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.71	1.52	1.66	20.7	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	4,824	4,824	0.08	0.19	0.46	4,882
Vendor	0.24	0.11	5.90	1.80	0.04	0.08	0.32	0.40	0.08	0.12	0.20	—	5,302	5,302	0.12	0.82	0.38	5,549
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.45	0.54	6.49	0.00	0.00	0.09	0.09	0.00	0.00	0.00	—	1,463	1,463	0.02	0.06	2.30	1,482
Vendor	0.07	0.03	1.78	0.53	0.01	0.02	0.09	0.12	0.02	0.04	0.06	—	1,587	1,587	0.04	0.25	1.86	1,663

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.18	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	242	242	< 0.005	0.01	0.38	245
Vendor	0.01	0.01	0.32	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	263	263	0.01	0.04	0.31	275
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.34	4.89	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Architectural Coatings	—	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.34	4.89	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Architectural Coatings	—	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.10	1.46	—	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	—	—	—	—	—	—
Architectural Coatings	—	5.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.27	—	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	—	—	—	—	—	—
Architectural Coatings	—	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.79	1.61	1.49	27.3	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	5,246	5,246	0.22	0.18	17.8	5,323
Vendor	0.24	0.11	5.66	1.75	0.04	0.08	0.32	0.40	0.08	0.12	0.20	—	5,298	5,298	0.12	0.82	14.5	5,559
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.71	1.52	1.66	20.7	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	4,824	4,824	0.08	0.19	0.46	4,882
Vendor	0.24	0.11	5.90	1.80	0.04	0.08	0.32	0.40	0.08	0.12	0.20	—	5,302	5,302	0.12	0.82	0.38	5,549
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.45	0.54	6.49	0.00	0.00	0.09	0.09	0.00	0.00	0.00	—	1,463	1,463	0.02	0.06	2.30	1,482
Vendor	0.07	0.03	1.78	0.53	0.01	0.02	0.09	0.12	0.02	0.04	0.06	—	1,587	1,587	0.04	0.25	1.86	1,663

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.18	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	242	242	< 0.005	0.01	0.38	245
Vendor	0.01	0.01	0.32	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	263	263	0.01	0.04	0.31	275
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.34	4.89	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Architectural Coatings	—	158	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.34	4.89	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Architectural Coatings	—	158	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.04	0.19	2.66	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Architectural Coatings	—	86.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.49	—	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	—	—	—	—	—	—
Architectural Coatings	—	15.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.72	1.53	1.32	25.3	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	5,149	5,149	0.06	0.18	16.0	5,220
Vendor	0.24	0.11	5.44	1.71	0.04	0.08	0.32	0.40	0.08	0.12	0.20	—	5,201	5,201	0.12	0.78	13.2	5,450
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.63	1.44	1.49	19.1	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	4,736	4,736	0.07	0.18	0.41	4,791
Vendor	0.23	0.10	5.68	1.76	0.04	0.08	0.32	0.40	0.08	0.12	0.20	—	5,205	5,205	0.12	0.78	0.34	5,440
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.78	0.90	10.9	0.00	0.00	0.17	0.17	0.00	0.00	0.00	—	2,609	2,609	0.04	0.10	3.75	2,643
Vendor	0.13	0.06	3.09	0.94	0.02	0.04	0.17	0.22	0.04	0.06	0.11	—	2,830	2,830	0.07	0.42	3.11	2,962

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.16	1.99	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	432	432	0.01	0.02	0.62	438
Vendor	0.02	0.01	0.56	0.17	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	469	469	0.01	0.07	0.51	490
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.34	4.89	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Architectural Coatings	—	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.34	4.89	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Architectural Coatings	—	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.04	0.19	2.66	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Architectural Coatings	—	10.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.49	—	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	—	—	—	—	—	—
Architectural Coatings	—	1.88	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.72	1.53	1.32	25.3	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	5,149	5,149	0.06	0.18	16.0	5,220
Vendor	0.24	0.11	5.44	1.71	0.04	0.08	0.32	0.40	0.08	0.12	0.20	—	5,201	5,201	0.12	0.78	13.2	5,450
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.63	1.44	1.49	19.1	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	4,736	4,736	0.07	0.18	0.41	4,791
Vendor	0.23	0.10	5.68	1.76	0.04	0.08	0.32	0.40	0.08	0.12	0.20	—	5,205	5,205	0.12	0.78	0.34	5,440
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.78	0.90	10.9	0.00	0.00	0.17	0.17	0.00	0.00	0.00	—	2,609	2,609	0.04	0.10	3.75	2,643
Vendor	0.13	0.06	3.09	0.94	0.02	0.04	0.17	0.22	0.04	0.06	0.11	—	2,830	2,830	0.07	0.42	3.11	2,962

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.16	1.99	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	432	432	0.01	0.02	0.62	438
Vendor	0.02	0.01	0.56	0.17	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	469	469	0.01	0.07	0.51	490
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description

Ph1 Mass Grading	Grading	6/1/2023	3/5/2024	5.00	199	—
Ph1 Blasting	Grading	6/1/2023	3/5/2024	5.00	199	—
Ph2 Remedial Grading	Grading	3/6/2024	6/6/2024	5.00	67.0	—
Ph2 Building Construction	Building Construction	6/7/2024	10/15/2026	5.00	615	—
Ph2 Paving	Paving	8/9/2027	10/5/2027	5.00	42.0	—
Ph2 Architectural Coating	Architectural Coating	8/1/2026	10/5/2027	5.00	307	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Ph1 Mass Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	8.00	8.00	670	0.40
Ph1 Mass Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	425	0.37
Ph1 Blasting	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	670	0.40
Ph1 Blasting	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	400	0.37
Ph2 Remedial Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	425	0.37
Ph2 Architectural Coating	Air Compressors	Diesel	Tier 4 Final	2.00	8.00	78.0	0.48
Ph1 Mass Grading	Excavators	Diesel	Tier 4 Final	4.00	8.00	400	0.38
Ph1 Mass Grading	Scrapers	Diesel	Tier 4 Final	16.0	8.00	570	0.48
Ph2 Remedial Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	400	0.38
Ph2 Remedial Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	4.00	8.00	670	0.40
Ph2 Remedial Grading	Scrapers	Diesel	Tier 4 Final	8.00	8.00	570	0.48
Ph2 Building Construction	Cranes	Diesel	Tier 4 Final	2.00	8.00	231	0.29
Ph2 Building Construction	Forklifts	Diesel	Tier 4 Final	6.00	8.00	89.0	0.20

Ph2 Building Construction	Generator Sets	Diesel	Tier 4 Final	2.00	8.00	84.0	0.74
Ph2 Building Construction	Welders	Diesel	Tier 4 Final	2.00	8.00	46.0	0.45
Ph2 Paving	Pavers	Diesel	Tier 4 Final	4.00	8.00	130	0.42
Ph2 Paving	Paving Equipment	Diesel	Tier 4 Final	4.00	8.00	132	0.36
Ph2 Paving	Rollers	Diesel	Tier 4 Final	4.00	8.00	80.0	0.38
Ph1 Mass Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	425	0.40
Ph1 Mass Grading	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	8.00	500	0.38
Ph1 Blasting	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	8.00	425	0.38
Ph1 Blasting	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	600	0.40
Ph1 Blasting	Bore/Drill Rigs	Diesel	Tier 4 Final	3.00	8.00	360	0.50
Ph2 Remedial Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	425	0.40
Ph2 Remedial Grading	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	8.00	500	0.38
Ph2 Building Construction	Crawler Tractors	Diesel	Tier 4 Final	3.00	8.00	212	0.43

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Ph1 Mass Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	8.00	8.00	670	0.40
Ph1 Mass Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	425	0.37
Ph1 Blasting	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	670	0.40
Ph1 Blasting	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	400	0.37
Ph2 Remedial Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	425	0.37
Ph2 Architectural Coating	Air Compressors	Diesel	Tier 4 Final	2.00	8.00	78.0	0.48
Ph1 Mass Grading	Excavators	Diesel	Tier 4 Final	4.00	8.00	400	0.38

Ph1 Mass Grading	Scrapers	Diesel	Tier 4 Final	16.0	8.00	570	0.48
Ph2 Remedial Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	400	0.38
Ph2 Remedial Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	4.00	8.00	670	0.40
Ph2 Remedial Grading	Scrapers	Diesel	Tier 4 Final	8.00	8.00	570	0.48
Ph2 Building Construction	Cranes	Diesel	Tier 4 Final	2.00	8.00	231	0.29
Ph2 Building Construction	Forklifts	Diesel	Tier 4 Final	6.00	8.00	89.0	0.20
Ph2 Building Construction	Generator Sets	Diesel	Tier 4 Final	2.00	8.00	84.0	0.74
Ph2 Building Construction	Welders	Diesel	Tier 4 Final	2.00	8.00	46.0	0.45
Ph2 Paving	Pavers	Diesel	Tier 4 Final	4.00	8.00	130	0.42
Ph2 Paving	Paving Equipment	Diesel	Tier 4 Final	4.00	8.00	132	0.36
Ph2 Paving	Rollers	Diesel	Tier 4 Final	4.00	8.00	80.0	0.38
Ph1 Mass Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	425	0.40
Ph1 Mass Grading	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	8.00	500	0.38
Ph1 Blasting	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	8.00	425	0.38
Ph1 Blasting	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	600	0.40
Ph1 Blasting	Bore/Drill Rigs	Diesel	Tier 4 Final	3.00	8.00	360	0.50
Ph2 Remedial Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	425	0.40
Ph2 Remedial Grading	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	8.00	500	0.38
Ph2 Building Construction	Crawler Tractors	Diesel	Tier 4 Final	3.00	8.00	212	0.43

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Ph1 Mass Grading	—	—	—	—
Ph1 Mass Grading	Worker	82.5	18.5	LDA,LDT1,LDT2
Ph1 Mass Grading	Vendor	114	10.2	HHDT,MHDT
Ph1 Mass Grading	Hauling	0.00	20.0	HHDT
Ph1 Mass Grading	Onsite truck	—	—	HHDT
Ph1 Blasting	—	—	—	—
Ph1 Blasting	Worker	27.5	18.5	LDA,LDT1,LDT2
Ph1 Blasting	Vendor	114	10.2	HHDT,MHDT
Ph1 Blasting	Hauling	0.00	20.0	HHDT
Ph1 Blasting	Onsite truck	—	—	HHDT
Ph2 Remedial Grading	—	—	—	—
Ph2 Remedial Grading	Worker	47.5	18.5	LDA,LDT1,LDT2
Ph2 Remedial Grading	Vendor	38.0	10.2	HHDT,MHDT
Ph2 Remedial Grading	Hauling	0.00	20.0	HHDT
Ph2 Remedial Grading	Onsite truck	—	—	HHDT
Ph2 Building Construction	—	—	—	—
Ph2 Building Construction	Worker	1,902	18.5	LDA,LDT1,LDT2
Ph2 Building Construction	Vendor	352	10.2	HHDT,MHDT
Ph2 Building Construction	Hauling	0.00	20.0	HHDT
Ph2 Building Construction	Onsite truck	—	—	HHDT
Ph2 Architectural Coating	—	—	—	—
Ph2 Architectural Coating	Worker	380	18.5	LDA,LDT1,LDT2
Ph2 Architectural Coating	Vendor	176	10.2	HHDT,MHDT
Ph2 Architectural Coating	Hauling	0.00	20.0	HHDT
Ph2 Architectural Coating	Onsite truck	—	—	HHDT
Ph2 Paving	—	—	—	—
Ph2 Paving	Worker	30.0	18.5	LDA,LDT1,LDT2

Ph2 Paving	Vendor	24.0	10.2	HHDT,MHDT
Ph2 Paving	Hauling	0.00	20.0	HHDT
Ph2 Paving	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Ph1 Mass Grading	—	—	—	—
Ph1 Mass Grading	Worker	82.5	18.5	LDA,LDT1,LDT2
Ph1 Mass Grading	Vendor	114	10.2	HHDT,MHDT
Ph1 Mass Grading	Hauling	0.00	20.0	HHDT
Ph1 Mass Grading	Onsite truck	—	—	HHDT
Ph1 Blasting	—	—	—	—
Ph1 Blasting	Worker	27.5	18.5	LDA,LDT1,LDT2
Ph1 Blasting	Vendor	114	10.2	HHDT,MHDT
Ph1 Blasting	Hauling	0.00	20.0	HHDT
Ph1 Blasting	Onsite truck	—	—	HHDT
Ph2 Remedial Grading	—	—	—	—
Ph2 Remedial Grading	Worker	47.5	18.5	LDA,LDT1,LDT2
Ph2 Remedial Grading	Vendor	38.0	10.2	HHDT,MHDT
Ph2 Remedial Grading	Hauling	0.00	20.0	HHDT
Ph2 Remedial Grading	Onsite truck	—	—	HHDT
Ph2 Building Construction	—	—	—	—
Ph2 Building Construction	Worker	1,902	18.5	LDA,LDT1,LDT2
Ph2 Building Construction	Vendor	352	10.2	HHDT,MHDT
Ph2 Building Construction	Hauling	0.00	20.0	HHDT
Ph2 Building Construction	Onsite truck	—	—	HHDT
Ph2 Architectural Coating	—	—	—	—

Ph2 Architectural Coating	Worker	380	18.5	LDA,LDT1,LDT2
Ph2 Architectural Coating	Vendor	176	10.2	HHDT,MHDT
Ph2 Architectural Coating	Hauling	0.00	20.0	HHDT
Ph2 Architectural Coating	Onsite truck	—	—	HHDT
Ph2 Paving	—	—	—	—
Ph2 Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Ph2 Paving	Vendor	24.0	10.2	HHDT,MHDT
Ph2 Paving	Hauling	0.00	20.0	HHDT
Ph2 Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Ph2 Architectural Coating	0.00	0.00	7,479,975	2,493,325	509,160

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Ph1 Mass Grading	—	—	3,980	0.00	—
Ph1 Blasting	—	—	3,980	0.00	—
Ph2 Remedial Grading	—	—	3,980	0.00	—
Ph2 Paving	0.00	0.00	0.00	0.00	195

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Office Park	0.00	0%
Regional Shopping Center	0.00	0%
Unrefrigerated Warehouse-No Rail	0.00	0%
Refrigerated Warehouse-No Rail	0.00	0%
City Park	0.00	0%
Other Asphalt Surfaces	195	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	532	0.03	< 0.005
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.2	annual days of extreme heat
Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	5.74	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	59.8
AQ-DPM	40.3

Drinking Water	70.7
Lead Risk Housing	53.6
Pesticides	13.2
Toxic Releases	64.0
Traffic	82.0
Effect Indicators	—
CleanUp Sites	82.5
Groundwater	97.9
Haz Waste Facilities/Generators	87.9
Impaired Water Bodies	0.00
Solid Waste	84.9
Sensitive Population	—
Asthma	71.5
Cardio-vascular	86.8
Low Birth Weights	97.0
Socioeconomic Factor Indicators	—
Education	82.5
Housing	59.7
Linguistic	82.8
Poverty	89.3
Unemployment	81.0

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	8.353650712

Employed	6.480174516
Median HI	22.3662261
Education	—
Bachelor's or higher	30.14243552
High school enrollment	100
Preschool enrollment	10.97138458
Transportation	—
Auto Access	10.29128705
Active commuting	87.46310792
Social	—
2-parent households	6.223533941
Voting	6.13370974
Neighborhood	—
Alcohol availability	44.43731554
Park access	43.37225715
Retail density	18.60644168
Supermarket access	67.43231105
Tree canopy	3.977928911
Housing	—
Homeownership	8.353650712
Housing habitability	10.4452714
Low-inc homeowner severe housing cost burden	45.06608495
Low-inc renter severe housing cost burden	46.23379956
Uncrowded housing	21.62196843
Health Outcomes	—
Insured adults	12.4085718
Arthritis	51.7

Asthma ER Admissions	24.0
High Blood Pressure	30.0
Cancer (excluding skin)	80.0
Asthma	9.8
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	31.9
Life Expectancy at Birth	7.4
Cognitively Disabled	15.9
Physically Disabled	19.5
Heart Attack ER Admissions	20.1
Mental Health Not Good	14.9
Chronic Kidney Disease	35.4
Obesity	8.3
Pedestrian Injuries	77.2
Physical Health Not Good	20.0
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	15.5
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	18.1
Elderly	24.3
English Speaking	44.9

Foreign-born	53.3
Outdoor Workers	18.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	73.9
Traffic Density	76.9
Traffic Access	61.5
Other Indices	—
Hardship	89.9
Other Decision Support	—
2016 Voting	11.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	98.0
Healthy Places Index Score for Project Location (b)	5.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Based on Project site plan
Construction: Construction Phases	Construction schedule based on data provided by the Project team
Construction: Off-Road Equipment	Construction equipment based on data provided by the Project team
Construction: Dust From Material Movement	Total acres grading based on equipment list
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for each phase.

APPENDIX 4.2:

CALEEMOD OPERATIONS EMISSIONS MODEL OUTPUTS

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14064 West Campus Upper Plateau Ops Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14064 West Campus Upper Plateau Ops
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	10.0
Location	33.907344901223, -117.30803322631292
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5480
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Office Park	1,763	1000sqft	40.5	1,763,170	0.00	—	—	—
Regional Shopping Center	161	1000sqft	3.69	160,920	0.00	—	—	—

Unrefrigerated Warehouse-No Rail	2,563	1000sqft	58.8	2,562,560	0.00	—	—	—
Refrigerated Warehouse-No Rail	500	1000sqft	11.5	500,000	0.00	—	—	—
City Park	60.3	Acre	60.3	0.00	2,625,801	0.00	—	—
Other Asphalt Surfaces	8,486	1000sqft	195	0.00	0.00	—	—	—
User Defined Industrial	3,063	User Defined Unit	0.00	0.00	0.00	—	—	—
User Defined Commercial	1,763	User Defined Unit	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	234	332	310	2,364	6.91	5.96	227	233	5.74	40.9	46.7	4,510	760,082	764,592	480	47.6	2,408	793,176
Mit.	234	332	310	2,364	6.91	5.96	227	233	5.74	40.9	46.7	4,510	745,571	750,080	479	47.4	2,408	778,580
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	2%	2%	< 0.5%	< 0.5%	—	2%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	187	288	328	1,762	6.52	5.67	227	233	5.35	40.9	46.3	4,510	721,637	726,147	480	48.3	562	753,104
Mit.	187	288	328	1,762	6.52	5.67	227	233	5.35	40.9	46.3	4,510	707,126	711,635	479	48.1	562	738,508
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	2%	2%	< 0.5%	< 0.5%	—	2%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	151	257	231	1,386	4.51	4.11	154	158	3.96	27.9	31.8	4,510	513,465	517,974	474	35.5	1,069	541,466
Mit.	151	257	231	1,386	4.51	4.11	154	158	3.96	27.9	31.8	4,510	498,953	503,463	473	35.3	1,069	526,870
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	3%	3%	< 0.5%	< 0.5%	—	3%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27.6	46.9	42.2	253	0.82	0.75	28.2	28.9	0.72	5.08	5.81	747	85,010	85,757	78.5	5.87	177	89,646
Mit.	27.6	46.9	42.2	253	0.82	0.75	28.2	28.9	0.72	5.08	5.81	747	82,607	83,354	78.2	5.85	177	87,229
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	3%	3%	< 0.5%	< 0.5%	—	3%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	196	174	308	2,148	6.90	5.67	227	233	5.35	40.9	46.3	—	709,893	709,893	19.4	42.1	1,895	724,817
Area	38.6	158	1.82	217	0.01	0.29	—	0.29	0.39	—	0.39	—	892	892	0.04	0.08	—	918
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	42,414	42,414	4.04	0.49	—	42,662
Water	—	—	—	—	—	—	—	—	—	—	—	1,980	6,883	8,863	204	4.90	—	15,418

Waste	—	—	—	—	—	—	—	—	—	—	—	2,529	0.00	2,529	253	0.00	—	8,848
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	513
Total	234	332	310	2,364	6.91	5.96	227	233	5.74	40.9	46.7	4,510	760,082	764,592	480	47.6	2,408	793,176
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	187	166	328	1,762	6.52	5.67	227	233	5.35	40.9	46.3	—	672,340	672,340	19.8	42.9	49.1	685,663
Area	—	122	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	42,414	42,414	4.04	0.49	—	42,662
Water	—	—	—	—	—	—	—	—	—	—	—	1,980	6,883	8,863	204	4.90	—	15,418
Waste	—	—	—	—	—	—	—	—	—	—	—	2,529	0.00	2,529	253	0.00	—	8,848
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	513
Total	187	288	328	1,762	6.52	5.67	227	233	5.35	40.9	46.3	4,510	721,637	726,147	480	48.3	562	753,104
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	125	110	230	1,237	4.50	3.91	154	158	3.70	27.9	31.6	—	463,557	463,557	13.4	30.0	556	473,397
Area	26.4	147	1.25	149	0.01	0.20	—	0.20	0.26	—	0.26	—	611	611	0.03	0.06	—	629
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	42,414	42,414	4.04	0.49	—	42,662
Water	—	—	—	—	—	—	—	—	—	—	—	1,980	6,883	8,863	204	4.90	—	15,418
Waste	—	—	—	—	—	—	—	—	—	—	—	2,529	0.00	2,529	253	0.00	—	8,848
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	513
Total	151	257	231	1,386	4.51	4.11	154	158	3.96	27.9	31.8	4,510	513,465	517,974	474	35.5	1,069	541,466
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	22.8	20.1	42.0	226	0.82	0.71	28.2	28.9	0.67	5.08	5.76	—	76,747	76,747	2.21	4.97	92.1	78,376
Area	4.83	26.8	0.23	27.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	101	101	< 0.005	0.01	—	104
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	7,022	7,022	0.67	0.08	—	7,063
Water	—	—	—	—	—	—	—	—	—	—	—	328	1,139	1,467	33.7	0.81	—	2,553
Waste	—	—	—	—	—	—	—	—	—	—	—	419	0.00	419	41.8	0.00	—	1,465
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.9	84.9

Total	27.6	46.9	42.2	253	0.82	0.75	28.2	28.9	0.72	5.08	5.81	747	85,010	85,757	78.5	5.87	177	89,646

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	196	174	308	2,148	6.90	5.67	227	233	5.35	40.9	46.3	—	709,893	709,893	19.4	42.1	1,895	724,817
Area	38.6	158	1.82	217	0.01	0.29	—	0.29	0.39	—	0.39	—	892	892	0.04	0.08	—	918
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	27,903	27,903	2.66	0.32	—	28,065
Water	—	—	—	—	—	—	—	—	—	—	—	1,980	6,883	8,863	204	4.90	—	15,418
Waste	—	—	—	—	—	—	—	—	—	—	—	2,529	0.00	2,529	253	0.00	—	8,848
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	513
Total	234	332	310	2,364	6.91	5.96	227	233	5.74	40.9	46.7	4,510	745,571	750,080	479	47.4	2,408	778,580
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	187	166	328	1,762	6.52	5.67	227	233	5.35	40.9	46.3	—	672,340	672,340	19.8	42.9	49.1	685,663
Area	—	122	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	27,903	27,903	2.66	0.32	—	28,065
Water	—	—	—	—	—	—	—	—	—	—	—	1,980	6,883	8,863	204	4.90	—	15,418
Waste	—	—	—	—	—	—	—	—	—	—	—	2,529	0.00	2,529	253	0.00	—	8,848
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	513
Total	187	288	328	1,762	6.52	5.67	227	233	5.35	40.9	46.3	4,510	707,126	711,635	479	48.1	562	738,508
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	125	110	230	1,237	4.50	3.91	154	158	3.70	27.9	31.6	—	463,557	463,557	13.4	30.0	556	473,397
Area	26.4	147	1.25	149	0.01	0.20	—	0.20	0.26	—	0.26	—	611	611	0.03	0.06	—	629

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	27,903	27,903	2.66	0.32	—	28,065
Water	—	—	—	—	—	—	—	—	—	—	—	1,980	6,883	8,863	204	4.90	—	15,418
Waste	—	—	—	—	—	—	—	—	—	—	—	2,529	0.00	2,529	253	0.00	—	8,848
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	513
Total	151	257	231	1,386	4.51	4.11	154	158	3.96	27.9	31.8	4,510	498,953	503,463	473	35.3	1,069	526,870
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	22.8	20.1	42.0	226	0.82	0.71	28.2	28.9	0.67	5.08	5.76	—	76,747	76,747	2.21	4.97	92.1	78,376
Area	4.83	26.8	0.23	27.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	101	101	< 0.005	0.01	—	104
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	4,620	4,620	0.44	0.05	—	4,647
Water	—	—	—	—	—	—	—	—	—	—	—	328	1,139	1,467	33.7	0.81	—	2,553
Waste	—	—	—	—	—	—	—	—	—	—	—	419	0.00	419	41.8	0.00	—	1,465
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.9	84.9
Total	27.6	46.9	42.2	253	0.82	0.75	28.2	28.9	0.72	5.08	5.81	747	82,607	83,354	78.2	5.85	177	87,229

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	87.6	78.8	50.0	1,128	2.68	1.04	13.3	14.4	0.96	3.98	4.94	—	271,472	271,472	7.63	5.52	731	274,037
Regional Shopping Center	47.8	44.2	36.2	342	0.89	0.62	5.14	5.76	0.58	1.59	2.17	—	90,520	90,520	3.61	4.02	259	92,068

Unrefrige Warehouse-No Rail	19.4	17.5	11.1	250	0.60	0.23	2.96	3.19	0.21	0.88	1.10	—	60,220	60,220	1.69	1.22	162	60,789
Refrigerated Warehouse-No Rail	2.97	2.67	1.69	38.3	0.09	0.04	0.45	0.49	0.03	0.14	0.17	—	9,210	9,210	0.26	0.19	24.8	9,297
City Park	30.6	27.1	34.1	340	0.96	0.65	5.66	6.31	0.61	1.75	2.36	—	98,353	98,353	3.07	3.94	285	99,889
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	4.80	2.52	115	31.6	1.10	2.03	9.32	11.4	1.94	3.00	4.94	—	118,328	118,328	2.04	17.9	285	123,991
User Defined Commercial	2.51	1.32	60.1	16.5	0.58	1.06	4.87	5.93	1.02	1.57	2.58	—	61,790	61,790	1.06	9.33	149	64,747
Total	196	174	308	2,148	6.90	5.67	41.7	47.4	5.35	12.9	18.3	—	709,893	709,893	19.4	42.1	1,895	724,817
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	84.4	75.6	55.5	912	2.48	1.04	13.3	14.4	0.96	3.98	4.94	—	250,667	250,667	7.82	5.93	18.9	252,648
Regional Shopping Center	45.1	41.5	38.7	291	0.83	0.62	5.14	5.76	0.58	1.59	2.17	—	85,063	85,063	3.76	4.15	6.71	86,400
Unrefrigerated Warehouse-No Rail	18.7	16.8	12.3	202	0.55	0.23	2.96	3.19	0.21	0.88	1.10	—	55,605	55,605	1.73	1.32	4.20	56,044
Refrigerated Warehouse-No Rail	2.86	2.56	1.88	30.9	0.08	0.04	0.45	0.49	0.03	0.14	0.17	—	8,504	8,504	0.27	0.20	0.64	8,571

City Park	29.1	25.7	36.6	278	0.90	0.65	5.66	6.31	0.61	1.75	2.36	—	92,328	92,328	3.13	4.06	7.39	93,625
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	4.69	2.43	120	31.8	1.10	2.03	9.32	11.4	1.95	3.00	4.95	—	118,364	118,364	2.03	17.9	7.40	123,752
User Defined Commercial	2.45	1.27	62.8	16.6	0.58	1.06	4.87	5.93	1.02	1.57	2.58	—	61,809	61,809	1.06	9.34	3.86	64,622
Total	187	166	328	1,762	6.52	5.67	41.7	47.4	5.35	12.9	18.3	—	672,340	672,340	19.8	42.9	49.1	685,663
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	11.3	10.1	7.69	128	0.34	0.14	1.79	1.93	0.13	0.53	0.66	—	30,929	30,929	0.96	0.74	38.5	31,212
Regional Shopping Center	4.95	4.56	4.22	32.2	0.09	0.07	0.54	0.61	0.06	0.17	0.23	—	8,212	8,212	0.37	0.41	10.7	8,353
Unrefrigerated Warehouse-No Rail	2.48	2.22	1.69	28.1	0.07	0.03	0.39	0.43	0.03	0.12	0.15	—	6,808	6,808	0.21	0.16	8.47	6,870
Refrigerated Warehouse-No Rail	0.38	0.34	0.26	4.29	0.01	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	1,041	1,041	0.03	0.02	1.29	1,051
City Park	2.74	2.41	3.53	27.3	0.09	0.06	0.54	0.60	0.06	0.17	0.22	—	7,989	7,989	0.27	0.35	10.5	8,111
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.63	0.33	16.1	4.19	0.15	0.27	1.24	1.51	0.26	0.40	0.66	—	14,230	14,230	0.24	2.15	14.8	14,892

User Defined Commercial	0.33	0.17	8.52	2.22	0.08	0.14	0.65	0.80	0.14	0.21	0.35	—	7,538	7,538	0.13	1.14	7.84	7,889
Total	22.8	20.1	42.0	226	0.82	0.71	5.21	5.93	0.67	1.61	2.29	—	76,747	76,747	2.21	4.97	92.1	78,376

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	87.6	78.8	50.0	1,128	2.68	1.04	13.3	14.4	0.96	3.98	4.94	—	271,472	271,472	7.63	5.52	731	274,037
Regional Shopping Center	47.8	44.2	36.2	342	0.89	0.62	5.14	5.76	0.58	1.59	2.17	—	90,520	90,520	3.61	4.02	259	92,068
Unrefrigerated Warehouse-No Rail	19.4	17.5	11.1	250	0.60	0.23	2.96	3.19	0.21	0.88	1.10	—	60,220	60,220	1.69	1.22	162	60,789
Refrigerated Warehouse-No Rail	2.97	2.67	1.69	38.3	0.09	0.04	0.45	0.49	0.03	0.14	0.17	—	9,210	9,210	0.26	0.19	24.8	9,297
City Park	30.6	27.1	34.1	340	0.96	0.65	5.66	6.31	0.61	1.75	2.36	—	98,353	98,353	3.07	3.94	285	99,889
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	4.80	2.52	115	31.6	1.10	2.03	9.32	11.4	1.94	3.00	4.94	—	118,328	118,328	2.04	17.9	285	123,991

User Defined Commercial	2.51	1.32	60.1	16.5	0.58	1.06	4.87	5.93	1.02	1.57	2.58	—	61,790	61,790	1.06	9.33	149	64,747
Total	196	174	308	2,148	6.90	5.67	41.7	47.4	5.35	12.9	18.3	—	709,893	709,893	19.4	42.1	1,895	724,817
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	84.4	75.6	55.5	912	2.48	1.04	13.3	14.4	0.96	3.98	4.94	—	250,667	250,667	7.82	5.93	18.9	252,648
Regional Shopping Center	45.1	41.5	38.7	291	0.83	0.62	5.14	5.76	0.58	1.59	2.17	—	85,063	85,063	3.76	4.15	6.71	86,400
Unrefrigerated Warehouse-No Rail	18.7	16.8	12.3	202	0.55	0.23	2.96	3.19	0.21	0.88	1.10	—	55,605	55,605	1.73	1.32	4.20	56,044
Refrigerated Warehouse-No Rail	2.86	2.56	1.88	30.9	0.08	0.04	0.45	0.49	0.03	0.14	0.17	—	8,504	8,504	0.27	0.20	0.64	8,571
City Park	29.1	25.7	36.6	278	0.90	0.65	5.66	6.31	0.61	1.75	2.36	—	92,328	92,328	3.13	4.06	7.39	93,625
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	4.69	2.43	120	31.8	1.10	2.03	9.32	11.4	1.95	3.00	4.95	—	118,364	118,364	2.03	17.9	7.40	123,752
User Defined Commercial	2.45	1.27	62.8	16.6	0.58	1.06	4.87	5.93	1.02	1.57	2.58	—	61,809	61,809	1.06	9.34	3.86	64,622
Total	187	166	328	1,762	6.52	5.67	41.7	47.4	5.35	12.9	18.3	—	672,340	672,340	19.8	42.9	49.1	685,663
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	11.3	10.1	7.69	128	0.34	0.14	1.79	1.93	0.13	0.53	0.66	—	30,929	30,929	0.96	0.74	38.5	31,212

Regional Shopping Center	4.95	4.56	4.22	32.2	0.09	0.07	0.54	0.61	0.06	0.17	0.23	—	8,212	8,212	0.37	0.41	10.7	8,353
Unrefrigerated Warehouse-No Rail	2.48	2.22	1.69	28.1	0.07	0.03	0.39	0.43	0.03	0.12	0.15	—	6,808	6,808	0.21	0.16	8.47	6,870
Refrigerated Warehouse-No Rail	0.38	0.34	0.26	4.29	0.01	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	1,041	1,041	0.03	0.02	1.29	1,051
City Park	2.74	2.41	3.53	27.3	0.09	0.06	0.54	0.60	0.06	0.17	0.22	—	7,989	7,989	0.27	0.35	10.5	8,111
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.63	0.33	16.1	4.19	0.15	0.27	1.24	1.51	0.26	0.40	0.66	—	14,230	14,230	0.24	2.15	14.8	14,892
User Defined Commercial	0.33	0.17	8.52	2.22	0.08	0.14	0.65	0.80	0.14	0.21	0.35	—	7,538	7,538	0.13	1.14	7.84	7,889
Total	22.8	20.1	42.0	226	0.82	0.71	5.21	5.93	0.67	1.61	2.29	—	76,747	76,747	2.21	4.97	92.1	78,376

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Office Park	—	—	—	—	—	—	—	—	—	—	—	—	16,029	16,029	1.53	0.19	—	16,123
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	1,851	1,851	0.18	0.02	—	1,862
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	5,640	5,640	0.54	0.07	—	5,673
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	18,894	18,894	1.80	0.22	—	19,004
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	42,414	42,414	4.04	0.49	—	42,662
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	16,029	16,029	1.53	0.19	—	16,123
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	1,851	1,851	0.18	0.02	—	1,862

Unrefrigerated Warehou Rail	—	—	—	—	—	—	—	—	—	—	—	—	5,640	5,640	0.54	0.07	—	5,673
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	18,894	18,894	1.80	0.22	—	19,004
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	42,414	42,414	4.04	0.49	—	42,662
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	2,654	2,654	0.25	0.03	—	2,669
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	307	307	0.03	< 0.005	—	308
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	934	934	0.09	0.01	—	939
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,128	3,128	0.30	0.04	—	3,146

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,022	7,022	0.67	0.08	—	7,063

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	13,387	13,387	1.28	0.15	—	13,465
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	1,161	1,161	0.11	0.01	—	1,168
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,787	4,787	0.46	0.06	—	4,815
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	8,568	8,568	0.82	0.10	—	8,618
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	27,903	27,903	2.66	0.32	—	28,065
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	13,387	13,387	1.28	0.15	—	13,465
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	1,161	1,161	0.11	0.01	—	1,168
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,787	4,787	0.46	0.06	—	4,815
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	8,568	8,568	0.82	0.10	—	8,618
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	27,903	27,903	2.66	0.32	—	28,065
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	2,216	2,216	0.21	0.03	—	2,229
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	192	192	0.02	< 0.005	—	193
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	793	793	0.08	0.01	—	797
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419	0.14	0.02	—	1,427
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,620	4,620	0.44	0.05	—	4,647

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Refrigerated	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	109	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	13.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	38.6	35.6	1.82	217	0.01	0.29	—	0.29	0.39	—	0.39	—	892	892	0.04	0.08	—	918
Total	38.6	158	1.82	217	0.01	0.29	—	0.29	0.39	—	0.39	—	892	892	0.04	0.08	—	918
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	109	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	13.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	122	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer	—	19.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	2.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.83	4.45	0.23	27.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	101	101	< 0.005	0.01	—	104
Total	4.83	26.8	0.23	27.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	101	101	< 0.005	0.01	—	104

4.3.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	109	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	13.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	38.6	35.6	1.82	217	0.01	0.29	—	0.29	0.39	—	0.39	—	892	892	0.04	0.08	—	918
Total	38.6	158	1.82	217	0.01	0.29	—	0.29	0.39	—	0.39	—	892	892	0.04	0.08	—	918
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	109	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	—	13.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	122	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	19.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	2.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.83	4.45	0.23	27.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	101	101	< 0.005	0.01	—	104
Total	4.83	26.8	0.23	27.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	101	101	< 0.005	0.01	—	104

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	600	2,023	2,624	61.8	1.49	—	4,611
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	22.8	77.0	99.8	2.35	0.06	—	175

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,136	3,826	4,962	117	2.81	—	8,719
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	222	747	968	22.8	0.55	—	1,701
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	210	210	0.02	< 0.005	—	211
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,980	6,883	8,863	204	4.90	—	15,418
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	600	2,023	2,624	61.8	1.49	—	4,611
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	22.8	77.0	99.8	2.35	0.06	—	175
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,136	3,826	4,962	117	2.81	—	8,719

Refrigerated Warehouse-No	—	—	—	—	—	—	—	—	—	—	—	222	747	968	22.8	0.55	—	1,701
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	210	210	0.02	< 0.005	—	211
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,980	6,883	8,863	204	4.90	—	15,418
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	99.4	335	434	10.2	0.25	—	763
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	3.78	12.7	16.5	0.39	0.01	—	29.0
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	188	633	821	19.3	0.47	—	1,444
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	36.7	124	160	3.77	0.09	—	282
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	34.7	34.7	< 0.005	< 0.005	—	34.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	328	1,139	1,467	33.7	0.81	—	2,553

4.4.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	600	2,023	2,624	61.8	1.49	—	4,611
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	22.8	77.0	99.8	2.35	0.06	—	175
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,136	3,826	4,962	117	2.81	—	8,719
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	222	747	968	22.8	0.55	—	1,701
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	210	210	0.02	< 0.005	—	211
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,980	6,883	8,863	204	4.90	—	15,418
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	600	2,023	2,624	61.8	1.49	—	4,611
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	22.8	77.0	99.8	2.35	0.06	—	175
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,136	3,826	4,962	117	2.81	—	8,719
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	222	747	968	22.8	0.55	—	1,701
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	210	210	0.02	< 0.005	—	211
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,980	6,883	8,863	204	4.90	—	15,418

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	99.4	335	434	10.2	0.25	—	763
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	3.78	12.7	16.5	0.39	0.01	—	29.0
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	188	633	821	19.3	0.47	—	1,444
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	36.7	124	160	3.77	0.09	—	282
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	34.7	34.7	< 0.005	< 0.005	—	34.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	328	1,139	1,467	33.7	0.81	—	2,553

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	884	0.00	884	88.3	0.00	—	3,092
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.10	0.00	—	319
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,298	0.00	1,298	130	0.00	—	4,542
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	253	0.00	253	25.3	0.00	—	886
City Park	—	—	—	—	—	—	—	—	—	—	—	2.79	0.00	2.79	0.28	0.00	—	9.77
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,529	0.00	2,529	253	0.00	—	8,848
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	884	0.00	884	88.3	0.00	—	3,092

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.10	0.00	—	319
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,298	0.00	1,298	130	0.00	—	4,542
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	253	0.00	253	25.3	0.00	—	886
City Park	—	—	—	—	—	—	—	—	—	—	—	2.79	0.00	2.79	0.28	0.00	—	9.77
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,529	0.00	2,529	253	0.00	—	8,848
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.6	0.00	—	512
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	15.1	0.00	15.1	1.51	0.00	—	52.7
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	215	0.00	215	21.5	0.00	—	752

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	41.9	0.00	41.9	4.19	0.00	—	147
City Park	—	—	—	—	—	—	—	—	—	—	—	0.46	0.00	0.46	0.05	0.00	—	1.62
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	419	0.00	419	41.8	0.00	—	1,465

4.5.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	884	0.00	884	88.3	0.00	—	3,092
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.10	0.00	—	319
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,298	0.00	1,298	130	0.00	—	4,542

Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	253	0.00	253	25.3	0.00	—	886
City Park	—	—	—	—	—	—	—	—	—	—	—	2.79	0.00	2.79	0.28	0.00	—	9.77
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,529	0.00	2,529	253	0.00	—	8,848
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	884	0.00	884	88.3	0.00	—	3,092
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.10	0.00	—	319
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,298	0.00	1,298	130	0.00	—	4,542
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	253	0.00	253	25.3	0.00	—	886
City Park	—	—	—	—	—	—	—	—	—	—	—	2.79	0.00	2.79	0.28	0.00	—	9.77

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,529	0.00	2,529	253	0.00	—	8,848
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.6	0.00	—	512
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	15.1	0.00	15.1	1.51	0.00	—	52.7
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	215	0.00	215	21.5	0.00	—	752
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	41.9	0.00	41.9	4.19	0.00	—	147
City Park	—	—	—	—	—	—	—	—	—	—	—	0.46	0.00	0.46	0.05	0.00	—	1.62
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	419	0.00	419	41.8	0.00	—	1,465

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.52	2.52
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	510	510
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	513
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.52	2.52
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	510	510

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	513
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.42	0.42
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.4	84.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.9	84.9

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.52	2.52
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	510	510
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	513

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.52	2.52
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	510	510
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	513
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.42	0.42
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.4	84.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.9	84.9

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Office Park	19,719	1,601	1,453	5,300,336	394,977	32,067	29,101	106,165,726
Regional Shopping Center	6,354	12,303	8,990	2,766,960	52,049	112,827	82,441	23,751,698
Unrefrigerated Warehouse-No Rail	4,374	359	144	1,166,629	87,617	7,186	2,874	23,367,583
Refrigerated Warehouse-No Rail	669	54.5	22.0	178,407	13,400	1,092	441	3,573,488
City Park	2,145	5,550	6,202	1,171,975	42,961	111,175	124,221	23,474,668

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	1,351	110	3.06	358,026	43,259	3,531	98.1	11,467,585
User Defined Commercial	705	58.2	52.9	189,665	22,590	1,864	1,694	6,074,985

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Office Park	19,719	1,601	1,453	5,300,336	394,977	32,067	29,101	106,165,726
Regional Shopping Center	6,354	12,303	8,990	2,766,960	52,049	112,827	82,441	23,751,698
Unrefrigerated Warehouse-No Rail	4,374	359	144	1,166,629	87,617	7,186	2,874	23,367,583
Refrigerated Warehouse-No Rail	669	54.5	22.0	178,407	13,400	1,092	441	3,573,488
City Park	2,145	5,550	6,202	1,171,975	42,961	111,175	124,221	23,474,668
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	1,351	110	3.06	358,026	43,259	3,531	98.1	11,467,585
User Defined Commercial	705	58.2	52.9	189,665	22,590	1,864	1,694	6,074,985

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	7,479,975	2,493,325	509,160

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Office Park	16,900,118	346	0.0330	0.0040	0.00
Regional Shopping Center	1,951,952	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	5,946,160	346	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	19,920,000	346	0.0330	0.0040	0.00
City Park	0.00	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

User Defined Industrial	0.00	346	0.0330	0.0040	0.00
User Defined Commercial	0.00	346	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Office Park	14,114,118	346	0.0330	0.0040	0.00
Regional Shopping Center	1,224,052	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	5,046,785	346	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	9,033,455	346	0.0330	0.0040	0.00
City Park	0.00	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00
User Defined Commercial	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Office Park	313,374,812	0.00
Regional Shopping Center	11,919,750	0.00
Unrefrigerated Warehouse-No Rail	592,592,000	0.00
Refrigerated Warehouse-No Rail	115,625,000	0.00
City Park	0.00	41,633,942
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

User Defined Commercial	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Office Park	313,374,812	0.00
Regional Shopping Center	11,919,750	0.00
Unrefrigerated Warehouse-No Rail	592,592,000	0.00
Refrigerated Warehouse-No Rail	115,625,000	0.00
City Park	0.00	41,633,942
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00
User Defined Commercial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Office Park	1,640	0.00
Regional Shopping Center	169	0.00
Unrefrigerated Warehouse-No Rail	2,409	0.00
Refrigerated Warehouse-No Rail	470	0.00
City Park	5.18	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00
User Defined Commercial	0.00	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Office Park	1,640	0.00
Regional Shopping Center	169	0.00
Unrefrigerated Warehouse-No Rail	2,409	0.00
Refrigerated Warehouse-No Rail	470	0.00
City Park	5.18	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00
User Defined Commercial	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Refrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Refrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.2	annual days of extreme heat
Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	5.74	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A

Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	59.8
AQ-DPM	40.3
Drinking Water	70.7
Lead Risk Housing	53.6
Pesticides	13.2
Toxic Releases	64.0
Traffic	82.0
Effect Indicators	—
CleanUp Sites	82.5
Groundwater	97.9
Haz Waste Facilities/Generators	87.9
Impaired Water Bodies	0.00
Solid Waste	84.9
Sensitive Population	—
Asthma	71.5
Cardio-vascular	86.8
Low Birth Weights	97.0
Socioeconomic Factor Indicators	—
Education	82.5
Housing	59.7
Linguistic	82.8
Poverty	89.3

Unemployment	81.0

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	8.353650712
Employed	6.480174516
Median HI	22.3662261
Education	—
Bachelor's or higher	30.14243552
High school enrollment	100
Preschool enrollment	10.97138458
Transportation	—
Auto Access	10.29128705
Active commuting	87.46310792
Social	—
2-parent households	6.223533941
Voting	6.13370974
Neighborhood	—
Alcohol availability	44.43731554
Park access	43.37225715
Retail density	18.60644168
Supermarket access	67.43231105
Tree canopy	3.977928911
Housing	—
Homeownership	8.353650712

Housing habitability	10.4452714
Low-inc homeowner severe housing cost burden	45.06608495
Low-inc renter severe housing cost burden	46.23379956
Uncrowded housing	21.62196843
Health Outcomes	—
Insured adults	12.4085718
Arthritis	51.7
Asthma ER Admissions	24.0
High Blood Pressure	30.0
Cancer (excluding skin)	80.0
Asthma	9.8
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	31.9
Life Expectancy at Birth	7.4
Cognitively Disabled	15.9
Physically Disabled	19.5
Heart Attack ER Admissions	20.1
Mental Health Not Good	14.9
Chronic Kidney Disease	35.4
Obesity	8.3
Pedestrian Injuries	77.2
Physical Health Not Good	20.0
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	15.5

No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	18.1
Elderly	24.3
English Speaking	44.9
Foreign-born	53.3
Outdoor Workers	18.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	73.9
Traffic Density	76.9
Traffic Access	61.5
Other Indices	—
Hardship	89.9
Other Decision Support	—
2016 Voting	11.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	98.0
Healthy Places Index Score for Project Location (b)	5.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Based on Project site plan.
Operations: Vehicle Data	Trips adjusted per Project traffic study
Operations: Fleet Mix	Fleet mix adjusted based on Project traffic study
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. As of 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.
Operations: Energy Use	Electricity usage based on CalEEMod 2020 calculations. Project will not use natural gas.

WCUP Park Lighting Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	WCUP Park Lighting
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	20.2
Location	Riverside County, CA, USA
County	Riverside-South Coast
City	Riverside
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5416
EDFZ	11
Electric Utility	City of Riverside
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	30.0	Acre	30.0	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,347	1,347	0.10	0.01	0.00	1,354
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,347	1,347	0.10	0.01	0.00	1,354
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,347	1,347	0.10	0.01	0.00	1,354
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	223	223	0.02	< 0.005	0.00	224

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.10	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,347	1,347	0.10	0.01	—	1,354
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,347	1,347	0.10	0.01	0.00	1,354
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,347	1,347	0.10	0.01	—	1,354
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,347	1,347	0.10	0.01	0.00	1,354
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.10	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,347	1,347	0.10	0.01	—	1,354
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,347	1,347	0.10	0.01	0.00	1,354
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.02	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	223	223	0.02	< 0.005	—	224
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	223	223	0.02	< 0.005	0.00	224

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,347	1,347	0.10	0.01	—	1,354
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,347	1,347	0.10	0.01	—	1,354
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,347	1,347	0.10	0.01	—	1,354
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,347	1,347	0.10	0.01	—	1,354
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	223	223	0.02	< 0.005	—	224
Total	—	—	—	—	—	—	—	—	—	—	—	—	223	223	0.02	< 0.005	—	224

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.10	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.02	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	0.00

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	1,144,757	430	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	—

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	25.6	annual days of extreme heat
Extreme Precipitation	2.20	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth

Wildfire	1.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.0
AQ-PM	92.6
AQ-DPM	95.7
Drinking Water	77.4
Lead Risk Housing	90.5
Pesticides	0.00
Toxic Releases	57.6
Traffic	57.0

Effect Indicators	—
CleanUp Sites	25.9
Groundwater	37.6
Haz Waste Facilities/Generators	67.6
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	55.6
Cardio-vascular	53.9
Low Birth Weights	50.7
Socioeconomic Factor Indicators	—
Education	60.5
Housing	77.2
Linguistic	19.9
Poverty	63.2
Unemployment	61.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	36.40446555
Employed	24.62466316
Median HI	37.40536379
Education	—
Bachelor's or higher	44.41165148
High school enrollment	100

Preschool enrollment	6.339022199
Transportation	—
Auto Access	48.06877967
Active commuting	41.6527653
Social	—
2-parent households	35.63454382
Voting	32.8114975
Neighborhood	—
Alcohol availability	36.80225844
Park access	18.40112922
Retail density	86.91133068
Supermarket access	72.66777878
Tree canopy	70.3580136
Housing	—
Homeownership	49.23649429
Housing habitability	71.62838445
Low-inc homeowner severe housing cost burden	71.85936096
Low-inc renter severe housing cost burden	62.88977287
Uncrowded housing	55.19055563
Health Outcomes	—
Insured adults	46.81124086
Arthritis	16.8
Asthma ER Admissions	46.4
High Blood Pressure	19.9
Cancer (excluding skin)	22.7
Asthma	30.0
Coronary Heart Disease	28.5

Chronic Obstructive Pulmonary Disease	25.1
Diagnosed Diabetes	58.5
Life Expectancy at Birth	7.0
Cognitively Disabled	76.7
Physically Disabled	45.1
Heart Attack ER Admissions	51.2
Mental Health Not Good	41.5
Chronic Kidney Disease	35.4
Obesity	29.7
Pedestrian Injuries	71.2
Physical Health Not Good	41.5
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	35.4
Current Smoker	37.8
No Leisure Time for Physical Activity	46.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	27.6
Elderly	55.1
English Speaking	85.6
Foreign-born	14.8
Outdoor Workers	25.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	69.2
Traffic Density	81.9

Traffic Access	57.3
Other Indices	—
Hardship	64.4
Other Decision Support	—
2016 Voting	48.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	73.0
Healthy Places Index Score for Project Location (b)	29.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Architectural Coatings	Lighting for Park Use

APPENDIX 4.3:

EMFAC2021

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Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Gasoline	9.455104489	402.0155083	0.108573531	108.5735307	317785.1606	402.0155083	1920248.354	6.04	HHDT
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Diesel	14188.53655	1870417.715	309.6254593	309625.4593		1870417.715			
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Electricity	10.75839329	733.8118529	0	0		733.8118529			
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Natural Gas	693.7983116	48694.81207	8.051127696	8051.127696		48694.81207			
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Gasoline	469124.6474	20366451.54	699.7310812	699731.0812	711067.1515	20366451.54	21760170.77	30.60	LDA
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Diesel	1558.762895	58561.51523	1.375784729	1375.784729		58561.51523			
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Electricity	16185.78734	744565.1808	0	0		744565.1808			
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Plug-in Hybrid	11651.42905	590592.5329	9.960285645	9960.285645		590592.5329			
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Gasoline	41569.09002	1542689.764	63.99950114	63999.50114	64044.29373	1542689.764	1546785.932	24.15	LDT1
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Diesel	20.22700504	383.6181372	0.015644241	15.64424123		383.6181372			
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Electricity	42.93918941	1813.231309	0	0		1813.231309			
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Plug-in Hybrid	33.25263876	1899.318283	0.029148352	29.14835174		1899.318283			
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Gasoline	191587.7811	8435118.12	356.5641957	356564.1957	358545.5463	8435118.12	8562709.114	23.88	LDT2
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Diesel	577.8339592	27328.90025	0.849494989	849.4949888		27328.90025			
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Electricity	816.9774193	29520.94571	0	0		29520.94571			
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Plug-in Hybrid	1285.022226	70741.14871	1.131855657	1131.855657		70741.14871			
Riverside (SC)	2023	LHDT1	Aggregate	Aggregate	Gasoline	18052.34987	656605.5887	49.73832228	49738.32228	77417.67097	656605.5887	1224140.947	15.81	LHDT1
Riverside (SC)	2023	LHDT1	Aggregate	Aggregate	Diesel	15395.69696	567535.3588	27.67934868	27679.34868		567535.3588			
Riverside (SC)	2023	LHDT2	Aggregate	Aggregate	Gasoline	2523.570585	90490.65997	7.611904144	7611.904144	22679.23434	90490.65997	346711.8059	15.29	LHDT2
Riverside (SC)	2023	LHDT2	Aggregate	Aggregate	Diesel	6852.470307	256221.1459	15.0673302	15067.3302		256221.1459			
Riverside (SC)	2023	MCY	Aggregate	Aggregate	Gasoline	24170.7213	141523.0693	3.403298812	3403.298812	3403.298812	141523.0693	141523.0693	41.58	MCY
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Gasoline	159138.1322	6456725.347	338.8355886	338835.5886	344047.395	6456725.347	6637695.092	19.29	MDV
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Diesel	2483.005938	104140.6313	4.4577137	4457.7137		104140.6313			
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Electricity	897.1539487	32338.42861	0	0		32338.42861			
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Plug-in Hybrid	887.9224631	44490.68605	0.754092705	754.0927053		44490.68605			
Riverside (SC)	2023	MH	Aggregate	Aggregate	Gasoline	5083.841078	44617.33224	9.135457245	9135.457245	10873.77525	44617.33224	62635.35904	5.76	MH
Riverside (SC)	2023	MH	Aggregate	Aggregate	Diesel	2073.70666	18018.02681	1.738318002	1738.318002		18018.02681			
Riverside (SC)	2023	MHDT	Aggregate	Aggregate	Gasoline	1260.142241	50001.99826	9.730848023	9730.848023	72860.34533	50001.99826	613586.1262	8.42	MHDT
Riverside (SC)	2023	MHDT	Aggregate	Aggregate	Diesel	12683.243	556347.8969	62.32189585	62321.89585		556347.8969			
Riverside (SC)	2023	MHDT	Aggregate	Aggregate	Electricity	4.9202908	108.4971152	0	0		108.4971152			
Riverside (SC)	2023	MHDT	Aggregate	Aggregate	Natural Gas	147.6204682	7127.733974	0.807601459	807.6014589		7127.733974			
Riverside (SC)	2023	OBUS	Aggregate	Aggregate	Gasoline	386.6813181	13386.35665	2.645844907	2645.844907	4805.404855	13386.35665	30497.76136	6.35	OBUS
Riverside (SC)	2023	OBUS	Aggregate	Aggregate	Diesel	215.667787	15076.44179	1.951877039	1951.877039		15076.44179			
Riverside (SC)	2023	OBUS	Aggregate	Aggregate	Natural Gas	33.12387867	2034.962916	0.207682909	207.6829092		2034.962916			
Riverside (SC)	2023	SBUS	Aggregate	Aggregate	Gasoline	421.1646074	16563.24745	1.897862822	1897.862822	5896.748986	16563.24745	37701.28126	6.39	SBUS
Riverside (SC)	2023	SBUS	Aggregate	Aggregate	Diesel	499.0687276	10519.58678	1.437331357	1437.331357		10519.58678			
Riverside (SC)	2023	SBUS	Aggregate	Aggregate	Electricity	0.562315788	6.53322339	0	0		6.53322339			
Riverside (SC)	2023	SBUS	Aggregate	Aggregate	Natural Gas	428.0776414	10611.9138	2.561554808	2561.554808		10611.9138			
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Gasoline	145.9294435	18476.36382	3.28009086	3280.09086	11107.60554	18476.36382	49531.64193	4.46	UBUS
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Diesel	0.3117338	30.10971099	0.002674589	2.674588852		30.10971099			
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Electricity	0.030745281	2.969621933	0	0		2.969621933			
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Natural Gas	251.677147	31022.19878	7.824840087	7824.840087		31022.19878			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Gasoline	7.589475903	347.9694468	0.092180823	92.18082291	321404.9638	347.9694468	1967302.751	6.12	HHDT
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Diesel	14792.02338	1911347.779	313.0439759	313043.9759		1911347.779			
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Electricity	47.99547895	5148.201829	0	0		5148.201829			
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Natural Gas	740.0705237	50458.80082	8.268807048	8268.807048		50458.80082			
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Gasoline	469145.3818	20418129.53	688.4836596	688483.6596	700469.6115	20418129.53	22069128.65	31.51	LDA
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Diesel	1473.049219	54327.45303	1.267188759	1267.188759		54327.45303			
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Electricity	19934.69439	945704.6798	0	0		945704.6798			
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Plug-in Hybrid	12893.65575	650966.9876	10.71876311	10718.76311		650966.9876			
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Gasoline	40643.24621	1523061.246	62.04624692	62046.24692	62104.32538	1523061.246	1529163.988	24.62	LDT1
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Diesel	18.16927182	339.6979643	0.013831102	13.83110227		339.6979643			
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Electricity	60.98632141	2789.967089	0	0		2789.967089			
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Plug-in Hybrid	52.35545177	2973.077776	0.044247357	44.24735695		2973.077776			
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Gasoline	196761.1569	8732860.794	359.674683	359674.683	361927.3798	8732860.794	8893408.735	24.57	LDT2
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Diesel	611.2140627	29007.74721	0.880423066	880.4230662		29007.74721			
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Electricity	1212.721837	43455.52608	0	0		43455.52608			
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Plug-in Hybrid	1617.209463	88084.6679	1.372273758	1372.273758		88084.6679			
Riverside (SC)	2024	LHDT1	Aggregate	Aggregate	Gasoline	17828.73734	656766.0119	48.36247552	48362.47552	75554.20605	656766.0119	1221087.42	16.16	LHDT1
Riverside (SC)	2024	LHDT1	Aggregate	Aggregate	Diesel	15247.60565	560367.9206	27.19173053	27191.73053		560367.9206			
Riverside (SC)	2024	LHDT1	Aggregate	Aggregate	Electricity	53.50587181	3953.487241	0	0		3953.487241			
Riverside (SC)	2024	LHDT2	Aggregate	Aggregate	Gasoline	2494.679179	89754.81853	7.38743171	7387.43171	22224.411	89754.81853	344827.7113	15.52	LHDT2
Riverside (SC)	2024	LHDT2	Aggregate	Aggregate	Diesel	6844.928194	254103.3578	14.83697929	14836.97929		254103.3578			
Riverside (SC)	2024	LHDT2	Aggregate	Aggregate	Electricity	13.8489928	969.5349487	0	0		969.5349487			
Riverside (SC)	2024	MCY	Aggregate	Aggregate	Gasoline	24077.0623	140258.0803	3.359217865	3359.217865	3359.217865	140258.0803	140258.0803	41.75	MCY
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Gasoline	158529.7591	6468418.76	332.0736912	332073.6912	337278.1883	6468418.76	6673535.232	19.79	MDV
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Diesel	2456.219583	102039.6434	4.306633032	4306.633032		102039.6434			
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Electricity	1347.135818	48185.7285	0	0		48185.7285			
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Plug-in Hybrid	1094.492843	54891.09982	0.897864131	897.864131		54891.09982			
Riverside (SC)	2024	MH	Aggregate	Aggregate	Gasoline	4781.777946	41623.53594	8.518926412	8518.926412	10212.97469	41623.53594	59176.14669	5.79	MH
Riverside (SC)	2024	MH	Aggregate	Aggregate	Diesel	2046.063726	17552.61075	1.694048275	1694.048275		17552.61075			
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Gasoline	1238.0029	49965.95549	9.588666638	9588.666638	73502.73221	49965.95549	624307.4842	8.49	MHDT
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Diesel	12954.3675	564761.4751	63.06414519	63064.14519		564761.4751			
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Electricity	40.46425607	2074.722372	0	0		2074.722372			
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Natural Gas	158.0466253	7505.331205	0.849920382	849.9203818		7505.331205			
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Gasoline	374.6153087	12781.812	2.496601383	2496.601383	4662.380277	12781.812	30088.9967	6.45	OBUS
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Diesel	219.2789175	15140.91273	1.951181612	1951.181612		15140.91273			
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Electricity	0.821516166	55.60331633	0	0		55.60331633			
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Natural Gas	34.6553722	2110.668656	0.214597282	214.5972817		2110.668656			
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Gasoline	423.5817437	16753.46749	1.914821769	1914.821769	5918.221943	16753.46749	37909.3201	6.41	SBUS
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Diesel	491.8063992	10225.99182	1.394925642	1394.925642		10225.99182			
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Electricity	2.445505521	61.99924762	0	0		61.99924762			
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Natural Gas	443.1589434	10867.86154	2.608474532	2608.474532		10867.86154			
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Gasoline	146.2127201	18511.1132	3.282633075	3282.633075	11054.35384	18511.1132	49631.8201	4.49	UBUS
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Diesel	0.3117338	30.10971099	0.002675115	2.675115035		30.10971099			
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Electricity	0.120004951	18.36371585	0	0		18.36371585			
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Natural Gas	252.109466	31072.23347	7.769045647	7769.045647		31072.23347			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2025	HHDT	Aggregate	Aggregate	Gasoline	6.232252524	303.889871	0.078875502	78.87550173	324061.9332	303.889871	2014903.459	6.22	HHDT
Riverside (SC)	2025	HHDT	Aggregate	Aggregate	Diesel	15281.49903	1950611.476	315.5182536	315518.2536		1950611.476			
Riverside (SC)	2025	HHDT	Aggregate	Aggregate	Electricity	103.9487733	11894.93596	0	0		11894.93596			
Riverside (SC)	2025	HHDT	Aggregate	Aggregate	Natural Gas	781.6601067	52093.15724	8.464804133	8464.804133		52093.15724			
Riverside (SC)	2025	LDA	Aggregate	Aggregate	Gasoline	469318.5342	20373765.83	673.3165394	673316.5394	685799.5767	20373765.83	22281991.59	32.49	LDA
Riverside (SC)	2025	LDA	Aggregate	Aggregate	Diesel	1383.809245	49996.02059	1.157204906	1157.204906		49996.02059			
Riverside (SC)	2025	LDA	Aggregate	Aggregate	Electricity	23756.17576	1153396.904	0	0		1153396.904			
Riverside (SC)	2025	LDA	Aggregate	Aggregate	Plug-in Hybrid	14087.23202	704832.8394	11.32583244	11325.83244		704832.8394			
Riverside (SC)	2025	LDT1	Aggregate	Aggregate	Gasoline	39844.42885	1499609.575	59.92078241	59920.78241	59994.79347	1499609.575	1508277.871	25.14	LDT1
Riverside (SC)	2025	LDT1	Aggregate	Aggregate	Diesel	16.26032827	298.1728862	0.012131898	12.13189805		298.1728862			
Riverside (SC)	2025	LDT1	Aggregate	Aggregate	Electricity	84.57619148	4089.475353	0	0		4089.475353			
Riverside (SC)	2025	LDT1	Aggregate	Aggregate	Plug-in Hybrid	76.19034646	4280.647946	0.061879155	61.87915548		4280.647946			
Riverside (SC)	2025	LDT2	Aggregate	Aggregate	Gasoline	201900.7772	8973973.952	360.0165635	360016.5635	362521.4419	8973973.952	9168424.554	25.29	LDT2
Riverside (SC)	2025	LDT2	Aggregate	Aggregate	Diesel	648.0824816	30519.42791	0.906087045	906.0870448		30519.42791			
Riverside (SC)	2025	LDT2	Aggregate	Aggregate	Electricity	1658.408696	58637.73041	0	0		58637.73041			
Riverside (SC)	2025	LDT2	Aggregate	Aggregate	Plug-in Hybrid	1963.286623	105293.4446	1.598791388	1598.791388		105293.4446			
Riverside (SC)	2025	LHDT1	Aggregate	Aggregate	Gasoline	17598.36242	652458.21	46.82732866	46827.32866	73403.79877	652458.21	1212550.7	16.52	LHDT1
Riverside (SC)	2025	LHDT1	Aggregate	Aggregate	Diesel	15075.59282	549831.8274	26.5764701	26576.4701		549831.8274			
Riverside (SC)	2025	LHDT1	Aggregate	Aggregate	Electricity	149.6982853	10260.66293	0	0		10260.66293			
Riverside (SC)	2025	LHDT2	Aggregate	Aggregate	Gasoline	2462.303572	88408.90183	7.133200743	7133.200743	21661.35468	88408.90183	341190.0394	15.75	LHDT2
Riverside (SC)	2025	LHDT2	Aggregate	Aggregate	Diesel	6820.445818	250292.8301	14.52815394	14528.15394		250292.8301			
Riverside (SC)	2025	LHDT2	Aggregate	Aggregate	Electricity	38.18158868	2488.307475	0	0		2488.307475			
Riverside (SC)	2025	MCY	Aggregate	Aggregate	Gasoline	24005.46384	138549.7935	3.307549619	3307.549619	3307.549619	138549.7935	138549.7935	41.89	MCY
Riverside (SC)	2025	MDV	Aggregate	Aggregate	Gasoline	157992.5704	6448292.677	323.4938203	323493.8203	328676.5122	6448292.677	6678432.543	20.32	MDV
Riverside (SC)	2025	MDV	Aggregate	Aggregate	Diesel	2427.253752	99526.12558	4.137752355	4137.752355		99526.12558			
Riverside (SC)	2025	MDV	Aggregate	Aggregate	Electricity	1830.142844	64565.5975	0	0		64565.5975			
Riverside (SC)	2025	MDV	Aggregate	Aggregate	Plug-in Hybrid	1324.504282	66048.14278	1.044939643	1044.939643		66048.14278			
Riverside (SC)	2025	MH	Aggregate	Aggregate	Gasoline	4508.467531	38795.29207	7.939175542	7939.175542	9582.26868	38795.29207	55815.16631	5.82	MH
Riverside (SC)	2025	MH	Aggregate	Aggregate	Diesel	2015.081247	17019.87424	1.643093138	1643.093138		17019.87424			
Riverside (SC)	2025	MHDT	Aggregate	Aggregate	Gasoline	1219.56756	49718.98291	9.418016992	9418.016992	73843.62953	49718.98291	635118.1523	8.60	MHDT
Riverside (SC)	2025	MHDT	Aggregate	Aggregate	Diesel	13275.74248	571359.1019	63.53271272	63532.71272		571359.1019			
Riverside (SC)	2025	MHDT	Aggregate	Aggregate	Electricity	118.7135177	6143.919124	0	0		6143.919124			
Riverside (SC)	2025	MHDT	Aggregate	Aggregate	Natural Gas	169.7860028	7896.148358	0.892899818	892.8998181		7896.148358			
Riverside (SC)	2025	OBUS	Aggregate	Aggregate	Gasoline	362.5102847	12151.28279	2.347950658	2347.950658	4510.758842	12151.28279	29688.04546	6.58	OBUS
Riverside (SC)	2025	OBUS	Aggregate	Aggregate	Diesel	224.9321911	15183.67961	1.940769719	1940.769719		15183.67961			
Riverside (SC)	2025	OBUS	Aggregate	Aggregate	Electricity	2.021694394	134.2617193	0	0		134.2617193			
Riverside (SC)	2025	OBUS	Aggregate	Aggregate	Natural Gas	36.9521167	2218.821339	0.222038465	222.0384652		2218.821339			
Riverside (SC)	2025	SBUS	Aggregate	Aggregate	Gasoline	426.2067312	16859.59503	1.92304347	1923.04347	5926.536182	16859.59503	38036.5897	6.42	SBUS
Riverside (SC)	2025	SBUS	Aggregate	Aggregate	Diesel	483.8964136	9931.139032	1.352394432	1352.394432		9931.139032			
Riverside (SC)	2025	SBUS	Aggregate	Aggregate	Electricity	5.22909553	143.1587763	0	0		143.1587763			
Riverside (SC)	2025	SBUS	Aggregate	Aggregate	Natural Gas	457.8096259	11102.69686	2.65109828	2651.09828		11102.69686			
Riverside (SC)	2025	UBUS	Aggregate	Aggregate	Gasoline	146.4959788	18545.85863	3.288543187	3288.543187	10964.44655	18545.85863	49731.99827	4.54	UBUS
Riverside (SC)	2025	UBUS	Aggregate	Aggregate	Diesel	0.3117338	30.10971099	0.002675115	2.675115035		30.10971099			
Riverside (SC)	2025	UBUS	Aggregate	Aggregate	Electricity	0.20926462	33.75780976	0	0		33.75780976			
Riverside (SC)	2025	UBUS	Aggregate	Aggregate	Natural Gas	252.5418031	31122.27213	7.673228246	7673.228246		31122.27213			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2026	HHDT	Aggregate	Aggregate	Gasoline	5.301713201	269.8155783	0.068469804	68.46980429	326183.3321	269.8155783	2063431.007	6.33	HHDT
Riverside (SC)	2026	HHDT	Aggregate	Aggregate	Diesel	15687.78827	1988453.103	317.4311809	317431.1809		1988453.103			
Riverside (SC)	2026	HHDT	Aggregate	Aggregate	Electricity	181.0556624	20854.79688	0	0		20854.79688			
Riverside (SC)	2026	HHDT	Aggregate	Aggregate	Natural Gas	822.9858358	53853.29132	8.683681391	8683.681391		53853.29132			
Riverside (SC)	2026	LDA	Aggregate	Aggregate	Gasoline	470220.2179	20338993.18	657.9019755	657901.9755	670683.7214	20338993.18	22423581.77	33.43	LDA
Riverside (SC)	2026	LDA	Aggregate	Aggregate	Diesel	1278.903087	45656.81459	1.04446634	1044.46634		45656.81459			
Riverside (SC)	2026	LDA	Aggregate	Aggregate	Electricity	27110.24505	1294343.513	0	0		1294343.513			
Riverside (SC)	2026	LDA	Aggregate	Aggregate	Plug-in Hybrid	15111.22646	744588.2646	11.73727955	11737.27955		744588.2646			
Riverside (SC)	2026	LDT1	Aggregate	Aggregate	Gasoline	39097.73904	1475770.596	57.77065353	57770.65353	57860.51954	1475770.596	1487146.031	25.70	LDT1
Riverside (SC)	2026	LDT1	Aggregate	Aggregate	Diesel	13.62192751	246.3725383	0.009960174	9.960173709		246.3725383			
Riverside (SC)	2026	LDT1	Aggregate	Aggregate	Electricity	113.2552136	5510.233656	0	0		5510.233656			
Riverside (SC)	2026	LDT1	Aggregate	Aggregate	Plug-in Hybrid	101.686721	5618.828531	0.079905828	79.90582849		5618.828531			
Riverside (SC)	2026	LDT2	Aggregate	Aggregate	Gasoline	207104.2919	9189016.153	359.2463978	359246.3978	361967.9264	9189016.153	9414279.735	26.01	LDT2
Riverside (SC)	2026	LDT2	Aggregate	Aggregate	Diesel	682.5626595	31821.71127	0.923868936	923.8689364		31821.71127			
Riverside (SC)	2026	LDT2	Aggregate	Aggregate	Electricity	2094.273367	72949.08151	0	0		72949.08151			
Riverside (SC)	2026	LDT2	Aggregate	Aggregate	Plug-in Hybrid	2291.195555	120492.7893	1.797659677	1797.659677		120492.7893			
Riverside (SC)	2026	LHDT1	Aggregate	Aggregate	Gasoline	17398.34216	648258.6134	45.43230342	45432.30342	71378.10447	648258.6134	1205852.586	16.89	LHDT1
Riverside (SC)	2026	LHDT1	Aggregate	Aggregate	Diesel	14868.32038	538771.2685	25.94580105	25945.80105		538771.2685			
Riverside (SC)	2026	LHDT1	Aggregate	Aggregate	Electricity	286.9935654	18822.70429	0	0		18822.70429			
Riverside (SC)	2026	LHDT2	Aggregate	Aggregate	Gasoline	2430.034218	87077.56554	6.894650038	6894.650038	21104.05262	87077.56554	337819.1023	16.01	LHDT2
Riverside (SC)	2026	LHDT2	Aggregate	Aggregate	Diesel	6777.719033	246178.6334	14.20940258	14209.40258		246178.6334			
Riverside (SC)	2026	LHDT2	Aggregate	Aggregate	Electricity	73.06243174	4562.903373	0	0		4562.903373			
Riverside (SC)	2026	MCY	Aggregate	Aggregate	Gasoline	23937.33086	137142.5787	3.259850983	3259.850983	3259.850983	137142.5787	137142.5787	42.07	MCY
Riverside (SC)	2026	MDV	Aggregate	Aggregate	Gasoline	157654.7501	6425602.492	314.7102388	314710.2388	319841.9429	6425602.492	6678197.896	20.88	MDV
Riverside (SC)	2026	MDV	Aggregate	Aggregate	Diesel	2395.180805	96875.32958	3.958815392	3958.815392		96875.32958			
Riverside (SC)	2026	MDV	Aggregate	Aggregate	Electricity	2298.450518	79855.22944	0	0		79855.22944			
Riverside (SC)	2026	MDV	Aggregate	Aggregate	Plug-in Hybrid	1539.714974	75864.84529	1.172888712	1172.888712		75864.84529			
Riverside (SC)	2026	MH	Aggregate	Aggregate	Gasoline	4250.734566	36312.00617	7.425870006	7425.870006	9021.53348	36312.00617	52833.22222	5.86	MH
Riverside (SC)	2026	MH	Aggregate	Aggregate	Diesel	1981.725027	16521.21606	1.595663475	1595.663475		16521.21606			
Riverside (SC)	2026	MHDT	Aggregate	Aggregate	Gasoline	1204.155669	49534.83957	9.263997368	9263.997368	74067.74937	49534.83957	646239.7348	8.72	MHDT
Riverside (SC)	2026	MHDT	Aggregate	Aggregate	Diesel	13571.64646	577213.7586	63.87135704	63871.35704		577213.7586			
Riverside (SC)	2026	MHDT	Aggregate	Aggregate	Electricity	219.063018	11241.81607	0	0		11241.81607			
Riverside (SC)	2026	MHDT	Aggregate	Aggregate	Natural Gas	180.8134913	8249.320573	0.932394966	932.394966		8249.320573			
Riverside (SC)	2026	OBUS	Aggregate	Aggregate	Gasoline	350.9276772	11597.74291	2.216471452	2216.471452	4375.818964	11597.74291	29375.18585	6.71	OBUS
Riverside (SC)	2026	OBUS	Aggregate	Aggregate	Diesel	230.0918445	15233.6578	1.930307181	1930.307181		15233.6578			
Riverside (SC)	2026	OBUS	Aggregate	Aggregate	Electricity	3.398598414	222.0634986	0	0		222.0634986			
Riverside (SC)	2026	OBUS	Aggregate	Aggregate	Natural Gas	39.09901647	2321.721637	0.229040331	229.0403313		2321.721637			
Riverside (SC)	2026	SBUS	Aggregate	Aggregate	Gasoline	428.6165302	16957.83533	1.930418011	1930.418011	5931.110106	16957.83533	38160.16985	6.43	SBUS
Riverside (SC)	2026	SBUS	Aggregate	Aggregate	Diesel	474.8674611	9627.108018	1.308586985	1308.586985		9627.108018			
Riverside (SC)	2026	SBUS	Aggregate	Aggregate	Electricity	8.960082283	245.5300912	0	0		245.5300912			
Riverside (SC)	2026	SBUS	Aggregate	Aggregate	Natural Gas	472.4302591	11329.69641	2.69210511	2692.10511		11329.69641			
Riverside (SC)	2026	UBUS	Aggregate	Aggregate	Gasoline	146.7792196	18580.60009	3.25315693	3253.15693	10939.25606	18580.60009	49832.17645	4.56	UBUS
Riverside (SC)	2026	UBUS	Aggregate	Aggregate	Diesel	0.3117338	30.10971099	0.002675115	2.675114958		30.10971099			
Riverside (SC)	2026	UBUS	Aggregate	Aggregate	Electricity	0.298524289	49.15190367	0	0		49.15190367			
Riverside (SC)	2026	UBUS	Aggregate	Aggregate	Natural Gas	252.9741581	31172.31474	7.683424013	7683.424013		31172.31474			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2027	HHDT	Aggregate	Aggregate	Gasoline	4.417589037	240.8696114	0.059741457	59.74145741	327553.1219	240.8696114	2112996.232	6.45	HHDT
Riverside (SC)	2027	HHDT	Aggregate	Aggregate	Diesel	16021.09962	2023648.424	318.6419902	318641.9902		2023648.424			
Riverside (SC)	2027	HHDT	Aggregate	Aggregate	Electricity	291.1277388	33695.26576	0	0		33695.26576			
Riverside (SC)	2027	HHDT	Aggregate	Aggregate	Natural Gas	859.7365707	55411.6726	8.851390205	8851.390205		55411.6726			
Riverside (SC)	2027	LDA	Aggregate	Aggregate	Gasoline	471235.7168	20354484.89	646.3182298	646318.2298	659332.1669	20354484.89	22605957.54	34.29	LDA
Riverside (SC)	2027	LDA	Aggregate	Aggregate	Diesel	1176.545459	41562.34596	0.941772786	941.772786		41562.34596			
Riverside (SC)	2027	LDA	Aggregate	Aggregate	Electricity	30348.88532	1428770.722	0	0		1428770.722			
Riverside (SC)	2027	LDA	Aggregate	Aggregate	Plug-in Hybrid	16056.71591	781139.586	12.07216427	12072.16427		781139.586			
Riverside (SC)	2027	LDT1	Aggregate	Aggregate	Gasoline	38425.04641	1456606.871	56.00411545	56004.11545	56110.21758	1456606.871	1471112.371	26.22	LDT1
Riverside (SC)	2027	LDT1	Aggregate	Aggregate	Diesel	8.182997029	149.5948697	0.005861932	5.861931679		149.5948697			
Riverside (SC)	2027	LDT1	Aggregate	Aggregate	Electricity	147.7776311	7209.101259	0	0		7209.101259			
Riverside (SC)	2027	LDT1	Aggregate	Aggregate	Plug-in Hybrid	130.963565	7146.803489	0.100240199	100.2401989		7146.803489			
Riverside (SC)	2027	LDT2	Aggregate	Aggregate	Gasoline	212339.9735	9414153.484	360.272054	360272.054	363211.8816	9414153.484	9671400.198	26.63	LDT2
Riverside (SC)	2027	LDT2	Aggregate	Aggregate	Diesel	713.6192887	33073.61643	0.942826085	942.8260853		33073.61643			
Riverside (SC)	2027	LDT2	Aggregate	Aggregate	Electricity	2564.171691	88062.50525	0	0		88062.50525			
Riverside (SC)	2027	LDT2	Aggregate	Aggregate	Plug-in Hybrid	2628.969244	136110.5925	1.997001514	1997.001514		136110.5925			
Riverside (SC)	2027	LHDT1	Aggregate	Aggregate	Gasoline	17212.0897	642894.8546	44.12357644	44123.57644	69419.14823	642894.8546	1201022.641	17.30	LHDT1
Riverside (SC)	2027	LHDT1	Aggregate	Aggregate	Diesel	14633.12771	526713.4197	25.29557179	25295.57179		526713.4197			
Riverside (SC)	2027	LHDT1	Aggregate	Aggregate	Electricity	492.5286755	31414.36647	0	0		31414.36647			
Riverside (SC)	2027	LHDT2	Aggregate	Aggregate	Gasoline	2393.256129	85530.68603	6.657949773	6657.949773	20539.98243	85530.68603	334771.945	16.30	LHDT2
Riverside (SC)	2027	LHDT2	Aggregate	Aggregate	Diesel	6722.419556	241624.1987	13.88203265	13882.03265		241624.1987			
Riverside (SC)	2027	LHDT2	Aggregate	Aggregate	Electricity	125.2869519	7617.060264	0	0		7617.060264			
Riverside (SC)	2027	MCY	Aggregate	Aggregate	Gasoline	23872.84416	135933.3741	3.223711537	3223.711537	3223.711537	135933.3741	135933.3741	42.17	MCY
Riverside (SC)	2027	MDV	Aggregate	Aggregate	Gasoline	157494.1298	6421344.406	307.9749594	307974.9594	313073.5241	6421344.406	6696600.902	21.39	MDV
Riverside (SC)	2027	MDV	Aggregate	Aggregate	Diesel	2354.829343	94400.81381	3.800171132	3800.171132		94400.81381			
Riverside (SC)	2027	MDV	Aggregate	Aggregate	Electricity	2779.433972	95116.63714	0	0		95116.63714			
Riverside (SC)	2027	MDV	Aggregate	Aggregate	Plug-in Hybrid	1757.393907	85739.04462	1.298393545	1298.393545		85739.04462			
Riverside (SC)	2027	MH	Aggregate	Aggregate	Gasoline	4014.402617	34124.53465	6.984241305	6984.241305	8533.923074	34124.53465	50163.52077	5.88	MH
Riverside (SC)	2027	MH	Aggregate	Aggregate	Diesel	1945.315043	16038.98612	1.549681769	1549.681769		16038.98612			
Riverside (SC)	2027	MHDT	Aggregate	Aggregate	Gasoline	1187.040113	49189.22554	9.102215369	9102.215369	74108.25298	49189.22554	657629.6251	8.87	MHDT
Riverside (SC)	2027	MHDT	Aggregate	Aggregate	Diesel	13823.92114	580928.627	64.04015234	64040.15234		580928.627			
Riverside (SC)	2027	MHDT	Aggregate	Aggregate	Electricity	371.8319942	18951.18768	0	0		18951.18768			
Riverside (SC)	2027	MHDT	Aggregate	Aggregate	Natural Gas	191.1860259	8560.584881	0.965885278	965.8852775		8560.584881			
Riverside (SC)	2027	OBUS	Aggregate	Aggregate	Gasoline	338.9861834	11067.86494	2.084603884	2084.603884	4234.382771	11067.86494	29125.06177	6.88	OBUS
Riverside (SC)	2027	OBUS	Aggregate	Aggregate	Diesel	234.5197906	15307.11304	1.914675461	1914.675461		15307.11304			
Riverside (SC)	2027	OBUS	Aggregate	Aggregate	Electricity	5.428935287	350.8664874	0	0		350.8664874			
Riverside (SC)	2027	OBUS	Aggregate	Aggregate	Natural Gas	40.94802157	2399.217305	0.235103425	235.1034253		2399.217305			
Riverside (SC)	2027	SBUS	Aggregate	Aggregate	Gasoline	430.4295714	17027.29145	1.934694955	1934.694955	5925.808471	17027.29145	38269.32872	6.46	SBUS
Riverside (SC)	2027	SBUS	Aggregate	Aggregate	Diesel	464.1146803	9303.444431	1.262004708	1262.004708		9303.444431			
Riverside (SC)	2027	SBUS	Aggregate	Aggregate	Electricity	14.63497518	401.3400131	0	0		401.3400131			
Riverside (SC)	2027	SBUS	Aggregate	Aggregate	Natural Gas	486.6196132	11537.25282	2.729108808	2729.108808		11537.25282			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Gasoline	147.0093126	18606.89257	3.253359958	3253.359958	10959.60845	18606.89257	49932.35462	4.56	UBUS
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Diesel	0.3117338	30.10971099	0.002674823	2.674822746		30.10971099			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Electricity	0.589513765	89.99316283	0	0		89.99316283			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Natural Gas	253.257931	31205.35917	7.703573673	7703.573673		31205.35917			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2028
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2028	HHDT	Aggregate	Aggregate	Gasoline	3.988581574	220.2375349	0.053426587	53.42658706	327968.5957	220.2375349	2164028.305	6.60	HHDT
Riverside (SC)	2028	HHDT	Aggregate	Aggregate	Diesel	16286.45202	2055799.739	318.9296757	318929.6757		2055799.739			
Riverside (SC)	2028	HHDT	Aggregate	Aggregate	Electricity	443.1127679	51388.26161	0	0		51388.26161			
Riverside (SC)	2028	HHDT	Aggregate	Aggregate	Natural Gas	889.8391393	56620.06678	8.985493411	8985.493411		56620.06678			
Riverside (SC)	2028	LDA	Aggregate	Aggregate	Gasoline	472360.9133	20372156.29	634.9783189	634978.3189	648196.1926	20372156.29	22779784.76	35.14	LDA
Riverside (SC)	2028	LDA	Aggregate	Aggregate	Diesel	1078.826078	37726.31375	0.844929589	844.9295888		37726.31375			
Riverside (SC)	2028	LDA	Aggregate	Aggregate	Electricity	33534.15965	1556851.62	0	0		1556851.62			
Riverside (SC)	2028	LDA	Aggregate	Aggregate	Plug-in Hybrid	16928.42831	813050.5364	12.37294411	12372.94411		813050.5364			
Riverside (SC)	2028	LDT1	Aggregate	Aggregate	Gasoline	37855.87026	1440444.902	54.36871858	54368.71858	54496.07482	1440444.902	1458584.787	26.76	LDT1
Riverside (SC)	2028	LDT1	Aggregate	Aggregate	Diesel	6.076587483	111.1215276	0.004270552	4.270551517		111.1215276			
Riverside (SC)	2028	LDT1	Aggregate	Aggregate	Electricity	188.4728547	9182.136055	0	0		9182.136055			
Riverside (SC)	2028	LDT1	Aggregate	Aggregate	Plug-in Hybrid	164.1063254	8846.627488	0.123085684	123.0856837		8846.627488			
Riverside (SC)	2028	LDT2	Aggregate	Aggregate	Gasoline	217588.1473	9627227.084	361.0416912	361041.6912	364204.6139	9627227.084	9917690.621	27.23	LDT2
Riverside (SC)	2028	LDT2	Aggregate	Aggregate	Diesel	743.8336965	34234.83166	0.959155323	959.1553231		34234.83166			
Riverside (SC)	2028	LDT2	Aggregate	Aggregate	Electricity	3077.663905	104270.8577	0	0		104270.8577			
Riverside (SC)	2028	LDT2	Aggregate	Aggregate	Plug-in Hybrid	2979.785378	151957.8474	2.203767446	2203.767446		151957.8474			
Riverside (SC)	2028	LHDT1	Aggregate	Aggregate	Gasoline	17013.08285	635719.8804	42.78386012	42783.86012	67372.46896	635719.8804	1197558.473	17.78	LHDT1
Riverside (SC)	2028	LHDT1	Aggregate	Aggregate	Diesel	14375.59914	513629.3418	24.58860884	24588.60884		513629.3418			
Riverside (SC)	2028	LHDT1	Aggregate	Aggregate	Electricity	775.5486666	48209.25082	0	0		48209.25082			
Riverside (SC)	2028	LHDT2	Aggregate	Aggregate	Gasoline	2353.812331	83781.03596	6.417908056	6417.908056	19945.38855	83781.03596	332098.5234	16.65	LHDT2
Riverside (SC)	2028	LHDT2	Aggregate	Aggregate	Diesel	6657.214497	236631.625	13.52748049	13527.48049		236631.625			
Riverside (SC)	2028	LHDT2	Aggregate	Aggregate	Electricity	197.0476771	11685.86241	0	0		11685.86241			
Riverside (SC)	2028	MCY	Aggregate	Aggregate	Gasoline	23825.11116	134879.6959	3.188684508	3188.684508	3188.684508	134879.6959	134879.6959	42.30	MCY
Riverside (SC)	2028	MDV	Aggregate	Aggregate	Gasoline	157471.3828	6419753.084	301.5064704	301506.4704	306577.6338	6419753.084	6718020.856	21.91	MDV
Riverside (SC)	2028	MDV	Aggregate	Aggregate	Diesel	2313.319617	92055.03155	3.64472254	3644.72254		92055.03155			
Riverside (SC)	2028	MDV	Aggregate	Aggregate	Electricity	3280.614214	110611.1646	0	0		110611.1646			
Riverside (SC)	2028	MDV	Aggregate	Aggregate	Plug-in Hybrid	1979.988786	95601.57573	1.426440918	1426.440918		95601.57573			
Riverside (SC)	2028	MH	Aggregate	Aggregate	Gasoline	3792.760048	32136.12659	6.576552774	6576.552774	8080.877903	32136.12659	47700.74841	5.90	MH
Riverside (SC)	2028	MH	Aggregate	Aggregate	Diesel	1905.838717	15564.62182	1.50432513	1504.32513		15564.62182			
Riverside (SC)	2028	MHDT	Aggregate	Aggregate	Gasoline	1167.514336	48564.31923	8.892465984	8892.465984	73657.11404	48564.31923	669292.9757	9.09	MHDT
Riverside (SC)	2028	MHDT	Aggregate	Aggregate	Diesel	14002.28475	581224.0545	63.77307861	63773.07861		581224.0545			
Riverside (SC)	2028	MHDT	Aggregate	Aggregate	Electricity	604.2282857	30714.98313	0	0		30714.98313			
Riverside (SC)	2028	MHDT	Aggregate	Aggregate	Natural Gas	199.9675247	8789.618879	0.991569449	991.5694486		8789.618879			
Riverside (SC)	2028	OBUS	Aggregate	Aggregate	Gasoline	327.7078639	10548.10232	1.966652018	1966.652018	4110.66287	10548.10232	28947.37014	7.04	OBUS
Riverside (SC)	2028	OBUS	Aggregate	Aggregate	Diesel	238.556013	15389.24479	1.90528198	1905.28198		15389.24479			
Riverside (SC)	2028	OBUS	Aggregate	Aggregate	Electricity	8.51445928	545.8268781	0	0		545.8268781			
Riverside (SC)	2028	OBUS	Aggregate	Aggregate	Natural Gas	42.59688326	2464.196156	0.238728872	238.7288719		2464.196156			
Riverside (SC)	2028	SBUS	Aggregate	Aggregate	Gasoline	431.0753654	17042.56634	1.933025708	1933.025708	5903.130779	17042.56634	38344.63518	6.50	SBUS
Riverside (SC)	2028	SBUS	Aggregate	Aggregate	Diesel	451.0585439	8951.328084	1.211406554	1211.406554		8951.328084			
Riverside (SC)	2028	SBUS	Aggregate	Aggregate	Electricity	23.22081025	641.5412948	0	0		641.5412948			
Riverside (SC)	2028	SBUS	Aggregate	Aggregate	Natural Gas	499.8225406	11709.19947	2.758698517	2758.698517		11709.19947			
Riverside (SC)	2028	UBUS	Aggregate	Aggregate	Gasoline	132.0967345	16779.39189	2.792318822	2792.318822	15869.53462	16779.39189	81237.89196	5.12	UBUS
Riverside (SC)	2028	UBUS	Aggregate	Aggregate	Electricity	56.86515729	8885.94529	0	0		8885.94529			
Riverside (SC)	2028	UBUS	Aggregate	Aggregate	Natural Gas	213.0114547	24367.19561	5.373642123	5373.642123		24367.19561			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Natural Gas	253.257931	31205.35917	7.703573673	7703.573673		31205.35917			