Legado Specific Plan

ENERGY ANALYSIS

CITY OF MENIFEE

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LIST OF ABBREVIATED TERMS

(1)	Reference
AQIA	Air Quality Impact Analysis
ARB	Air Resources Board
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CEC	California Energy Commission
CPUC	California Public Utilities Commission
EIR	Environmental Impact Report
EMFAC	Emissions Factor
EVs	Electric Vehicles
FERC	Federal Energy Regulatory Commission
GPA	General Plan Amendment
GWh	Gigawatt Hour
HHD	Heavy-Heavy Duty
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
LHD	Light-Heavy Duty
MHD	Medium-Heavy Duty
MM	Mitigation Measures
MPG	Miles Per Gallon
MPO	Metropolitan Planning Organization
PDF	Project Design Features
Project	Legado Specific Plan
SCE	Southern California Edison
SF	Square Feet
SoCalGas	Southern California Gas
SP	Specific Plan
TEA-21	Transportation Equity Act for the 21st Century
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Legado Specific Plan 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) 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: 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: 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 DESIGN FEATURES

The Project Design Feature (PDF) measures listed below (or equivalent language) shall appear on all Project grading plans, Energy-saving and sustainable design features and operational programs would be incorporated into all facilities developed pursuant to the Project. Notably, the Project would comply with the California Green Building Standards Code (CALGreen; California Code of Regulations (CCR), Title 24, Part 11) as implemented by the City of Menifee. The Project also incorporates and expresses the following design features and attributes promoting energy efficiency and sustainability. Because these features/attributes are integral to the Project, they are not considered to be mitigation measures.

- Pedestrian connections would be constructed at selected roads within the Project, providing pedestrian access to the various uses and activity centers within the Project. Facilitating pedestrian access encourages people to walk instead of drive. The Project would not impose barriers to pedestrian access and interconnectivity. Furthermore, the mix of uses within the Specific Plan as proposed by the Project acts to reduce travel distances and regional vehicle miles traveled (VMT) by consolidating trips and reducing requirements for multiple trips.
- The Project will create local "light" vehicle networks, such as neighborhood electric vehicle (NEV) networks. NEVs offer an alternative to traditional vehicle trips and can legally be used on roadways with speed limits of 35 miles per hour (MPH) or less (unless specifically restricted). To create an NEV network, the Project will implement the

necessary infrastructure, including NEV parking, charging facilities, striping, signage and educational tools.

- As per information provided by the Project Applicant, the Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development.
- Three electric vehicle charging stations will be provided.
- Applicant must design and construct the roof of the buildings to accommodate maximally sized photovoltaic (PV) solar arrays taking into consideration limitations imposed by other rooftop equipment, roof warranties, building and fire code requirements, and other physical or legal limitations. Applicant must develop each Project building with the necessary electrical system and other infrastructure to accommodate maximally sized PV arrays in the future. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage which informs future tenant/purchasers of the existence of this infrastructure.

ES.3 CITY OF MENIFEE GENERAL PLAN OPEN SPACE AND CONSERVATION ELEMENT

Policy/Action	Policy/Implementation Action Description	Project Consistency
Action OSC59	Evaluate the existing transportation network to identify areas where mobile source pollution can be reduced by making vehicular movement more efficient. Revise the transportation network as necessary. Possible improvements include: installation of dedicated left and right turn lanes, construction of roundabouts, development of Intelligent Transportation systems such as synchronized signal timing, and adaptive traffic control systems, removal of unwarranted stop signs and construction of new and improved freeway on- and off-ramps.	Not Applicable.
Action OSC72	Set and monitor performance goals and/or VMT reduction targets that are consistent with the targets set by Southern California Association of Governments (SCAG) Sustainable Communities Strategy and Regional Transportation Plan and Western Riverside Council of Governments (WRCOG) Climate Action Plan (CAP).	Not Applicable.

Policy/Action	Policy/Implementation Action Description	Project Consistency
Action OSC73	Work with Riverside Transit Agency (RTA), and the Riverside County Transportation Commission (RCTC) to evaluate options to add transit to increase service in Menifee. Improvements include supporting the implementation of a regional Bus Rapid Transit system in Western Riverside County (with a stop in the City of Menifee) and expanded service or a dedicated shuttle to connect Sun City Core to the Menifee Valley Medical Center. Partner with RTA to increase the frequency and coverage of buses connecting Menifee to other cities and the nearby existing and proposed rail stations. Possible grant funding sources should be considered in the evaluation.	Not Applicable.
Action OSC75	Create a program to incentivize new and existing commercial, industrial, public, school and medical facilities/developments to install shared vehicle parking, carpool parking, additional bike racks, and bus stop shelters. Components of the plan could include reduced permit fees, expedited processing, reduced parking requirements, etc.	Not Applicable.
Action OSC76	Design and implement a public outreach campaign to reduce vehicle miles traveled within the City. Campaign components can include a ride sharing board at City Hall and an on-line version through the City website, promotion of RTA's schedule, passes, and programs, the City's Bicycle Master Plan when Complete, as well as electric vehicles and their routes/street network.	Not Applicable.

ES.4 MITIGATION MEASURES

The following mitigation measures (MM) for greenhouse gases are shown below and are required for the Project, these select measures 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 the following measures.

MM GHG-1

To reduce water demands and associated energy use, development proposals within the Project site would be required to implement a Water Conservation Strategy and demonstrate a minimum 20% reduction in outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). This water reduction will be applied to both the residential and retail components of the proposed Project. Development proposals within the Project site would also be required to implement the following:

- Landscaping palette emphasizing drought-tolerant plants consistent with provisions of the City of Menifee requirements;
- Use of water-efficient irrigation techniques consistent with City of Menifee requirements;

MM GHG-2

To reduce water consumption and the associated energy-usage, the Project will be designed to comply with the mandatory reductions in indoor water usage contained in the incumbent CalGreen Code (2) and any mandated reduction in outdoor water usage contained in the City's water efficient landscape requirements. Additionally, the Project shall implement the following:

- U.S. Environmental Protection Agency (EPA) Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.

MM GHG-3

Prior to the issuance of building permits, the Project applicant shall ensure that the Project is designed to achieve efficiency equal to or exceeding then incumbent (2019 or later) California Building Code Title 24 requirements. As per information provided by the Project Applicant, the Project will be designed to achieve 53% efficiency.

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1 INTRODUCTION

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

1.1 SITE LOCATION

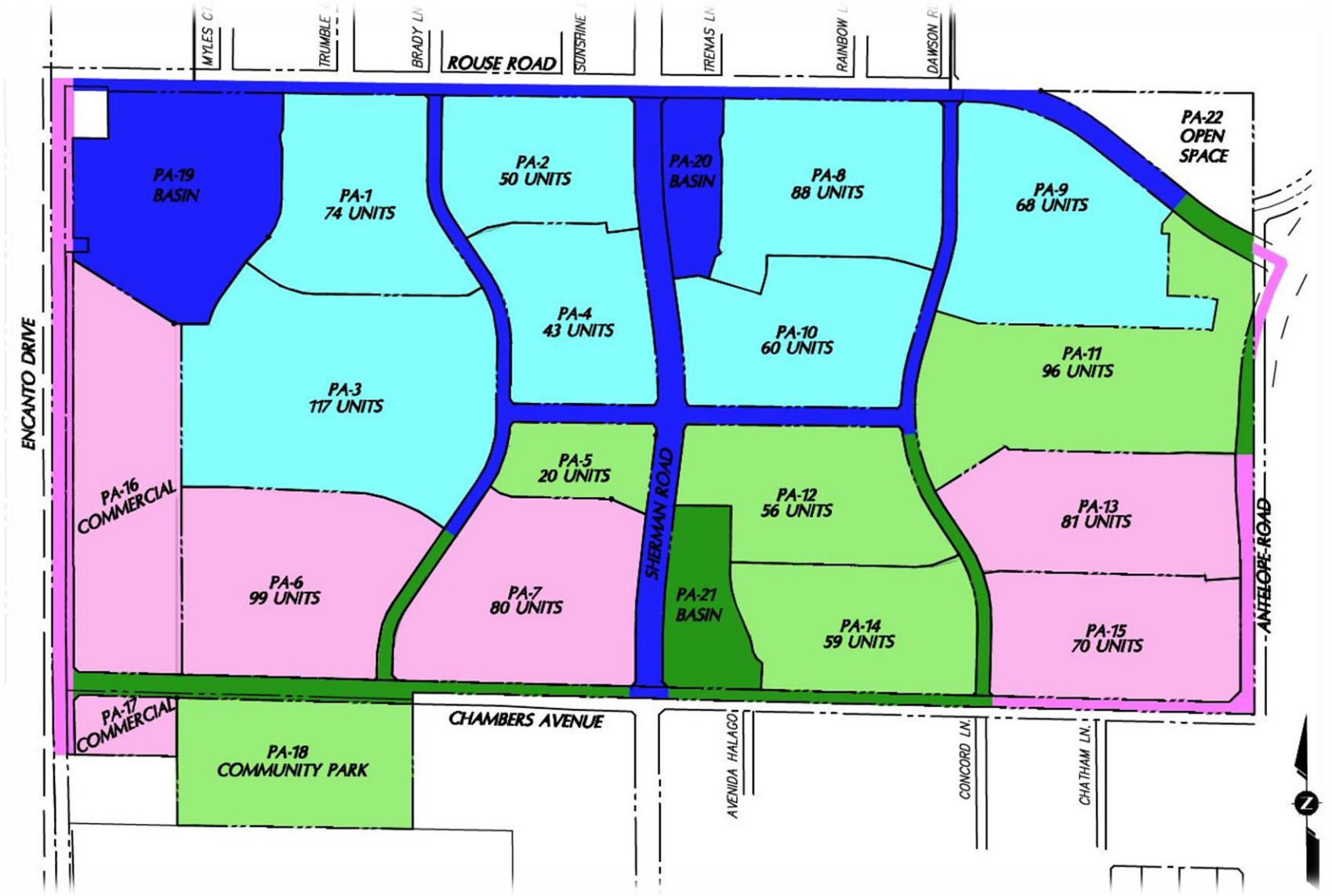
The proposed Legado Specific Plan site is generally located north of Chambers Avenue between Encanto Drive and Antelope Road in the City of Menifee, as shown on Exhibit 1-A. The Project site is currently vacant. Existing residential uses in the Project study area are located north, south, east and west of the Project site. The Evans Brown Mortuary is located adjacent to the Project's northwestern site boundaries, and the Life Care Center is located adjacent to the southwestern Project site boundaries. The Hans Christensen Middle School is located south of the Project site across Chambers Avenue. Interstate 215 (I-215) is located roughly 100 feet west of the Project site. The Project site is located approximately 2.5 miles southeast of the Perris Valley Airport, and over 9 miles southeast of the March Air Reserve Base/Inland Port Airport (MARB/IPA). The City of Menifee General Plan Land Use Map designates the 331.0-acre Project site as "Fleming Ranch Specific Plan," although no Specific Plan has been adopted for the site. The City's 2010 General Plan EIR Land Use designation for the site, proposed a buildout assumption that includes 1,558 dwelling units (DU), 71,176 square feet (s.f.) of commercial retail, and 160,300 of nonretail use. Thus, allowable land uses per the site's existing General Plan land use designation would be established as part of the proposed Legado Specific Plan.

1.2 PROJECT DESCRIPTION

The Project is proposed to consist of up to 1,061 single family detached residential DUs, up to 225,000 s.f. of commercial use, up to 10,000 s.f. of recreational community center, and up to 11.23 acres of sports park use. For the purposes of this analysis, the Project is anticipated to be developed in three phases with a projected Opening Year of 2025. Phase 1 (2020) of the proposed Project is anticipated to include the development of 500 single family detached residential dwelling units and Phase 2 (2023) of the proposed Project is anticipated to include an additional 231 single family detached residential dwelling units for a total of 731 dwelling unit, up to 10,000 square feet of recreational community center, and up to 11.23 acres of sports park use. Project Buildout (2025) is anticipated to include up to an additional 330 single family detached residential dwelling units for a total of 1,061 dwelling units, up to 225,000 square feet of commercial use, up to 10,000 square feet of recreational community center, and up to 11.23 acres of sports park use.

EXHIBIT 1-A: LOCATION MAP

EXHIBIT 1-B: SITE PLAN



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2 EXISTING CONDITIONS

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

2.1 OVERVIEW

The most recent data for California's estimated annual energy use is from 2016 and included:

- Approximately 7,830 trillion British Thermal Unit (BTU) of energy was consumed; (3);
- Approximately 2,115 billion cubic feet of natural gas (3); and
- Approximately 15.8 billion gallons of transportation fuel (for the year 2017) (4)

The most recent data provided by the United States Energy Information Administration (EIA) is from 2016 and illustrates energy use in California by demand sector as follows:

- Approximately 39.8 percent transportation;
- Approximately 23.7 percent industrial;
- Approximately 17.7 percent residential; and
- Approximately 18.9 percent commercial (5)

In 2017, total system electric generation for California was 292,039 gigawatt-hours (GWh). California's massive electricity in-state generation system generated approximately 206,336 GWh which accounted for approximately 71% of the electricity it uses; the rest was imported from the Pacific Northwest (14%) and the U.S. Southwest (16%) (6). Natural gas is the main source for electricity generation at 50% of the total in-state electric generation system power as shown in Table 2-1.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2017)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	California Power Mix (GWh)	Percent California Power Mix
Coal	302	0.15%	409	11,364	12,075	4.13%
Large Hydro	36,920	17.89%	4531	1,536	42,987	14.72%
Natural Gas	89,564	43.40%	46	8,705	98,315	33.67%
Nuclear	17,925	8.69%	0	8,594	26,519	9.08%
Oil	33	0.02%	0	0	33	0.01%
Other	409	0.20%	0	0	409	0.14%
Renewables	61,183	29.65%	12,502	10,999	84,684	29.00%
Biomass	5,827	2.82%	1,015	32	6,874	2.35%
Geothermal	11,745	5.69%	23	937	12,705	4.35%
Small Hydro	6,413	3.11%	1449	5	7,867	2.70%
Solar	24,331	11.79%	0	5,465	29,796	10.20%
Wind	12,867	6.24%	10,015	4,560	27,442	9.40%
Unspecified Sources of Power	N/A	N/A	22,385	4,632	27,017	9.25%
Total	**206,336**	**100%**	**39,873**	**45,830**	**292,039**	**100%**

Source: https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html

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

- California was the fourth-largest producer of crude oil among the 50 states in 2017, after Texas, North Dakota, and Alaska, and, as of January 2018, third in oil refining capacity after Texas and Louisiana.
- California is the largest consumer of jet fuel among the 50 states and accounted for one-fifth of the nation's jet fuel consumption in 2016.
- California's total energy consumption is second-highest in the nation, but, in 2016, the state's per capita energy consumption ranked 48th, due in part to its mild climate and its energy efficiency programs.
- In 2017, California ranked second in the nation in conventional hydroelectric generation and first as a producer of electricity from solar, geothermal, and biomass resources.
- In 2017, solar PV and solar thermal installations provided about 16% of California's net electricity generation (7).

As indicated above, California is one of the nation's leading energy-producing states, and California per capita energy use is among the nation's most efficient. Given the nature of the proposed 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 uses planned for the Project.

2.2 ELECTRICITY

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 ISO studies had revealed the extent to which the Southern California 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 (2013 IEPR) after a collaborative process with other energy agencies, utilities, and air districts (8). If the resource development outlined in the preliminary plan continues as detailed, reliability in Southern California would likely be assured; however, tight resource margins have led energy agencies and the ARB to develop a contingency plan. This contingency plan was discussed at a public workshop in Los Angeles on August 20, 2014 and is detailed within this Section (9).

Electricity is provided to the Project by Southern California Edison (SCE). SCE provides electric power to more than 14 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. 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 (10).

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator ("ISO") is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities [such as SCE] 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 sufficient 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, transmission owners (investor-owned utilities such as SCE) 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.

Table 2-2 identifies SCE's specific proportional shares of electricity sources in 2017. As indicated in Table 2-2, the 2017 SCE Power Mix has renewable energy at 32% of the overall energy resources. Geothermal resources are at 8%, wind power is at 10%, large hydroelectric sources are at 8%, solar energy is at 13%, and coal is at 0%. Biomass and waste sources have decreased to 0% from 1% in 2016. Natural gas is at 20% having decreased from 19% in 2016 (12).

TABLE 2-2: SCE 2017 POWER CONTENT MIX

Energy Resources	2017 SCE Power Mix
Eligible Renewable	**32%**
Biomass & waste	0%
Geothermal	8%
Small Hydroelectric	1%
Solar	13%
Wind	10%
Coal	**0%**
Large Hydroelectric	**8%**
Natural Gas	**20%**
Nuclear	**6%**
Other	**0%**
Unspecified Sources of power*	34%
Total	**100%**

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

2.3 NATURAL GAS

The usage associated with natural gas use were calculated using the CalEEMod model. The following summary of natural gas resources and service providers, delivery systems, and associated regulation is excerpted from information provided by the California Public Utilities Commission (CPUC).

> "The California Public Utilities Commission (PUC) 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.
>
> The vast majority of California's natural gas customers are residential and small commercial customers, referred to as "core" customers, who accounted for approximately 32% of the natural gas delivered by California utilities in 2012. Large

consumers, like electric generators and industrial customers, referred to as "noncore" customers, accounted for approximately 68% of the natural gas delivered by California utilities in 2012.

The PUC regulates the California utilities' natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. In 2012, California customers received 35% of their natural gas supply from basins located in the Southwest, 16% from Canada, 40% from the Rocky Mountains, and 9% from basins located within California. California gas utilities may soon also begin receiving biogas into their pipeline systems.

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 consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Questar Southern Trails and Mojave Pipeline. 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, the PUC often participates in FERC regulatory proceedings to represent the interests of California natural gas consumers.

Most of the natural gas transported via the interstate pipelines, as well as some of the California-produced natural gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large noncore customers take natural gas directly off the high-pressure backbone pipeline systems, while core customers and other noncore customers take natural gas off the utilities' distribution pipeline systems. The PUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82% of the total amount of natural gas delivered to California's gas consumers in 2012.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, and currently receive all of their natural gas from the SoCalGas system (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area). Some other municipal wholesale customers are the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Some of the natural gas delivered to California customers may be delivered directly to them without being transported over the regulated utility systems. For example, the Kern River/Mojave pipeline system can deliver natural gas directly to some large customers, "bypassing" the utilities' systems. Much of California-produced natural gas is also delivered directly to large consumers.

PG&E and SoCalGas own and operate several natural gas storage fields that are located in northern and southern California. 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 natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. (A portion of the Gill Ranch facility is owned by PG&E).

California's regulated utilities do not own any natural gas production facilities. All of the natural gas sold by these utilities must be purchased from suppliers and/or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the FERC in the mid-1980's and is determined by "market forces." However, the PUC decides whether California's utilities have taken reasonable steps in order to minimize the cost of natural gas purchased on behalf of their core customers." (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 PUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. In March 2018, the Department of Motor Vehicles (DMV) identified 35 million registered vehicles in California (14), and those vehicles (as noted previously) consume an estimated 19 billion gallons of fuel each year[1]. Gasoline (and other vehicle fuels) are commercially-provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 170,000 miles of highways and major roadways, more than 27 million passenger vehicles and light trucks, and almost 8 million medium- and heavy-duty vehicles (14). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. Petroleum comprises about 92 percent of all transportation energy use, excluding fuel consumed for aviation and most marine vessels (15). Nearly 19 billion gallons of on-highway fuel are burned each year, including 15.1 billion gallons of gasoline (including ethanol) and 3.9 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2016, Californians also used 194 million therms of natural gas as a transportation fuel (16), or the equivalent of 155 million gallons of gasoline.

[1] Fuel consumptions estimated utilizing information from EMFAC2014.

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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 are three federal agencies with substantial influence over energy policies and programs. On the state level, the PUC and the California Energy Commissions (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

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (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.

The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (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

Integrated Energy Policy Report

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

The 2018 Integrated Energy Policy Report (2018 IEPR) was adopted February 20, 2019, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2018 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast (17).

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 a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

California Code Title 24, Part 6, Energy Efficiency Standards

California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

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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 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* (18), states that the means of achieving the goal of energy conservation includes 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 2016.3.2 outputs for the *Legado Specific Plan Air Quality Impact Analysis* (AQIA) (Urban Crossroads, Inc., 2019) (19) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands. These outputs can be referenced in Appendices 3.1 through 3.2.

4.3 CONSTRUCTION ENERGY DEMANDS

4.3.1 CONSTRUCTION EQUIPMENT ELECTRICITY USAGE ESTIMATES

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. Based on the 2017 National Construction Estimator, Richard Pray (2017) (20), the typical power cost per 1,000 square feet of building construction per month is estimated to be $2.32. For the Legado Specific Plan development, the Project plans to develop 3,236,750 square feet of building space over the course of 80 months. Based on Table 4-1, the total power cost of the on-site electricity usage during the construction of the proposed Project is estimated to be approximately $600,470.80. Additionally, as of June 1, 2018, SCE's general service rate schedule (GS-1) for a commercial land uses is $0.07 per kWh of electricity (21). Additionally, SCE's domestic rate schedule (D) is $0.09 per kWh of electricity for residential land uses (22). As shown on Table 4-2, the total electricity usage from on-site Project construction related activities is estimated to be approximately 6,511,731.73 kWh.

TABLE 4-1: PROJECT CONSTRUCTION POWER COST

Land Use	**Power Cost** (per 1,000 SF of building per month of construction)	**Total Building Size** (1,000 SF)	**Construction Duration** (months)	**Project Construction Power Cost**
Recreational Community Center	$2.32	10.000	80	$1,856.00
Regional Shopping Center	$2.32	225.000	80	$41,760.00
Single Family Residential	$2.32	3,001.750	80	$557,124.80
TOTAL PROJECT CONSTRUCTION POWER COST				***$600,740.80***

TABLE 4-2: PROJECT CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
Recreational Community Center	$0.07	26,514
Regional Shopping Center	$0.07	596,571
Single Family Residential	$0.09	5,888,646
TOTAL PROJECT CONSTURCTION ELECTRICTY USAGE (kWh)		***6,511,731.73***

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 4-3. Eight-hour daily use of all equipment is assumed. The aggregate fuel consumption rate for all equipment is estimated at 18.5 hp-hr-gal., obtained from California Air Resources Board (CARB) 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (23). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is standard practice consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the City and region.

As presented in Table 4-3, Project construction activities would consume an estimated 510,724 gallons of diesel fuel. Project construction would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 4-3: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Activity/Duration	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Grading (180 days)	Crawler Tractors	212	2	8	0.43	1,459	14,191
	Excavators	158	2	8	0.38	961	9,347
	Graders	187	1	8	0.41	613	5,968
	Rubber Tired Dozers	247	1	8	0.40	790	7,690
	Scrapers	367	2	8	0.48	2,819	27,424
Building Construction (1,550 days)	Cranes	231	1	8	0.29	536	44,901
	Crawler Tractors	212	3	8	0.43	2,188	183,306
	Forklifts	89	3	8	0.20	427	35,792
	Generator Sets	84	1	8	0.74	497	41,664
	Welders	46	1	8	0.45	166	13,875
Architectural Coating (1,490 days)	Air Compressors	78	1	8	0.48	300	24,124
Grading (180 days)	Crawler Tractors	212	2	8	0.43	1,459	14,191
	Excavators	158	2	8	0.38	961	9,347
	Graders	187	1	8	0.41	613	5,968
	Rubber Tired Dozers	247	1	8	0.40	790	7,690
	Scrapers	367	2	8	0.48	2,819	27,424
Paving (330 days)	Pavers	130	2	8	0.42	874	15,583
	Paving Equipment	132	2	8	0.36	760	13,562
	Rollers	80	2	8	0.38	486	8,676
CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)							***510,724***

4.3.3 CONSTRUCTION WORKER FUEL ESTIMATES

It is assumed that all construction worker trips are from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 18,220,944 VMT (19). Data regarding Project related construction worker trips were based on CalEEMod 2016.3.2 model defaults utilized within the AQIA.

Vehicle fuel efficiencies for LDA were estimated using information generated within the 2014 version of the Emissions FACtor model (EMFAC) developed by the CARB. EMFAC 2014 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 ARB to project changes in future emissions from on-road mobile sources (24). EMFAC 2014 was run for the LDA vehicle class within the California sub-area for a 2025 calendar year. Data from EMFAC 2014 is shown in Appendix 3.3.

As generated by EMFAC 2014, an aggregated fuel economy of LDAs ranging from model year 1974 to model year 2025 are estimated to have a fuel efficiency of 34.99 miles per gallon (mpg). Table 4-4 provides an estimated annual fuel consumption resulting from the Project generated by LDAs related to construction worker trips. Based on Table 4-4, it is estimated that 520,801 gallons of fuel will be consumed related to construction worker trips during full construction of the proposed Project. Project 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.

TABLE 4-4: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES

Construction Activity	Worker Trips / Day	Trip Length	Vehicle Miles	Average Vehicle Fuel Economy	Estimated Fuel Consumption
Grading (180 days)	20	14.7	52,920	34.99	1,513
Building Construction (1,550 days)	664	14.7	15,129,240	34.99	432,432
Architectural Coating (1,490 days)	133	14.7	2,913,099	34.99	83,264
Grading (180 days)	20	14.7	52,920	34.99	1,513
Paving (330 days)	15	14.7	72,765	34.99	2,080
TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION					***520,801***

4.3.4 CONSTRUCTION VENDOR/HAULING FUEL ESTIMATES

With respect to estimated VMT, the construction vendor/hauling trips would generate an estimated 2,481,240 VMT along area roadways (19). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHD) and 50% are from heavy-heavy duty trucks (HHD). These

assumptions are consistent with the 2016.3.2 CalEEMod defaults utilized within the within the AQIA (19). Vehicle fuel efficiencies for MHD and HHD trucks were estimated using information generated within EMFAC 2014. For purposes of this analysis, EMFAC 2014 was run for the MHD and HHD vehicle class within the California sub-area for a 2025 calendar year. Data from EMFAC 2014 is shown in Appendix 3.3.

As generated by EMFAC 2014, an aggregated fuel economy of MHD trucks ranging from model year 1974 to model year 2025 are estimated to have a fuel efficiency of 8.67 mpg. Additionally, HHD trucks are estimated to have a fuel efficiency of 6.29 mpg. Based on Table 4-5, it is estimated that 143,023 gallons of fuel will be consumed related to construction vendor trips (medium duty trucks) during full construction of the proposed Project. Table 4-6 shows the estimated fuel economy of HHD trucks accessing the Project site. Based on Table 4-6, fuel consumption from construction vendor (heavy duty trucks) will total approximately 197,269 gallons. The total fuel consumption from construction vendor and hauling trips (medium and heavy-duty trucks) is 340,292 gallons. 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 4-5: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (MHD TRUCKS)

Construction Activity	Vendor Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Vendor					
Building Construction (1,550 days)	116	6.9	1,240,620	8.67	143,023
				PROJECT MEDIUM DUTY TRUCK TOTAL	***143,023***

TABLE 4-6: CONSTRUCTION VENDOR/HAULING FUEL CONSUMPTION ESTIMATES (HHD TRUCKS)

Construction Activity	Vendor Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Vendor					
Building Construction (1,550 days)	116	6.9	1,240,620	6.29	197,269
				PROJECT HEAVY DUTY TRUCK TOTAL	***197,269***

4.3.5 CONSTRUCTION ENERGY EFFICIENCY/CONSERVATION MEASURES

The equipment used for Project construction would conform to CARB regulations and CA emissions standards. 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.

The Project would utilize construction contractors which practice compliance 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.

Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations and best available control measures (BACM). More specifically, California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. To this end, "grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are 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 City building officials, and/or in response to citizen complaints.

Indirectly, construction energy efficiencies and energy conservation would be achieved for the proposed development through energy efficiencies realized from bulk purchase, transport and use of construction materials.

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 employee and patron 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.

LIGHT-DUTY AUTOS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's AQIA, the Project would generate an estimated 51,488,317 annual VMT along area roadways for all LDAs with full build-out of the Project (19). As generated by EMFAC 2014, an aggregated fuel economy of LDAs ranging from model year 1974 to model year 2025 are estimated to have a fuel efficiency of 34.99 mpg. Table 4-7 provides an estimated range of annual fuel consumption resulting from Project generated LDAs. Based on Table 4-7, it is estimated that 1,471,668 gallons of fuel will be consumed from Project generated LDA trips.

TABLE 4-7: PROJECT-GENERATED LDA VEHICLE TRAFFIC ANNUAL FUEL CONSUMPTION

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
51,488,317	34.99	1,471,668

4.4.2 FACILITY ENERGY DEMANDS

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied to the Project by SCE. Annual natural gas and electricity demands of the Project are summarized in Table 4-8.

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting (25). Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.).

TABLE 4-8: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY

Natural Gas Demand	kBTU/year
Single Family Detached Residential	32,462,500
Commercial	499,500
Recreational Community Center	324,900
Sports Park	0
TOTAL PROJECT NATURAL GAS DEMAND	***33,286,900***
Electricity Demand	**kWh/year**
Single Family Detached Residential	9,248,190
Commercial	2,841,750
Recreational Community Center	101,500
Sports Park	0
TOTAL PROJECT ELECTRICITY DEMAND	***12,191,440***

4.4.3 OPERATIONAL ENERGY EFFICIENCY/CONSERVATION MEASURES

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

It should also be noted that the Project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure because it would be served by the existing electric utility lines in the Project vicinity.

Enhanced Vehicle Fuel Efficiencies

Project annual fuel consumption estimates presented previously in Tables 4-7 are based on the 80-month construction period and 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.

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.

4.5 SUMMARY

4.5.1 CONSISTENCY WITH APPLICABLE FEDERAL AND STATE REGULATIONS

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

Transportation and access to the Project site is provided primarily 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.

The Transportation Equity Act for the 21st Century (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.

Integrated Energy Policy Report

Electricity would be provided to the Project by SCE and natural gas would be provided by SoCalGas. SCE's Clean Power and Electrification Pathway (CPEP) white paper and SoCalGas' 2018 Corporate Sustainability Report 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 2018 IEPR.

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, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities. 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.

California Code Title 24, Part 6, Energy Efficiency Standards

The 2016 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2017 and is applicable to the Project.

4.5.2 CONSTRUCTION ENERGY DEMANDS

The estimated power cost of on-site electricity usage during the construction of the proposed Project is assumed to be around $600,740.80. 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 around 6,511,731.73 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 510,724 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

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

Construction worker trips for full construction of the proposed Project would result in the estimated fuel consumption of 520,801 gallons of fuel. Additionally, fuel consumption from construction vendor trips (medium and heavy-duty trucks) will total approximately 340,292 gallons. Diesel fuel would be supplied by City and regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved through the use of bulk purchases, transport and use of construction materials. The 2018 IEPR released by the California Energy Commission has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (17). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.5.3 Operational Energy Demands

Transportation Energy Demands

Annual vehicular trips and related VMT generated by the operational of the Project would result in an estimated 1,471,668 gallons of fuel consumption per year for LDAs for the year 2025. Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other residential, commercial, and recreational uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Ed., 2017); and CalEEMod. That is, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of LDAs 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, 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: 33,286,900 kBTU/year of natural gas; and 12,191,400 kWh/year of electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied by SCE. The Project proposes conventional warehouse uses reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project are not inherently energy intensive, and the Project energy demands in total would be comparable to, or less than, other warehouse projects of similar scale and configuration.

Additionally, the Project is will implement the project design features (as summarized in the Executive Summary). Implementation of these project design features combined with the required Title 24 standards will ensure that the Project energy demands would not be considered inefficient, wasteful, or otherwise unnecessary.

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5 CONCLUSION

***Impact Energy-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 operations would not result in the inefficient, wasteful or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. 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.

***Impact Energy-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency*.**

The Project would implement the applicable PDFs and MMs listed in Sections ES.2 and ES.4, which would lessen the Project's energy usage. Further, the proposed Project is subject to California Building Code requirements. New buildings must achieve the 2019 Building and Energy Efficiency Standards and the 2019 California Green Building Standards requirements.

The Project would provide for, and promote, energy efficiencies beyond those required under other applicable federal and State of California standards and regulations, and in so doing would meet or exceed all California Building Standards Code Title 24 standards. Moreover, energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other residential, commercial, and recreational uses of similar scale and intensity that are constructed and operating in California. On this basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the Project would not cause or result in the need for additional energy producing facilities or energy delivery systems.

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7 CERTIFICATION

The contents of this energy report represent an accurate depiction of the environmental impacts associated with the proposed Legado Specific Plan Project. The information contained in this energy report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5987.

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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

Environmental Site Assessment – American Society for Testing and Materials • June, 2013
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
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Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 3.1:

CALEEMOD ANNUAL CONSTRUCTION EMISSIONS MODEL OUTPUTS

Legado (Construction - Unmitigated)

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	11.23	Acre	11.23	489,178.80	0
Health Club	10.00	1000sqft	1.67	10,000.00	0
Single Family Housing	1,061.00	Dwelling Unit	216.90	3,001,750.00	2971
Regional Shopping Center	225.00	1000sqft	20.10	225,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Legado (Construction - Unmitigated) - South Coast AQMD Air District, Annual

Project Characteristics -

Land Use - As per the Legado Community Development Plan, the Residential Planning Area is 216.9 acres; the Commercial Area is 20.1 acres; and the Community Park/Center is 12.9 acres. It should also be noted that as per the Plan, the population is 2.8 persons per household = 2,971 persons. As home size has not been provided, it is assumed that 50% of the lot acreage is the building sf.

Construction Phase - Construction Schedule adjusted to meet the 2025 OY.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment -

Grading - For purposes of analysis, based on the construction equipment and CalEEMod methodology, it is assumed that 4 acres per day will be disturbed during Grading (Phase 1 & 2) activities.

Vehicle Trips - Construction Run Only.

Woodstoves - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	2,026,181.00	4,052,363.00
tblArchitecturalCoating	ConstArea_Residential_Interior	6,078,544.00	12,157,088.00
tblAreaCoating	Area_Residential_Exterior	2026181	4052363
tblAreaCoating	Area_Residential_Interior	6078544	12157088
tblConstructionPhase	NumDays	465.00	180.00
tblConstructionPhase	NumDays	4,650.00	1,550.00
tblConstructionPhase	NumDays	330.00	1,490.00
tblConstructionPhase	NumDays	465.00	180.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	5.61	0.00

Legado (Construction - Unmitigated) - South Coast AQMD Air District, Annual

tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	2.44	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	0.30	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24E	4.58	0.00
tblEnergyUse	T24E	951.67	0.00
tblEnergyUse	T24NG	15.36	0.00
tblEnergyUse	T24NG	1.92	0.00
tblEnergyUse	T24NG	24,566.15	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	901.85	0.00
tblFireplaces	NumberNoFireplace	106.10	0.00
tblFireplaces	NumberWood	53.05	0.00
tblGrading	AcresOfGrading	630.00	720.00
tblGrading	AcresOfGrading	630.00	720.00
tblLandUse	LandUseSquareFeet	1,909,800.00	3,001,750.00
tblLandUse	LotAcreage	0.23	1.67
tblLandUse	LotAcreage	344.48	216.90
tblLandUse	LotAcreage	5.17	20.10
tblLandUse	Population	3,034.00	2,971.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	0.97	0.00
tblSolidWaste	SolidWasteGenerationRate	57.00	0.00
tblSolidWaste	SolidWasteGenerationRate	236.25	0.00
tblSolidWaste	SolidWasteGenerationRate	1,218.11	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	16.90	0.00
tblVehicleTrips	CW_TTP	16.30	0.00

tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	52.00	0.00
tblVehicleTrips	PR_TP	54.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	1.89	0.00

tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	591,431.44	0.00
tblWater	IndoorWaterUseRate	16,666,317.33	0.00
tblWater	IndoorWaterUseRate	69,128,421.18	0.00
tblWater	OutdoorWaterUseRate	13,380,335.56	0.00
tblWater	OutdoorWaterUseRate	362,490.24	0.00
tblWater	OutdoorWaterUseRate	10,214,839.66	0.00
tblWater	OutdoorWaterUseRate	43,580,961.18	0.00
tblWoodstoves	NumberCatalytic	53.05	0.00
tblWoodstoves	NumberNoncatalytic	53.05	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.5691	6.5208	3.5845	8.1400e-003	1.0179	0.2582	1.2761	0.3644	0.2378	0.6023	0.0000	735.0049	735.0049	0.1974	0.0000	739.9397
2020	3.9519	8.6414	7.3571	0.0249	1.3057	0.2552	1.5609	0.3512	0.2396	0.5908	0.0000	2,276.7039	2,276.7039	0.2148	0.0000	2,282.0732
2021	4.4450	7.9481	7.0415	0.0248	1.3320	0.2235	1.5554	0.3581	0.2097	0.5678	0.0000	2,264.6697	2,264.6697	0.2092	0.0000	2,269.8986
2022	4.3526	7.1688	6.6292	0.0242	1.3268	0.1932	1.5200	0.3567	0.1813	0.5380	0.0000	2,213.5501	2,213.5501	0.2032	0.0000	2,218.6301
2023	4.2744	5.9753	6.2544	0.0236	1.3268	0.1679	1.4947	0.3567	0.1575	0.5142	0.0000	2,155.6764	2,155.6764	0.1941	0.0000	2,160.5299
2024	4.6566	9.6598	9.2405	0.0310	2.2877	0.3153	2.6030	0.7058	0.2927	0.9984	0.0000	2,812.8306	2,812.8306	0.4041	0.0000	2,822.9327
2025	3.7845	5.6372	6.8454	0.0229	1.1835	0.1664	1.3499	0.3182	0.1550	0.4732	0.0000	2,085.7236	2,085.7236	0.2440	0.0000	2,091.8243
Maximum	**4.6566**	**9.6598**	**9.2405**	**0.0310**	**2.2877**	**0.3153**	**2.6030**	**0.7058**	**0.2927**	**0.9984**	**0.0000**	**2,812.8306**	**2,812.8306**	**0.4041**	**0.0000**	**2,822.9327**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.5691	6.5208	3.5845	8.1400e-003	1.0179	0.2582	1.2761	0.3644	0.2378	0.6023	0.0000	735.0042	735.0042	0.1974	0.0000	739.9389
2020	3.9519	8.6414	7.3571	0.0249	1.3057	0.2552	1.5609	0.3512	0.2396	0.5908	0.0000	2,276.7032	2,276.7032	0.2148	0.0000	2,282.0726
2021	4.4450	7.9481	7.0415	0.0248	1.3320	0.2235	1.5554	0.3581	0.2097	0.5678	0.0000	2,264.6691	2,264.6691	0.2092	0.0000	2,269.8979
2022	4.3526	7.1688	6.6292	0.0242	1.3268	0.1932	1.5200	0.3567	0.1813	0.5380	0.0000	2,213.5494	2,213.5494	0.2032	0.0000	2,218.6295
2023	4.2744	5.9753	6.2544	0.0236	1.3268	0.1679	1.4947	0.3567	0.1575	0.5142	0.0000	2,155.6758	2,155.6758	0.1941	0.0000	2,160.5293
2024	4.6566	9.6598	9.2405	0.0310	2.2877	0.3153	2.6030	0.7058	0.2927	0.9984	0.0000	2,812.8292	2,812.8292	0.4041	0.0000	2,822.9313
2025	3.7845	5.6372	6.8454	0.0229	1.1835	0.1664	1.3499	0.3182	0.1550	0.4732	0.0000	2,085.7228	2,085.7228	0.2440	0.0000	2,091.8234
Maximum	**4.6566**	**9.6598**	**9.2405**	**0.0310**	**2.2877**	**0.3153**	**2.6030**	**0.7058**	**0.2927**	**0.9984**	**0.0000**	**2,812.8292**	**2,812.8292**	**0.4041**	**0.0000**	**2,822.9313**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**4-1-2019**	**6-30-2019**	2.3235	2.3235
2	**7-1-2019**	**9-30-2019**	2.3491	2.3491
3	**10-1-2019**	**12-31-2019**	2.3972	2.3972
4	**1-1-2020**	**3-31-2020**	2.6319	2.6319

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5	**4-1-2020**	**6-30-2020**	3.2636	3.2636
6	**7-1-2020**	**9-30-2020**	3.2995	3.2995
7	**10-1-2020**	**12-31-2020**	3.3181	3.3181
8	**1-1-2021**	**3-31-2021**	3.0498	3.0498
9	**4-1-2021**	**6-30-2021**	3.0680	3.0680
10	**7-1-2021**	**9-30-2021**	3.1017	3.1017
11	**10-1-2021**	**12-31-2021**	3.1175	3.1175
12	**1-1-2022**	**3-31-2022**	2.8464	2.8464
13	**4-1-2022**	**6-30-2022**	2.8639	2.8639
14	**7-1-2022**	**9-30-2022**	2.8954	2.8954
15	**10-1-2022**	**12-31-2022**	2.9097	2.9097
16	**1-1-2023**	**3-31-2023**	2.5357	2.5357
17	**4-1-2023**	**6-30-2023**	2.5514	2.5514
18	**7-1-2023**	**9-30-2023**	2.5794	2.5794
19	**10-1-2023**	**12-31-2023**	2.5920	2.5920
20	**1-1-2024**	**3-31-2024**	2.8490	2.8490
21	**4-1-2024**	**6-30-2024**	3.8627	3.8627
22	**7-1-2024**	**9-30-2024**	4.0187	4.0187
23	**10-1-2024**	**12-31-2024**	3.5462	3.5462
24	**1-1-2025**	**3-31-2025**	2.6376	2.6376
25	**4-1-2025**	**6-30-2025**	2.6554	2.6554
26	**7-1-2025**	**9-30-2025**	2.6846	2.6846
		Highest	4.0187	4.0187

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	14.0163	0.1259	10.9345	5.8000e-004		0.0607	0.0607		0.0607	0.0607	0.0000	17.8792	17.8792	0.0171	0.0000	18.3075
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**14.0163**	**0.1259**	**10.9345**	**5.8000e-004**	**0.0000**	**0.0607**	**0.0607**	**0.0000**	**0.0607**	**0.0607**	**0.0000**	**17.8792**	**17.8792**	**0.0171**	**0.0000**	**18.3075**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	14.0163	0.1259	10.9345	5.8000e-004		0.0607	0.0607		0.0607	0.0607	0.0000	17.8792	17.8792	0.0171	0.0000	18.3075
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**14.0163**	**0.1259**	**10.9345**	**5.8000e-004**	**0.0000**	**0.0607**	**0.0607**	**0.0000**	**0.0607**	**0.0607**	**0.0000**	**17.8792**	**17.8792**	**0.0171**	**0.0000**	**18.3075**

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading (Phase 1)	Grading	4/1/2019	12/6/2019	5	180	
2	Building Construction	Building Construction	12/7/2019	11/14/2025	5	1550	
3	Architectural Coating	Architectural Coating	3/1/2020	11/14/2025	5	1490	
4	Grading (Phase 2)	Grading	3/8/2024	11/14/2024	5	180	
5	Paving	Paving	9/1/2024	12/5/2025	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 12,157,088; Residential Outdoor: 4,052,363; Non-Residential Indoor: 352,500; Non-Residential Outdoor: 117,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Legado (Construction - Unmitigated) - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading (Phase 1)	Crawler Tractors	2	8.00	212	0.43
Grading (Phase 1)	Excavators	2	8.00	158	0.38
Grading (Phase 1)	Graders	1	8.00	187	0.41
Grading (Phase 1)	Rubber Tired Dozers	1	8.00	247	0.40
Grading (Phase 1)	Scrapers	2	8.00	367	0.48
Grading (Phase 1)	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Crawler Tractors	3	8.00	212	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48
Grading (Phase 2)	Crawler Tractors	2	8.00	212	0.43
Grading (Phase 2)	Excavators	2	8.00	158	0.38
Grading (Phase 2)	Graders	1	8.00	187	0.41
Grading (Phase 2)	Rubber Tired Dozers	1	8.00	247	0.40
Grading (Phase 2)	Scrapers	2	8.00	367	0.48
Grading (Phase 2)	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading (Phase 1)	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	664.00	232.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	133.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading (Phase 2)	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading (Phase 1) - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9238	0.0000	0.9238	0.3391	0.0000	0.3391	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4945	5.9250	3.0538	6.4300e-003		0.2406	0.2406		0.2214	0.2214	0.0000	578.0174	578.0174	0.1829	0.0000	582.5894
Total	**0.4945**	**5.9250**	**3.0538**	**6.4300e-003**	**0.9238**	**0.2406**	**1.1644**	**0.3391**	**0.2214**	**0.5605**	**0.0000**	**578.0174**	**578.0174**	**0.1829**	**0.0000**	**582.5894**

3.2 Grading (Phase 1) - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6900e-003	6.9000e-003	0.0751	2.0000e-004	0.0198	1.6000e-004	0.0199	5.2400e-003	1.4000e-004	5.3900e-003	0.0000	18.3473	18.3473	5.7000e-004	0.0000	18.3616
Total	**8.6900e-003**	**6.9000e-003**	**0.0751**	**2.0000e-004**	**0.0198**	**1.6000e-004**	**0.0199**	**5.2400e-003**	**1.4000e-004**	**5.3900e-003**	**0.0000**	**18.3473**	**18.3473**	**5.7000e-004**	**0.0000**	**18.3616**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9238	0.0000	0.9238	0.3391	0.0000	0.3391	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4945	5.9250	3.0538	6.4300e-003		0.2406	0.2406		0.2214	0.2214	0.0000	578.0167	578.0167	0.1829	0.0000	582.5887
Total	**0.4945**	**5.9250**	**3.0538**	**6.4300e-003**	**0.9238**	**0.2406**	**1.1644**	**0.3391**	**0.2214**	**0.5605**	**0.0000**	**578.0167**	**578.0167**	**0.1829**	**0.0000**	**582.5887**

3.2 Grading (Phase 1) - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6900e-003	6.9000e-003	0.0751	2.0000e-004	0.0198	1.6000e-004	0.0199	5.2400e-003	1.4000e-004	5.3900e-003	0.0000	18.3473	18.3473	5.7000e-004	0.0000	18.3616
Total	**8.6900e-003**	**6.9000e-003**	**0.0751**	**2.0000e-004**	**0.0198**	**1.6000e-004**	**0.0199**	**5.2400e-003**	**1.4000e-004**	**5.3900e-003**	**0.0000**	**18.3473**	**18.3473**	**5.7000e-004**	**0.0000**	**18.3616**

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0310	0.3373	0.1627	3.7000e-004		0.0154	0.0154		0.0144	0.0144	0.0000	32.2904	32.2904	8.7600e-003	0.0000	32.5094
Total	**0.0310**	**0.3373**	**0.1627**	**3.7000e-004**		**0.0154**	**0.0154**		**0.0144**	**0.0144**	**0.0000**	**32.2904**	**32.2904**	**8.7600e-003**	**0.0000**	**32.5094**

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7500e-003	0.2299	0.0577	5.1000e-004	0.0124	1.5000e-003	0.0139	3.5900e-003	1.4400e-003	5.0300e-003	0.0000	48.8210	48.8210	3.3800e-003	0.0000	48.9055
Worker	0.0273	0.0217	0.2353	6.4000e-004	0.0619	4.9000e-004	0.0624	0.0165	4.5000e-004	0.0169	0.0000	57.5289	57.5289	1.8000e-003	0.0000	57.5738
Total	**0.0350**	**0.2516**	**0.2930**	**1.1500e-003**	**0.0744**	**1.9900e-003**	**0.0763**	**0.0200**	**1.8900e-003**	**0.0219**	**0.0000**	**106.3499**	**106.3499**	**5.1800e-003**	**0.0000**	**106.4793**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0310	0.3373	0.1627	3.7000e-004		0.0154	0.0154		0.0144	0.0144	0.0000	32.2903	32.2903	8.7600e-003	0.0000	32.5094
Total	**0.0310**	**0.3373**	**0.1627**	**3.7000e-004**		**0.0154**	**0.0154**		**0.0144**	**0.0144**	**0.0000**	**32.2903**	**32.2903**	**8.7600e-003**	**0.0000**	**32.5094**

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7500e-003	0.2299	0.0577	5.1000e-004	0.0124	1.5000e-003	0.0139	3.5900e-003	1.4400e-003	5.0300e-003	0.0000	48.8210	48.8210	3.3800e-003	0.0000	48.9055
Worker	0.0273	0.0217	0.2353	6.4000e-004	0.0619	4.9000e-004	0.0624	0.0165	4.5000e-004	0.0169	0.0000	57.5289	57.5289	1.8000e-003	0.0000	57.5738
Total	**0.0350**	**0.2516**	**0.2930**	**1.1500e-003**	**0.0744**	**1.9900e-003**	**0.0763**	**0.0200**	**1.8900e-003**	**0.0219**	**0.0000**	**106.3499**	**106.3499**	**5.1800e-003**	**0.0000**	**106.4793**

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4406	4.8047	2.4404	5.6400e-003		0.2145	0.2145		0.2003	0.2003	0.0000	488.9792	488.9792	0.1340	0.0000	492.3302
Total	**0.4406**	**4.8047**	**2.4404**	**5.6400e-003**		**0.2145**	**0.2145**		**0.2003**	**0.2003**	**0.0000**	**488.9792**	**488.9792**	**0.1340**	**0.0000**	**492.3302**

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1018	3.2433	0.8034	7.7300e-003	0.1916	0.0159	0.2075	0.0553	0.0152	0.0705	0.0000	747.4970	747.4970	0.0491	0.0000	748.7237
Worker	0.3883	0.2977	3.2944	9.5100e-003	0.9543	7.3700e-003	0.9617	0.2535	6.7900e-003	0.2602	0.0000	859.1114	859.1114	0.0247	0.0000	859.7277
Total	**0.4901**	**3.5411**	**4.0978**	**0.0172**	**1.1459**	**0.0233**	**1.1692**	**0.3087**	**0.0220**	**0.3307**	**0.0000**	**1,606.6084**	**1,606.6084**	**0.0737**	**0.0000**	**1,608.4514**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4406	4.8047	2.4404	5.6400e-003		0.2145	0.2145		0.2003	0.2003	0.0000	488.9786	488.9786	0.1340	0.0000	492.3296
Total	**0.4406**	**4.8047**	**2.4404**	**5.6400e-003**		**0.2145**	**0.2145**		**0.2003**	**0.2003**	**0.0000**	**488.9786**	**488.9786**	**0.1340**	**0.0000**	**492.3296**

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1018	3.2433	0.8034	7.7300e-003	0.1916	0.0159	0.2075	0.0553	0.0152	0.0705	0.0000	747.4970	747.4970	0.0491	0.0000	748.7237
Worker	0.3883	0.2977	3.2944	9.5100e-003	0.9543	7.3700e-003	0.9617	0.2535	6.7900e-003	0.2602	0.0000	859.1114	859.1114	0.0247	0.0000	859.7277
Total	**0.4901**	**3.5411**	**4.0978**	**0.0172**	**1.1459**	**0.0233**	**1.1692**	**0.3087**	**0.0220**	**0.3307**	**0.0000**	**1,606.6084**	**1,606.6084**	**0.0737**	**0.0000**	**1,608.4514**

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4063	4.4326	2.3745	5.6200e-003		0.1927	0.1927		0.1798	0.1798	0.0000	487.0975	487.0975	0.1327	0.0000	490.4150
Total	**0.4063**	**4.4326**	**2.3745**	**5.6200e-003**		**0.1927**	**0.1927**		**0.1798**	**0.1798**	**0.0000**	**487.0975**	**487.0975**	**0.1327**	**0.0000**	**490.4150**

3.3 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0861	2.9295	0.7263	7.6300e-003	0.1908	5.8900e-003	0.1967	0.0551	5.6400e-003	0.0607	0.0000	739.1780	739.1780	0.0468	0.0000	740.3467
Worker	0.3612	0.2670	3.0197	9.1600e-003	0.9507	7.1300e-003	0.9578	0.2525	6.5700e-003	0.2591	0.0000	828.0985	828.0985	0.0222	0.0000	828.6538
Total	**0.4473**	**3.1964**	**3.7460**	**0.0168**	**1.1415**	**0.0130**	**1.1546**	**0.3075**	**0.0122**	**0.3198**	**0.0000**	**1,567.2765**	**1,567.2765**	**0.0690**	**0.0000**	**1,569.0004**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4063	4.4326	2.3745	5.6200e-003		0.1927	0.1927		0.1798	0.1798	0.0000	487.0969	487.0969	0.1327	0.0000	490.4144
Total	**0.4063**	**4.4326**	**2.3745**	**5.6200e-003**		**0.1927**	**0.1927**		**0.1798**	**0.1798**	**0.0000**	**487.0969**	**487.0969**	**0.1327**	**0.0000**	**490.4144**

3.3 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0861	2.9295	0.7263	7.6300e-003	0.1908	5.8900e-003	0.1967	0.0551	5.6400e-003	0.0607	0.0000	739.1780	739.1780	0.0468	0.0000	740.3467
Worker	0.3612	0.2670	3.0197	9.1600e-003	0.9507	7.1300e-003	0.9578	0.2525	6.5700e-003	0.2591	0.0000	828.0985	828.0985	0.0222	0.0000	828.6538
Total	**0.4473**	**3.1964**	**3.7460**	**0.0168**	**1.1415**	**0.0130**	**1.1546**	**0.3075**	**0.0122**	**0.3198**	**0.0000**	**1,567.2765**	**1,567.2765**	**0.0690**	**0.0000**	**1,569.0004**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3635	3.8693	2.2971	5.5900e-003		0.1657	0.1657		0.1546	0.1546	0.0000	484.7716	484.7716	0.1315	0.0000	488.0597
Total	**0.3635**	**3.8693**	**2.2971**	**5.5900e-003**		**0.1657**	**0.1657**		**0.1546**	**0.1546**	**0.0000**	**484.7716**	**484.7716**	**0.1315**	**0.0000**	**488.0597**

3.3 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0805	2.7671	0.6838	7.5300e-003	0.1901	5.0900e-003	0.1952	0.0549	4.8700e-003	0.0597	0.0000	729.8627	729.8627	0.0448	0.0000	730.9830
Worker	0.3379	0.2402	2.7776	8.8000e-003	0.9470	6.9000e-003	0.9539	0.2515	6.3500e-003	0.2579	0.0000	795.3499	795.3499	0.0200	0.0000	795.8494
Total	**0.4183**	**3.0073**	**3.4614**	**0.0163**	**1.1372**	**0.0120**	**1.1491**	**0.3064**	**0.0112**	**0.3176**	**0.0000**	**1,525.2125**	**1,525.2125**	**0.0648**	**0.0000**	**1,526.8324**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3635	3.8693	2.2971	5.5900e-003		0.1657	0.1657		0.1546	0.1546	0.0000	484.7710	484.7710	0.1315	0.0000	488.0591
Total	**0.3635**	**3.8693**	**2.2971**	**5.5900e-003**		**0.1657**	**0.1657**		**0.1546**	**0.1546**	**0.0000**	**484.7710**	**484.7710**	**0.1315**	**0.0000**	**488.0591**

3.3 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0805	2.7671	0.6838	7.5300e-003	0.1901	5.0900e-003	0.1952	0.0549	4.8700e-003	0.0597	0.0000	729.8627	729.8627	0.0448	0.0000	730.9830
Worker	0.3379	0.2402	2.7776	8.8000e-003	0.9470	6.9000e-003	0.9539	0.2515	6.3500e-003	0.2579	0.0000	795.3499	795.3499	0.0200	0.0000	795.8494
Total	**0.4183**	**3.0073**	**3.4614**	**0.0163**	**1.1372**	**0.0120**	**1.1491**	**0.3064**	**0.0112**	**0.3176**	**0.0000**	**1,525.2125**	**1,525.2125**	**0.0648**	**0.0000**	**1,526.8324**

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3317	3.4066	2.2551	5.5900e-003		0.1452	0.1452		0.1355	0.1355	0.0000	484.5012	484.5012	0.1309	0.0000	487.7742
Total	**0.3317**	**3.4066**	**2.2551**	**5.5900e-003**		**0.1452**	**0.1452**		**0.1355**	**0.1355**	**0.0000**	**484.5012**	**484.5012**	**0.1309**	**0.0000**	**487.7742**

3.3 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0601	2.0821	0.6114	7.2900e-003	0.1901	2.3700e-003	0.1925	0.0549	2.2600e-003	0.0571	0.0000	707.8628	707.8628	0.0390	0.0000	708.8367
Worker	0.3181	0.2173	2.5610	8.4700e-003	0.9470	6.7200e-003	0.9538	0.2515	6.1900e-003	0.2577	0.0000	765.6879	765.6879	0.0180	0.0000	766.1380
Total	**0.3781**	**2.2994**	**3.1724**	**0.0158**	**1.1372**	**9.0900e-003**	**1.1462**	**0.3064**	**8.4500e-003**	**0.3148**	**0.0000**	**1,473.5507**	**1,473.5507**	**0.0570**	**0.0000**	**1,474.9747**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3317	3.4066	2.2551	5.5900e-003		0.1452	0.1452		0.1355	0.1355	0.0000	484.5006	484.5006	0.1309	0.0000	487.7736
Total	**0.3317**	**3.4066**	**2.2551**	**5.5900e-003**		**0.1452**	**0.1452**		**0.1355**	**0.1355**	**0.0000**	**484.5006**	**484.5006**	**0.1309**	**0.0000**	**487.7736**

3.3 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0601	2.0821	0.6114	7.2900e-003	0.1901	2.3700e-003	0.1925	0.0549	2.2600e-003	0.0571	0.0000	707.8628	707.8628	0.0390	0.0000	708.8367
Worker	0.3181	0.2173	2.5610	8.4700e-003	0.9470	6.7200e-003	0.9538	0.2515	6.1900e-003	0.2577	0.0000	765.6879	765.6879	0.0180	0.0000	766.1380
Total	**0.3781**	**2.2994**	**3.1724**	**0.0158**	**1.1372**	**9.0900e-003**	**1.1462**	**0.3064**	**8.4500e-003**	**0.3148**	**0.0000**	**1,473.5507**	**1,473.5507**	**0.0570**	**0.0000**	**1,474.9747**

3.3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3154	3.1865	2.2437	5.6300e-003		0.1323	0.1323		0.1234	0.1234	0.0000	488.3619	488.3619	0.1315	0.0000	491.6503
Total	**0.3154**	**3.1865**	**2.2437**	**5.6300e-003**		**0.1323**	**0.1323**		**0.1234**	**0.1234**	**0.0000**	**488.3619**	**488.3619**	**0.1315**	**0.0000**	**491.6503**

3.3 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0592	2.0932	0.5982	7.3200e-003	0.1916	2.3600e-003	0.1939	0.0553	2.2500e-003	0.0575	0.0000	710.7878	710.7878	0.0386	0.0000	711.7535
Worker	0.3037	0.1995	2.4071	8.2500e-003	0.9543	6.6800e-003	0.9610	0.2535	6.1500e-003	0.2596	0.0000	746.1863	746.1863	0.0166	0.0000	746.6016
Total	**0.3630**	**2.2926**	**3.0052**	**0.0156**	**1.1459**	**9.0400e-003**	**1.1549**	**0.3087**	**8.4000e-003**	**0.3171**	**0.0000**	**1,456.9741**	**1,456.9741**	**0.0552**	**0.0000**	**1,458.3551**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3154	3.1865	2.2437	5.6300e-003		0.1323	0.1323		0.1234	0.1234	0.0000	488.3613	488.3613	0.1315	0.0000	491.6497
Total	**0.3154**	**3.1865**	**2.2437**	**5.6300e-003**		**0.1323**	**0.1323**		**0.1234**	**0.1234**	**0.0000**	**488.3613**	**488.3613**	**0.1315**	**0.0000**	**491.6497**

3.3 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0592	2.0932	0.5982	7.3200e-003	0.1916	2.3600e-003	0.1939	0.0553	2.2500e-003	0.0575	0.0000	710.7878	710.7878	0.0386	0.0000	711.7535
Worker	0.3037	0.1995	2.4071	8.2500e-003	0.9543	6.6800e-003	0.9610	0.2535	6.1500e-003	0.2596	0.0000	746.1863	746.1863	0.0166	0.0000	746.6016
Total	**0.3630**	**2.2926**	**3.0052**	**0.0156**	**1.1459**	**9.0400e-003**	**1.1549**	**0.3087**	**8.4000e-003**	**0.3171**	**0.0000**	**1,456.9741**	**1,456.9741**	**0.0552**	**0.0000**	**1,458.3551**

3.3 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2486	2.4207	1.9107	4.9000e-003		0.0987	0.0987		0.0921	0.0921	0.0000	424.8699	424.8699	0.1141	0.0000	427.7213
Total	**0.2486**	**2.4207**	**1.9107**	**4.9000e-003**		**0.0987**	**0.0987**		**0.0921**	**0.0921**	**0.0000**	**424.8699**	**424.8699**	**0.1141**	**0.0000**	**427.7213**

3.3 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0502	1.8053	0.5067	6.3300e-003	0.1667	2.0200e-003	0.1687	0.0481	1.9300e-003	0.0500	0.0000	615.0754	615.0754	0.0331	0.0000	615.9019
Worker	0.2514	0.1587	1.9453	6.8900e-003	0.8305	5.7000e-003	0.8362	0.2206	5.2500e-003	0.2258	0.0000	623.7739	623.7739	0.0132	0.0000	624.1032
Total	**0.3016**	**1.9641**	**2.4521**	**0.0132**	**0.9972**	**7.7200e-003**	**1.0049**	**0.2687**	**7.1800e-003**	**0.2758**	**0.0000**	**1,238.8493**	**1,238.8493**	**0.0462**	**0.0000**	**1,240.0051**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2486	2.4207	1.9107	4.9000e-003		0.0987	0.0987		0.0921	0.0921	0.0000	424.8694	424.8694	0.1141	0.0000	427.7207
Total	**0.2486**	**2.4207**	**1.9107**	**4.9000e-003**		**0.0987**	**0.0987**		**0.0921**	**0.0921**	**0.0000**	**424.8694**	**424.8694**	**0.1141**	**0.0000**	**427.7207**

3.3 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0502	1.8053	0.5067	6.3300e-003	0.1667	2.0200e-003	0.1687	0.0481	1.9300e-003	0.0500	0.0000	615.0754	615.0754	0.0331	0.0000	615.9019
Worker	0.2514	0.1587	1.9453	6.8900e-003	0.8305	5.7000e-003	0.8362	0.2206	5.2500e-003	0.2258	0.0000	623.7739	623.7739	0.0132	0.0000	624.1032
Total	**0.3016**	**1.9641**	**2.4521**	**0.0132**	**0.9972**	**7.7200e-003**	**1.0049**	**0.2687**	**7.1800e-003**	**0.2758**	**0.0000**	**1,238.8493**	**1,238.8493**	**0.0462**	**0.0000**	**1,240.0051**

3.4 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.9208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0354	0.2458	0.2674	4.3000e-004		0.0162	0.0162		0.0162	0.0162	0.0000	37.2775	37.2775	2.8900e-003	0.0000	37.3497
Total	**2.9561**	**0.2458**	**0.2674**	**4.3000e-004**		**0.0162**	**0.0162**		**0.0162**	**0.0162**	**0.0000**	**37.2775**	**37.2775**	**2.8900e-003**	**0.0000**	**37.3497**

3.4 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0650	0.0499	0.5516	1.5900e-003	0.1598	1.2300e-003	0.1610	0.0424	1.1400e-003	0.0436	0.0000	143.8387	143.8387	4.1300e-003	0.0000	143.9419
Total	**0.0650**	**0.0499**	**0.5516**	**1.5900e-003**	**0.1598**	**1.2300e-003**	**0.1610**	**0.0424**	**1.1400e-003**	**0.0436**	**0.0000**	**143.8387**	**143.8387**	**4.1300e-003**	**0.0000**	**143.9419**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.9208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0354	0.2458	0.2674	4.3000e-004		0.0162	0.0162		0.0162	0.0162	0.0000	37.2775	37.2775	2.8900e-003	0.0000	37.3496
Total	**2.9561**	**0.2458**	**0.2674**	**4.3000e-004**		**0.0162**	**0.0162**		**0.0162**	**0.0162**	**0.0000**	**37.2775**	**37.2775**	**2.8900e-003**	**0.0000**	**37.3496**

3.4 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0650	0.0499	0.5516	1.5900e-003	0.1598	1.2300e-003	0.1610	0.0424	1.1400e-003	0.0436	0.0000	143.8387	143.8387	4.1300e-003	0.0000	143.9419
Total	**0.0650**	**0.0499**	**0.5516**	**1.5900e-003**	**0.1598**	**1.2300e-003**	**0.1610**	**0.0424**	**1.1400e-003**	**0.0436**	**0.0000**	**143.8387**	**143.8387**	**4.1300e-003**	**0.0000**	**143.9419**

3.4 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0381	0.2657	0.3163	5.2000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	44.4266	44.4266	3.0500e-003	0.0000	44.5028
Total	**3.5190**	**0.2657**	**0.3163**	**5.2000e-004**		**0.0164**	**0.0164**		**0.0164**	**0.0164**	**0.0000**	**44.4266**	**44.4266**	**3.0500e-003**	**0.0000**	**44.5028**

3.4 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0723	0.0535	0.6048	1.8300e-003	0.1904	1.4300e-003	0.1919	0.0506	1.3200e-003	0.0519	0.0000	165.8691	165.8691	4.4500e-003	0.0000	165.9803
Total	**0.0723**	**0.0535**	**0.6048**	**1.8300e-003**	**0.1904**	**1.4300e-003**	**0.1919**	**0.0506**	**1.3200e-003**	**0.0519**	**0.0000**	**165.8691**	**165.8691**	**4.4500e-003**	**0.0000**	**165.9803**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0381	0.2657	0.3163	5.2000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	44.4266	44.4266	3.0500e-003	0.0000	44.5028
Total	**3.5190**	**0.2657**	**0.3163**	**5.2000e-004**		**0.0164**	**0.0164**		**0.0164**	**0.0164**	**0.0000**	**44.4266**	**44.4266**	**3.0500e-003**	**0.0000**	**44.5028**

3.4 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0723	0.0535	0.6048	1.8300e-003	0.1904	1.4300e-003	0.1919	0.0506	1.3200e-003	0.0519	0.0000	165.8691	165.8691	4.4500e-003	0.0000	165.9803
Total	**0.0723**	**0.0535**	**0.6048**	**1.8300e-003**	**0.1904**	**1.4300e-003**	**0.1919**	**0.0506**	**1.3200e-003**	**0.0519**	**0.0000**	**165.8691**	**165.8691**	**4.4500e-003**	**0.0000**	**165.9803**

3.4 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4676					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0355	0.2441	0.3144	5.2000e-004		0.0142	0.0142		0.0142	0.0142	0.0000	44.2564	44.2564	2.8800e-003	0.0000	44.3284
Total	**3.5030**	**0.2441**	**0.3144**	**5.2000e-004**		**0.0142**	**0.0142**		**0.0142**	**0.0142**	**0.0000**	**44.2564**	**44.2564**	**2.8800e-003**	**0.0000**	**44.3284**

3.4 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0677	0.0481	0.5564	1.7600e-003	0.1897	1.3800e-003	0.1911	0.0504	1.2700e-003	0.0517	0.0000	159.3095	159.3095	4.0000e-003	0.0000	159.4096
Total	**0.0677**	**0.0481**	**0.5564**	**1.7600e-003**	**0.1897**	**1.3800e-003**	**0.1911**	**0.0504**	**1.2700e-003**	**0.0517**	**0.0000**	**159.3095**	**159.3095**	**4.0000e-003**	**0.0000**	**159.4096**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4676					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0355	0.2441	0.3144	5.2000e-004		0.0142	0.0142		0.0142	0.0142	0.0000	44.2564	44.2564	2.8800e-003	0.0000	44.3284
Total	**3.5030**	**0.2441**	**0.3144**	**5.2000e-004**		**0.0142**	**0.0142**		**0.0142**	**0.0142**	**0.0000**	**44.2564**	**44.2564**	**2.8800e-003**	**0.0000**	**44.3284**

3.4 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0677	0.0481	0.5564	1.7600e-003	0.1897	1.3800e-003	0.1911	0.0504	1.2700e-003	0.0517	0.0000	159.3095	159.3095	4.0000e-003	0.0000	159.4096
Total	**0.0677**	**0.0481**	**0.5564**	**1.7600e-003**	**0.1897**	**1.3800e-003**	**0.1911**	**0.0504**	**1.2700e-003**	**0.0517**	**0.0000**	**159.3095**	**159.3095**	**4.0000e-003**	**0.0000**	**159.4096**

3.4 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4676					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.2259	0.3139	5.2000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	44.2564	44.2564	2.6500e-003	0.0000	44.3226
Total	**3.5008**	**0.2259**	**0.3139**	**5.2000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**	**0.0000**	**44.2564**	**44.2564**	**2.6500e-003**	**0.0000**	**44.3226**

3.4 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0637	0.0435	0.5130	1.7000e-003	0.1897	1.3500e-003	0.1910	0.0504	1.2400e-003	0.0516	0.0000	153.3682	153.3682	3.6100e-003	0.0000	153.4584
Total	**0.0637**	**0.0435**	**0.5130**	**1.7000e-003**	**0.1897**	**1.3500e-003**	**0.1910**	**0.0504**	**1.2400e-003**	**0.0516**	**0.0000**	**153.3682**	**153.3682**	**3.6100e-003**	**0.0000**	**153.4584**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4676					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.2259	0.3139	5.2000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	44.2564	44.2564	2.6500e-003	0.0000	44.3225
Total	**3.5008**	**0.2259**	**0.3139**	**5.2000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**	**0.0000**	**44.2564**	**44.2564**	**2.6500e-003**	**0.0000**	**44.3225**

3.4 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0637	0.0435	0.5130	1.7000e-003	0.1897	1.3500e-003	0.1910	0.0504	1.2400e-003	0.0516	0.0000	153.3682	153.3682	3.6100e-003	0.0000	153.4584
Total	**0.0637**	**0.0435**	**0.5130**	**1.7000e-003**	**0.1897**	**1.3500e-003**	**0.1910**	**0.0504**	**1.2400e-003**	**0.0516**	**0.0000**	**153.3682**	**153.3682**	**3.6100e-003**	**0.0000**	**153.4584**

3.4 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4943					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0316	0.2129	0.3162	5.2000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	44.5968	44.5968	2.5100e-003	0.0000	44.6596
Total	**3.5258**	**0.2129**	**0.3162**	**5.2000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**	**0.0000**	**44.5968**	**44.5968**	**2.5100e-003**	**0.0000**	**44.6596**

3.4 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0608	0.0400	0.4821	1.6500e-003	0.1912	1.3400e-003	0.1925	0.0508	1.2300e-003	0.0520	0.0000	149.4620	149.4620	3.3300e-003	0.0000	149.5452
Total	**0.0608**	**0.0400**	**0.4821**	**1.6500e-003**	**0.1912**	**1.3400e-003**	**0.1925**	**0.0508**	**1.2300e-003**	**0.0520**	**0.0000**	**149.4620**	**149.4620**	**3.3300e-003**	**0.0000**	**149.5452**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4943					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0316	0.2129	0.3162	5.2000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	44.5968	44.5968	2.5100e-003	0.0000	44.6596
Total	**3.5258**	**0.2129**	**0.3162**	**5.2000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**	**0.0000**	**44.5968**	**44.5968**	**2.5100e-003**	**0.0000**	**44.6596**

3.4 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0608	0.0400	0.4821	1.6500e-003	0.1912	1.3400e-003	0.1925	0.0508	1.2300e-003	0.0520	0.0000	149.4620	149.4620	3.3300e-003	0.0000	149.5452
Total	**0.0608**	**0.0400**	**0.4821**	**1.6500e-003**	**0.1912**	**1.3400e-003**	**0.1925**	**0.0508**	**1.2300e-003**	**0.0520**	**0.0000**	**149.4620**	**149.4620**	**3.3300e-003**	**0.0000**	**149.5452**

3.4 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.0408					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0260	0.1741	0.2750	4.5000e-004		7.8300e-003	7.8300e-003		7.8300e-003	7.8300e-003	0.0000	38.8095	38.8095	2.1200e-003	0.0000	38.8624
Total	**3.0668**	**0.1741**	**0.2750**	**4.5000e-004**		**7.8300e-003**	**7.8300e-003**		**7.8300e-003**	**7.8300e-003**	**0.0000**	**38.8095**	**38.8095**	**2.1200e-003**	**0.0000**	**38.8624**

3.4 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0504	0.0318	0.3897	1.3800e-003	0.1664	1.1400e-003	0.1675	0.0442	1.0500e-003	0.0452	0.0000	124.9427	124.9427	2.6400e-003	0.0000	125.0086
Total	**0.0504**	**0.0318**	**0.3897**	**1.3800e-003**	**0.1664**	**1.1400e-003**	**0.1675**	**0.0442**	**1.0500e-003**	**0.0452**	**0.0000**	**124.9427**	**124.9427**	**2.6400e-003**	**0.0000**	**125.0086**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.0408					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0260	0.1741	0.2750	4.5000e-004		7.8300e-003	7.8300e-003		7.8300e-003	7.8300e-003	0.0000	38.8094	38.8094	2.1200e-003	0.0000	38.8623
Total	**3.0668**	**0.1741**	**0.2750**	**4.5000e-004**		**7.8300e-003**	**7.8300e-003**		**7.8300e-003**	**7.8300e-003**	**0.0000**	**38.8094**	**38.8094**	**2.1200e-003**	**0.0000**	**38.8623**

3.4 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0504	0.0318	0.3897	1.3800e-003	0.1664	1.1400e-003	0.1675	0.0442	1.0500e-003	0.0452	0.0000	124.9427	124.9427	2.6400e-003	0.0000	125.0086
Total	**0.0504**	**0.0318**	**0.3897**	**1.3800e-003**	**0.1664**	**1.1400e-003**	**0.1675**	**0.0442**	**1.0500e-003**	**0.0452**	**0.0000**	**124.9427**	**124.9427**	**2.6400e-003**	**0.0000**	**125.0086**

3.5 Grading (Phase 2) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9238	0.0000	0.9238	0.3391	0.0000	0.3391	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3401	3.5079	2.4891	6.4400e-003		0.1414	0.1414		0.1301	0.1301	0.0000	565.2818	565.2818	0.1828	0.0000	569.8524
Total	**0.3401**	**3.5079**	**2.4891**	**6.4400e-003**	**0.9238**	**0.1414**	**1.0652**	**0.3391**	**0.1301**	**0.4692**	**0.0000**	**565.2818**	**565.2818**	**0.1828**	**0.0000**	**569.8524**

3.5 Grading (Phase 2) - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2900e-003	4.1300e-003	0.0498	1.7000e-004	0.0198	1.4000e-004	0.0199	5.2400e-003	1.3000e-004	5.3700e-003	0.0000	15.4412	15.4412	3.4000e-004	0.0000	15.4498
Total	**6.2900e-003**	**4.1300e-003**	**0.0498**	**1.7000e-004**	**0.0198**	**1.4000e-004**	**0.0199**	**5.2400e-003**	**1.3000e-004**	**5.3700e-003**	**0.0000**	**15.4412**	**15.4412**	**3.4000e-004**	**0.0000**	**15.4498**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9238	0.0000	0.9238	0.3391	0.0000	0.3391	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3401	3.5079	2.4891	6.4400e-003		0.1414	0.1414		0.1301	0.1301	0.0000	565.2811	565.2811	0.1828	0.0000	569.8517
Total	**0.3401**	**3.5079**	**2.4891**	**6.4400e-003**	**0.9238**	**0.1414**	**1.0652**	**0.3391**	**0.1301**	**0.4692**	**0.0000**	**565.2811**	**565.2811**	**0.1828**	**0.0000**	**569.8517**

3.5 Grading (Phase 2) - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2900e-003	4.1300e-003	0.0498	1.7000e-004	0.0198	1.4000e-004	0.0199	5.2400e-003	1.3000e-004	5.3700e-003	0.0000	15.4412	15.4412	3.4000e-004	0.0000	15.4498
Total	**6.2900e-003**	**4.1300e-003**	**0.0498**	**1.7000e-004**	**0.0198**	**1.4000e-004**	**0.0199**	**5.2400e-003**	**1.3000e-004**	**5.3700e-003**	**0.0000**	**15.4412**	**15.4412**	**3.4000e-004**	**0.0000**	**15.4498**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0430	0.4143	0.6362	9.9000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	87.1154	87.1154	0.0282	0.0000	87.8198
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0430**	**0.4143**	**0.6362**	**9.9000e-004**		**0.0204**	**0.0204**		**0.0188**	**0.0188**	**0.0000**	**87.1154**	**87.1154**	**0.0282**	**0.0000**	**87.8198**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2800e-003	1.5000e-003	0.0181	6.0000e-005	7.1600e-003	5.0000e-005	7.2100e-003	1.9000e-003	5.0000e-005	1.9500e-003	0.0000	5.5974	5.5974	1.2000e-004	0.0000	5.6005
Total	**2.2800e-003**	**1.5000e-003**	**0.0181**	**6.0000e-005**	**7.1600e-003**	**5.0000e-005**	**7.2100e-003**	**1.9000e-003**	**5.0000e-005**	**1.9500e-003**	**0.0000**	**5.5974**	**5.5974**	**1.2000e-004**	**0.0000**	**5.6005**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0430	0.4143	0.6362	9.9000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	87.1153	87.1153	0.0282	0.0000	87.8197
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0430**	**0.4143**	**0.6362**	**9.9000e-004**		**0.0204**	**0.0204**		**0.0188**	**0.0188**	**0.0000**	**87.1153**	**87.1153**	**0.0282**	**0.0000**	**87.8197**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2800e-003	1.5000e-003	0.0181	6.0000e-005	7.1600e-003	5.0000e-005	7.2100e-003	1.9000e-003	5.0000e-005	1.9500e-003	0.0000	5.5974	5.5974	1.2000e-004	0.0000	5.6005
Total	**2.2800e-003**	**1.5000e-003**	**0.0181**	**6.0000e-005**	**7.1600e-003**	**5.0000e-005**	**7.2100e-003**	**1.9000e-003**	**5.0000e-005**	**1.9500e-003**	**0.0000**	**5.5974**	**5.5974**	**1.2000e-004**	**0.0000**	**5.6005**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1112	1.0427	1.7712	2.7700e-003		0.0509	0.0509		0.0468	0.0468	0.0000	243.2340	243.2340	0.0787	0.0000	245.2006
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1112**	**1.0427**	**1.7712**	**2.7700e-003**		**0.0509**	**0.0509**		**0.0468**	**0.0468**	**0.0000**	**243.2340**	**243.2340**	**0.0787**	**0.0000**	**245.2006**

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0500e-003	3.8200e-003	0.0468	1.7000e-004	0.0200	1.4000e-004	0.0201	5.3100e-003	1.3000e-004	5.4400e-003	0.0000	15.0183	15.0183	3.2000e-004	0.0000	15.0263
Total	**6.0500e-003**	**3.8200e-003**	**0.0468**	**1.7000e-004**	**0.0200**	**1.4000e-004**	**0.0201**	**5.3100e-003**	**1.3000e-004**	**5.4400e-003**	**0.0000**	**15.0183**	**15.0183**	**3.2000e-004**	**0.0000**	**15.0263**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1112	1.0427	1.7712	2.7700e-003		0.0509	0.0509		0.0468	0.0468	0.0000	243.2337	243.2337	0.0787	0.0000	245.2003
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1112**	**1.0427**	**1.7712**	**2.7700e-003**		**0.0509**	**0.0509**		**0.0468**	**0.0468**	**0.0000**	**243.2337**	**243.2337**	**0.0787**	**0.0000**	**245.2003**

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0500e-003	3.8200e-003	0.0468	1.7000e-004	0.0200	1.4000e-004	0.0201	5.3100e-003	1.3000e-004	5.4400e-003	0.0000	15.0183	15.0183	3.2000e-004	0.0000	15.0263
Total	**6.0500e-003**	**3.8200e-003**	**0.0468**	**1.7000e-004**	**0.0200**	**1.4000e-004**	**0.0201**	**5.3100e-003**	**1.3000e-004**	**5.4400e-003**	**0.0000**	**15.0183**	**15.0183**	**3.2000e-004**	**0.0000**	**15.0263**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Health Club	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Single Family Housing	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	14.0163	0.1259	10.9345	5.8000e-004		0.0607	0.0607		0.0607	0.0607	0.0000	17.8792	17.8792	0.0171	0.0000	18.3075
Unmitigated	14.0163	0.1259	10.9345	5.8000e-004		0.0607	0.0607		0.0607	0.0607	0.0000	17.8792	17.8792	0.0171	0.0000	18.3075

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.9872					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	11.7006					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3285	0.1259	10.9345	5.8000e-004		0.0607	0.0607		0.0607	0.0607	0.0000	17.8792	17.8792	0.0171	0.0000	18.3075
Total	**14.0163**	**0.1259**	**10.9345**	**5.8000e-004**		**0.0607**	**0.0607**		**0.0607**	**0.0607**	**0.0000**	**17.8792**	**17.8792**	**0.0171**	**0.0000**	**18.3075**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.9872					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	11.7006					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3285	0.1259	10.9345	5.8000e-004		0.0607	0.0607		0.0607	0.0607	0.0000	17.8792	17.8792	0.0171	0.0000	18.3075
Total	**14.0163**	**0.1259**	**10.9345**	**5.8000e-004**		**0.0607**	**0.0607**		**0.0607**	**0.0607**	**0.0000**	**17.8792**	**17.8792**	**0.0171**	**0.0000**	**18.3075**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Health Club	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Health Club	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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APPENDIX 3.2:

CALEEMOD ANNUAL OPERATIONAL EMISSIONS MODEL OUTPUTS

Legado (Operations - Unmitigated)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	11.23	Acre	11.23	489,178.80	0
Health Club	10.00	1000sqft	1.67	10,000.00	0
Single Family Housing	1,061.00	Dwelling Unit	216.90	3,001,750.00	2971
Regional Shopping Center	225.00	1000sqft	20.10	225,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Legado (Operations - Unmitigated) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - As per the Legado Community Development Plan, the Residential Planning Area is 216.9 acres; the Commercial Area is 20.1 acres; and the Community Park/Center is 12.9 acres. It should also be noted that as per the Plan, the population is 2.8 persons per household = 2,971 persons. As home size has not been provided, it is assumed that 50% of the lot acreage is the building sf.

Construction Phase - Operations Run Only

Off-road Equipment - Operations Run Only

Vehicle Trips - Trip Rates for Single Family Residential, Regional Shopping Center, and Health Center based on information provided in ITE 10th Edition. Trip Rate for City Park based on San Diego Municipal Code Land Development Code Trip Generation Manual.

Water And Wastewater - As per the WSA, the water demand was calculated for the Project based on the SP's proposed land use and EMWD demand factor.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	1.00
tblLandUse	LandUseSquareFeet	1,909,800.00	3,001,750.00
tblLandUse	LotAcreage	0.23	1.67
tblLandUse	LotAcreage	344.48	216.90
tblLandUse	LotAcreage	5.17	20.10
tblLandUse	Population	3,034.00	2,971.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	WD_TR	1.89	50.00
tblVehicleTrips	WD_TR	32.93	33.82
tblVehicleTrips	WD_TR	42.70	41.76
tblVehicleTrips	WD_TR	9.52	7.78
tblWater	IndoorWaterUseRate	591,431.44	1,341,010.00
tblWater	IndoorWaterUseRate	16,666,317.33	16,140,300.00
tblWater	IndoorWaterUseRate	69,128,421.18	170,396,600.00
tblWater	OutdoorWaterUseRate	13,380,335.56	9,017,690.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	16.5524	0.4011	17.6792	0.0178		1.0738	1.0738		1.0738	1.0738	112.6984	234.4469	347.1453	0.3532	7.6500e-003	358.2553
Energy	0.1795	1.5362	0.6705	9.7900e-003		0.1240	0.1240		0.1240	0.1240	0.0000	5,660.7690	5,660.7690	0.1944	0.0658	5,685.2215
Mobile	4.0606	30.5685	46.9590	0.2373	19.6478	0.1369	19.7847	5.2622	0.1275	5.3897	0.0000	22,056.8664	22,056.8664	0.9918	0.0000	22,081.6612
Waste						0.0000	0.0000		0.0000	0.0000	306.9893	0.0000	306.9893	18.1426	0.0000	760.5531
Water						0.0000	0.0000		0.0000	0.0000	59.6050	1,003.0978	1,062.7028	6.1634	0.1531	1,262.4186
Total	**20.7925**	**32.5058**	**65.3087**	**0.2648**	**19.6478**	**1.3347**	**20.9825**	**5.2622**	**1.3253**	**6.5875**	**479.2927**	**28,955.1801**	**29,434.4729**	**25.8454**	**0.2265**	**30,148.1097**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	16.5524	0.4011	17.6792	0.0178		1.0738	1.0738		1.0738	1.0738	112.6984	234.4469	347.1453	0.3532	7.6500e-003	358.2553
Energy	0.1795	1.5362	0.6705	9.7900e-003		0.1240	0.1240		0.1240	0.1240	0.0000	5,660.7690	5,660.7690	0.1944	0.0658	5,685.2215
Mobile	4.0606	30.5685	46.9590	0.2373	19.6478	0.1369	19.7847	5.2622	0.1275	5.3897	0.0000	22,056.8664	22,056.8664	0.9918	0.0000	22,081.6612
Waste						0.0000	0.0000		0.0000	0.0000	306.9893	0.0000	306.9893	18.1426	0.0000	760.5531
Water						0.0000	0.0000		0.0000	0.0000	59.6050	1,003.0978	1,062.7028	6.1634	0.1531	1,262.4186
Total	**20.7925**	**32.5058**	**65.3087**	**0.2648**	**19.6478**	**1.3347**	**20.9825**	**5.2622**	**1.3253**	**6.5875**	**479.2927**	**28,955.1801**	**29,434.4729**	**25.8454**	**0.2265**	**30,148.1097**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	4/1/2019	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

3.2 Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.0606	30.5685	46.9590	0.2373	19.6478	0.1369	19.7847	5.2622	0.1275	5.3897	0.0000	22,056.8664	22,056.8664	0.9918	0.0000	22,081.6612
Unmitigated	4.0606	30.5685	46.9590	0.2373	19.6478	0.1369	19.7847	5.2622	0.1275	5.3897	0.0000	22,056.8664	22,056.8664	0.9918	0.0000	22,081.6612

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	561.50	255.48	187.99	1,336,401	1,336,401
Health Club	338.20	208.70	267.30	662,102	662,102
Regional Shopping Center	9,396.00	11,243.25	5679.00	19,744,371	19,744,371
Single Family Housing	8,254.58	10,514.51	9145.82	29,745,443	29,745,443
Total	18,550.28	22,221.94	15,280.11	51,488,317	51,488,317

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Health Club	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Regional Shopping Center	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Single Family Housing	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,884.4525	3,884.4525	0.1604	0.0332	3,898.3492
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,884.4525	3,884.4525	0.1604	0.0332	3,898.3492
NaturalGas Mitigated	0.1795	1.5362	0.6705	9.7900e-003		0.1240	0.1240		0.1240	0.1240	0.0000	1,776.3166	1,776.3166	0.0341	0.0326	1,786.8723
NaturalGas Unmitigated	0.1795	1.5362	0.6705	9.7900e-003		0.1240	0.1240		0.1240	0.1240	0.0000	1,776.3166	1,776.3166	0.0341	0.0326	1,786.8723

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	324900	1.7500e-003	0.0159	0.0134	1.0000e-004		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	17.3379	17.3379	3.3000e-004	3.2000e-004	17.4409
Regional Shopping Center	499500	2.6900e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003	0.0000	26.6552	26.6552	5.1000e-004	4.9000e-004	26.8136
Single Family Housing	3.24625e+007	0.1750	1.4958	0.6365	9.5500e-003		0.1209	0.1209		0.1209	0.1209	0.0000	1,732.3234	1,732.3234	0.0332	0.0318	1,742.6178
Total		**0.1795**	**1.5362**	**0.6705**	**9.8000e-003**		**0.1240**	**0.1240**		**0.1240**	**0.1240**	**0.0000**	**1,776.3166**	**1,776.3166**	**0.0340**	**0.0326**	**1,786.8723**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	324900	1.7500e-003	0.0159	0.0134	1.0000e-004		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	17.3379	17.3379	3.3000e-004	3.2000e-004	17.4409
Regional Shopping Center	499500	2.6900e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003	0.0000	26.6552	26.6552	5.1000e-004	4.9000e-004	26.8136
Single Family Housing	3.24625e+007	0.1750	1.4958	0.6365	9.5500e-003		0.1209	0.1209		0.1209	0.1209	0.0000	1,732.3234	1,732.3234	0.0332	0.0318	1,742.6178
Total		**0.1795**	**1.5362**	**0.6705**	**9.8000e-003**		**0.1240**	**0.1240**		**0.1240**	**0.1240**	**0.0000**	**1,776.3166**	**1,776.3166**	**0.0340**	**0.0326**	**1,786.8723**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	101500	32.3401	1.3400e-003	2.8000e-004	32.4558
Regional Shopping Center	2.84175e+006	905.4424	0.0374	7.7300e-003	908.6817
Single Family Housing	9.24819e+006	2,946.6700	0.1217	0.0252	2,957.2118
Total		**3,884.4525**	**0.1604**	**0.0332**	**3,898.3492**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	101500	32.3401	1.3400e-003	2.8000e-004	32.4558
Regional Shopping Center	2.84175e+006	905.4424	0.0374	7.7300e-003	908.6817
Single Family Housing	9.24819e+006	2,946.6700	0.1217	0.0252	2,957.2118
Total		**3,884.4525**	**0.1604**	**0.0332**	**3,898.3492**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	16.5524	0.4011	17.6792	0.0178		1.0738	1.0738		1.0738	1.0738	112.6984	234.4469	347.1453	0.3532	7.6500e-003	358.2553
Unmitigated	16.5524	0.4011	17.6792	0.0178		1.0738	1.0738		1.0738	1.0738	112.6984	234.4469	347.1453	0.3532	7.6500e-003	358.2553

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.0481					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	11.7006					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.4753	0.2752	6.7447	0.0172		1.0131	1.0131		1.0131	1.0131	112.6984	216.5677	329.2661	0.3361	7.6500e-003	339.9478
Landscaping	0.3285	0.1259	10.9345	5.8000e-004		0.0607	0.0607		0.0607	0.0607	0.0000	17.8792	17.8792	0.0171	0.0000	18.3075
Total	**16.5524**	**0.4011**	**17.6792**	**0.0178**		**1.0738**	**1.0738**		**1.0738**	**1.0738**	**112.6984**	**234.4469**	**347.1454**	**0.3532**	**7.6500e-003**	**358.2553**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.0481					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	11.7006					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.4753	0.2752	6.7447	0.0172		1.0131	1.0131		1.0131	1.0131	112.6984	216.5677	329.2661	0.3361	7.6500e-003	339.9478
Landscaping	0.3285	0.1259	10.9345	5.8000e-004		0.0607	0.0607		0.0607	0.0607	0.0000	17.8792	17.8792	0.0171	0.0000	18.3075
Total	**16.5524**	**0.4011**	**17.6792**	**0.0178**		**1.0738**	**1.0738**		**1.0738**	**1.0738**	**112.6984**	**234.4469**	**347.1454**	**0.3532**	**7.6500e-003**	**358.2553**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,062.7028	6.1634	0.1531	1,262.4186
Unmitigated	1,062.7028	6.1634	0.1531	1,262.4186

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 9.01769	31.9216	1.3200e-003	2.7000e-004	32.0358
Health Club	1.34101 / 0.36249	7.2722	0.0440	1.0900e-003	8.6965
Regional Shopping Center	16.1403 / 10.2148	108.2423	0.5302	0.0133	125.4602
Single Family Housing	170.397 / 43.581	915.2668	5.5879	0.1385	1,096.2260
Total		**1,062.7028**	**6.1634**	**0.1531**	**1,262.4186**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 9.01769	31.9216	1.3200e-003	2.7000e-004	32.0358
Health Club	1.34101 / 0.36249	7.2722	0.0440	1.0900e-003	8.6965
Regional Shopping Center	16.1403 / 10.2148	108.2423	0.5302	0.0133	125.4602
Single Family Housing	170.397 / 43.581	915.2668	5.5879	0.1385	1,096.2260
Total		**1,062.7028**	**6.1634**	**0.1531**	**1,262.4186**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	306.9893	18.1426	0.0000	760.5531
Unmitigated	306.9893	18.1426	0.0000	760.5531

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.97	0.1969	0.0116	0.0000	0.4878
Health Club	57	11.5705	0.6838	0.0000	28.6654
Regional Shopping Center	236.25	47.9566	2.8342	0.0000	118.8105
Single Family Housing	1218.11	247.2653	14.6130	0.0000	612.5894
Total		**306.9893**	**18.1426**	**0.0000**	**760.5531**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.97	0.1969	0.0116	0.0000	0.4878
Health Club	57	11.5705	0.6838	0.0000	28.6654
Regional Shopping Center	236.25	47.9566	2.8342	0.0000	118.8105
Single Family Housing	1218.11	247.2653	14.6130	0.0000	612.5894
Total		**306.9893**	**18.1426**	**0.0000**	**760.5531**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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APPENDIX 3.3:

EMFAC 2014 MODEL OUTPUTS

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: Air District
Region: South Coast AQMD
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per G	Vehicle Class
South Coast AQMD	2025	HHDT	Aggregated	Aggregated	GAS	940.1710382	119043.6416	24.27356382	24273.56382	2442636.032	119043.6416	15361711.72	6.29	HHDT
South Coast AQMD	2025	HHDT	Aggregated	Aggregated	DSL	103677.305	15242668.08	2418.362468	2418362.468		15242668.08			
South Coast AQMD	2025	LDA	Aggregated	Aggregated	GAS	6593607.405	215137558.4	6720.774503	6720774.503	6781952.626	215137558.4	237275853	34.99	LDA
South Coast AQMD	2025	LDA	Aggregated	Aggregated	DSL	76739.13844	2608526.986	61.17812243	61178.12243		2608526.986			
South Coast AQMD	2025	LDA	Aggregated	Aggregated	ELEC	475151.43	19529767.66	0	0		19529767.66			
South Coast AQMD	2025	LDT1	Aggregated	Aggregated	GAS	553771.5975	18114855.57	667.6030939	667603.0939	668077.3295	18114855.57	18139310.74	27.15	LDT1
South Coast AQMD	2025	LDT1	Aggregated	Aggregated	DSL	537.2707383	14346.10743	0.474235623	474.2356234		14346.10743			
South Coast AQMD	2025	LDT1	Aggregated	Aggregated	ELEC	328.6859103	10109.06035	0	0		10109.06035			
South Coast AQMD	2025	LDT2	Aggregated	Aggregated	GAS	2479313.813	87716077.14	3562.074606	3562074.606	3567761.765	87716077.14	87901373.72	24.64	LDT2
South Coast AQMD	2025	LDT2	Aggregated	Aggregated	DSL	5085.780367	185296.5785	5.687159155	5687.159155		185296.5785			
South Coast AQMD	2025	LHDT1	Aggregated	Aggregated	GAS	95086.40645	2612217.883	235.1171751	235117.1751	399264.2306	2612217.883	6084477.044	15.24	LHDT1
South Coast AQMD	2025	LHDT1	Aggregated	Aggregated	DSL	103184.755	3472259.16	164.1470555	164147.0555		3472259.16			
South Coast AQMD	2025	LHDT2	Aggregated	Aggregated	GAS	23388.57706	793759.4588	76.08586887	76085.86887	163204.5158	793759.4588	2488794.459	15.25	LHDT2
South Coast AQMD	2025	LHDT2	Aggregated	Aggregated	DSL	45986.89756	1695035.001	87.11864692	87118.64692		1695035.001			
South Coast AQMD	2025	MCY	Aggregated	Aggregated	GAS	334510.5865	2108289.522	60.25554682	60255.54682	60255.54682	2108289.522	2108289.522	34.99	MCY
South Coast AQMD	2025	MDV	Aggregated	Aggregated	GAS	1502799.645	48129334.41	2680.545094	2680545.094	2725793.173	48129334.41	49266751.22	18.07	MDV
South Coast AQMD	2025	MDV	Aggregated	Aggregated	DSL	32349.54487	1137416.815	45.24807955	45248.07955		1137416.815			MDV
South Coast AQMD	2025	MH	Aggregated	Aggregated	GAS	34614.02611	276682.5718	36.92430073	36924.30073	44498.91299	276682.5718	355041.2576	7.98	MH
South Coast AQMD	2025	MH	Aggregated	Aggregated	DSL	9685.541521	78358.68587	7.574612262	7574.612262		78358.68587			
South Coast AQMD	2025	MHDT	Aggregated	Aggregated	GAS	20351.08907	981249.5605	137.0735912	137073.5912	1085273.838	981249.5605	9413937.472	8.67	MHDT
South Coast AQMD	2025	MHDT	Aggregated	Aggregated	DSL	159519.3847	8432687.912	948.2002471	948200.2471		8432687.912			
South Coast AQMD	2025	OBUS	Aggregated	Aggregated	GAS	9575.414757	416890.2169	57.03436093	57034.36093	124142.3168	416890.2169	922295.3883	7.43	OBUS
South Coast AQMD	2025	OBUS	Aggregated	Aggregated	DSL	6203.61635	505405.1714	67.1079559	67107.9559		505405.1714			
South Coast AQMD	2025	SBUS	Aggregated	Aggregated	GAS	2860.382171	104017.0675	9.034698749	9034.698749	36793.43845	104017.0675	306888.4014	8.34	SBUS
South Coast AQMD	2025	SBUS	Aggregated	Aggregated	DSL	5369.08142	202871.3338	27.7587397	27758.7397		202871.3338			
South Coast AQMD	2025	UBUS	Aggregated	Aggregated	GAS	2646.186736	288496.06	56.37808784	56378.08784	142702.6392	288496.06	721412.5193	5.06	UBUS
South Coast AQMD	2025	UBUS	Aggregated	Aggregated	DSL	3970.158356	432916.4593	86.32455134	86324.55134		432916.4593			

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