
APPENDIX E

GREENHOUSE GAS EMISSIONS AND ENERGY

TECHNICAL MEMORANDUM

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Technical Memorandum:
GREENHOUSE GAS EMISSIONS AND ENERGY
Marea Village Mixed Use Development Project

Technical Memorandum

TO: City of Encinitas **DATE:** March 1, 2021 (Updated May 2022)
FROM: Michael Baker International **SUBJECT:** Greenhouse Gas Emissions and Energy
for the Marea Village Mixed Use
Development Project

PURPOSE

The Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village Mixed Use Development Project (project) in the City of Encinitas (City). The project requires California Environmental Quality Act (CEQA) review and approval of a density bonus tentative map, design review permit, and coastal development permit by the City. The purpose of this technical memorandum is to evaluate potential greenhouse gas (GHG) impacts and energy consumption impacts resulting from the construction and operation of the proposed project.

PROJECT LOCATION

The project is located at 1900 and 1950 North Coast Highway 101 in the City and the coastal portion of San Diego County (County). The proposed project is comprised of two sites; County of San Diego Assessor Parcel Numbers (APNs) 216-041-20 and 216-041-21 (Site 1), and 216-041-06 (Site 2) totaling approximately 3.8 acres.

The project site is located within the community of Leucadia, one of five designated communities in the City. The City is bordered to the south by Solana Beach and to the west by the Pacific Ocean. The City of Carlsbad borders Encinitas to the north at the Batiquitos Lagoon State Marine Conservation Area and then extends farther to the east and north, across Batiquitos Lagoon.

Regional access to the project site is via Interstate 5 (I-5) to westbound La Costa Avenue, then to southbound North Coast Highway 101. Access to the project site from the south is via northbound North Coast Highway 101 which forms the eastern boundary of the property. Moorgate Road runs along the southern boundary of the site.

PROJECT DESCRIPTION

The project would demolish the existing buildings on the property and construct 94 apartments, 34 hotel rooms, and 18,261 square feet of commercial uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area.

Vehicular access to the development would be provided via a proposed roundabout to be located near the southern boundary of the site. Pedestrian access to the site would be provided at multiple points of ingress from the public right of way along the southbound side of North Coast Highway 101. Pedestrian

access to the site would also be provided from the property directly adjacent to the north which supports a recently constructed hotel.

Site 1 is designated as Visitor Serving Commercial (VSC) by the City of Encinitas General Plan (General Plan) and zoned as Limited Visitor Serving Commercial (N-L-VSC) with a Coastal Zone Overlay, R-30 Zone Overlay, and Scenic/Visual Corridor Overlay. A portion of the northernmost parcel (Parcel 1; APN 216-041-20) is located within a Special Study Overlay Zone. Site 2 is designated as General Commercial (GC) by the General Plan and zoned as Commercial Residential Mixed 1 (N-CRM-1) with a Coastal Zone Overlay and Scenic/Visual Corridor Overlay.

Project construction would occur in one phase over approximately 16.5 months. Construction of the project would include the following phases: demolition, grading, building construction, paving, and architectural coating.

EXISTING SITE CONDITIONS

The project site is currently occupied by an operating restaurant, a small commercial center, and a vacant structure formerly operated as a restaurant, along with various supporting surface parking areas and a small area of previously undeveloped land.

The topography of the project site varies. Developed areas in the southern portion of the site are generally flat; however, approximately 15 percent of the overall site has a slope greater than 25 percent, with some on-site slopes exceeding 40 percent.

The existing Seabluffe 255-gated townhome residential community is located directly adjacent to the south and west; Moorgate Road runs along the southern boundary of the site. A recently developed hotel is located adjacent to the north; further to the north is the Batiquitos Lagoon. North Coast Highway 101 forms the eastern boundary of the project site. The North County Transit District railroad runs generally north-south in the vicinity of the site and is located approximately 135 feet to the east at its nearest point, running along the eastern length of North Coast Highway 101 in Leucadia. The intersection of La Costa Avenue and North Coast Highway 101 lies approximately 215 feet to the northeast.

ENVIRONMENTAL SETTING

Global Climate Change

The natural process through which heat is retained in the troposphere is called the “greenhouse effect.”¹ The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long wave radiation; and GHG in the upper atmosphere absorb this long wave radiation and emit this long wave radiation into space and toward the Earth. This “trapping” of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

The most abundant GHGs are water vapor and carbon dioxide (CO₂). Many other trace gases have greater ability to absorb and re-radiate long wave radiation; however, these gases are not as plentiful. For this reason, and to gauge the potency of GHGs, scientists have established a Global Warming Potential (GWP) for each GHG based on its ability to absorb and re-radiate long wave radiation. GHGs normally associated with development projects include the following:²

¹ The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth’s surface to 10 to 12 kilometers.

² All GWPs are given as 100-year GWP. Generally, GWPs were obtained from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4), with the addition of GWPs from the IPCC’s Fifth Assessment Report for fluorinated GHGs that did not have GWPs in the AR4. See Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report*,

Water Vapor (H₂O). Although water vapor has not received the scrutiny of other GHGs, it is the primary contributor to the greenhouse effect. Natural processes, such as evaporation from oceans and rivers, and transpiration from plants, contribute 90 percent and 10 percent of the water vapor in our atmosphere, respectively. The primary human related source of water vapor comes from fuel combustion in motor vehicles; however, it does not contribute a significant amount (less than one percent) to atmospheric concentrations of water vapor. The Intergovernmental Panel on Climate Change (IPCC) has not determined a GWP for water vapor.

Carbon Dioxide (CO₂). Carbon dioxide is primarily generated by fossil fuel combustion in stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources in the past 250 years, CO₂ emissions from fossil fuel combustion increased by a total of 3.7 percent between 1990 and 2018.³ CO₂ is the most widely emitted GHG and is the reference gas (GWP of 1) for determining GWPs for other GHGs.

Methane (CH₄). Methane is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The United States' top three methane sources are landfills, natural gas systems, and enteric fermentation. Methane is the primary component of natural gas, used for space and water heating, steam production, and power generation. The GWP of methane is 25.

Nitrous Oxide (N₂O). Nitrous oxide is produced by both natural and human related sources. Primary human related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. The GWP of nitrous oxide is 298.

Hydrofluorocarbons (HFCs). Typically used as refrigerants for both stationary refrigeration and mobile air conditioning, use of HFCs for cooling and foam blowing is increasing, as the continued phase out of chlorofluorocarbons (CFCs) and HCFCs gains momentum. The 100-year GWP of HFCs range from 12 for HFC-161 to 14,800 for HFC-23.

Perfluorocarbons (PFCs). PFCs are compounds consisting of carbon and fluorine and are primarily created as a byproduct of aluminum production and semiconductor manufacturing. PFCs are potent GHGs with a GWP several thousand times that of CO₂, depending on the specific PFC. Another area of concern regarding PFCs is their long atmospheric lifetime (up to 50,000 years). The GWP of PFCs range from 7,390 to 12,200.

Sulfur hexafluoride (SF₆). SF₆ is a colorless, odorless, nontoxic, nonflammable gas. SF₆ is the most potent GHG that has been evaluated by the IPCC with a GWP of 22,800. However, its global warming contribution is not as high as the GWP would indicate due to its low mixing ratio compared to CO₂ (4 parts per trillion [ppt] in 1990 versus 365 ppm, respectively).

In addition to the six major GHGs discussed above (excluding water vapor), many other compounds have the potential to contribute to the greenhouse effect. Some of these substances were previously identified as stratospheric ozone (O₃) depletors; therefore, their gradual phase out is currently in effect. The following is a listing of these compounds:

Hydrochlorofluorocarbons (HCFCs). HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal

https://www.ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf, accessed April 14, 2022

³ U.S. Environmental Protection Agency, *Inventory of United States Greenhouse Gas Emissions and Sinks 1990 to 2018, 2020*, <https://www.epa.gov/sites/production/files/2020-04/documents/us-ghg-inventory-2020-main-text.pdf>, accessed April 14, 2022.

Protocol, all developed countries that adhere to the Montreal Protocol are subject to a consumption cap and gradual phase out of HCFCs. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year GWPs of HCFCs range from 77 for HCFC-123 to 2,310 for HCFC-142b.

1,1,1 trichloroethane. 1,1,1 trichloroethane or methyl chloroform is a solvent and degreasing agent commonly used by manufacturers. The GWP of methyl chloroform is 146 times that of CO₂.

Chlorofluorocarbons (CFCs). CFCs are used as refrigerants, cleaning solvents, and aerosols spray propellants. CFCs were also part of the U.S. Environmental Protection Agency's (EPA) Final Rule (57 Federal Register [FR] 3374) for the phase out of O₃ depleting substances. Currently, CFCs have been replaced by HFCs in cooling systems and a variety of alternatives for cleaning solvents. Nevertheless, CFCs remain suspended in the atmosphere contributing to the greenhouse effect. CFCs are potent GHGs with 100-year GWPs ranging from 4,750 for CFC-11 to 14,400 for CFC-13.

Electricity/Natural Gas Services

San Diego Gas and Electric (SDG&E) provides electrical services to the City through State-regulated public utility contracts. Over the past 15 years, electricity generation in California has undergone a transition. Historically, California has relied heavily on oil- and gas-fired plants to generate electricity. Spurred by regulatory measures and tax incentives, California's electrical system has become more reliant on renewable energy sources, including cogeneration, wind energy, solar energy, geothermal energy, biomass conversion, transformation plants, and small hydroelectric plants. Unlike petroleum production, generation of electricity is usually not tied to the location of the fuel source and can be delivered great distances via the electrical grid. The generating capacity of a unit of electricity is expressed in megawatt (MW). One MW provides enough energy to power 1,000 average California homes per day. Net generation refers to the gross amount of energy produced by a unit, minus the amount of energy the unit consumes. Generation is typically measured in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh).

SDG&E also provides natural gas services to the City. Natural gas is a hydrocarbon fuel found in reservoirs beneath the earth's surface and is composed primarily of CH₄. It is used for space and water heating, process heating and electricity generation, and as transportation fuel. Use of natural gas to generate electricity is expected to increase in coming years because it is a relatively clean alternative to other fossil fuels like oil and coal. In California and throughout the western United States, many new electrical generation plants that are fired by natural gas are being brought online. Thus, there is great interest in importing liquefied natural gas from other parts of the world. Nearly 45 percent of the electricity consumed in California was generated using natural gas.⁴ While the supply of natural gas in the United States and production has increased greatly, California produces little, and imports 90 percent of its natural gas.⁵

Energy Usage

Energy usage is typically quantified using the British Thermal Unit (BTU). Total energy usage in California was 7,802.3 trillion BTU in 2019 (the most recent year for which this specific data is available), which equates to an average of 198 million BTU per capita.^{6,7} Of California's total energy usage, the breakdown

⁴ California Energy Commission, *Supply and Demand of Natural Gas in California*, <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>, accessed April 14, 2022.

⁵ Ibid.

⁶ U.S. Energy Information Administration, *Rankings: Total Energy Consumed per Capita, 2019 (million Btu)*, <https://www.eia.gov/state/rankings/?sid=CA#series/12>, accessed April 14, 2022.

⁷ U.S. Energy Information Administration, *Table F33: Total Energy Consumption, Price, and Expenditure Estimates, 2019*, https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_te.html&sid=US, accessed April 14, 2022.

by sector is 39.3 percent transportation, 23.2 percent industrial, 18.8 percent commercial, and 18.7 percent residential.⁸ Electricity and natural gas in California are generally consumed by stationary users such as residences and commercial and industrial facilities, whereas petroleum consumption is generally accounted for by transportation-related energy use. In 2019, taxable gasoline sales (including aviation gasoline) in California accounted for 13,060,407,775 gallons of gasoline.⁹

The electricity consumption attributable to San Diego County from 2010 to 2020 is shown in Table 1, Electricity Consumption in San Diego County 2010-2020. As indicated in Table 1, energy consumption in San Diego County remained relatively constant between 2010 and 2020, with no substantial increase or decrease.

Table 1
Electricity Consumption in San Diego County 2010-2020

Year	Electricity Consumption (in millions of kilowatt hours)
2010	19,115
2011	19,122
2012	19,647
2013	19,688
2014	19,999
2015	19,894
2016	19,666
2017	19,667
2018	19,733
2019	19,048
2020	19,045

Source: California Energy Commission, *Electricity Consumption by County*, <http://www.ecdms.energy.ca.gov/elecbycounty.aspx>, accessed March 10, 2022.

The natural gas consumption in San Diego County from 2010 to 2020 is shown in Table 2, Natural Gas Consumption in San Diego County 2010-2020. Similar to energy consumption, natural gas consumption in San Diego County remained relatively constant between 2010 and 2020, with no substantial increase or decrease.

Table 2
Natural Gas Consumption in San Diego County 2010-2020

Year	Natural Gas Consumption (in millions of therms)
2010	556
2011	529
2012	515
2013	528
2014	451
2015	453
2016	473
2017	480
2018	483
2019	534
2020	505

Source: California Energy Commission, *Gas Consumption by County*, <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>, accessed March 10, 2022.

⁸ U.S. Energy Information Administration, *California Energy Consumption by End-Use Section, 2019*, <https://www.eia.gov/state/?sid=CA#tabs-1>, accessed April 14, 2022.

⁹ California Department of Tax and Fee Administration, *Net Taxable Gasoline Gallons*, <https://www.cdtfa.ca.gov/taxes-and-fees/MVF-10-Year-Report.xlsx>, accessed April 14, 2022.

Gasoline/Diesel Fuels

Automotive fuel consumption in San Diego County from 2010 to 2020 is shown in Table 3, *Automotive Fuel Consumption in San Diego County 2010-2020* (projections for the year 2021 are also shown). As shown in Table 3, since 2010 on-road automotive fuel consumption in San Diego County has generally declined and heavy-duty vehicle fuel consumption has steadily increased.

Table 3
Automotive Fuel Consumption in San Diego County 2010-2020

Year	On-Road Automotive Fuel Consumption (Gallons)	Heavy-Duty Vehicle/Diesel Fuel Consumption (Gallons)
2010	1,508,667,038	97,156,155
2011	1,481,337,159	96,017,458
2012	1,472,989,765	95,242,542
2013	1,478,545,554	101,043,794
2014	1,490,518,576	101,313,889
2015	1,531,616,348	101,781,235
2016	1,569,728,227	107,743,690
2017	1,556,356,992	107,679,306
2018	1,524,037,178	108,226,615
2019	1,490,698,455	108,601,793
2020	1,460,575,916	108,341,542
2021 (projected)	1,430,976,383	108,359,703

Source: California Air Resources Board, *EMFAC2017 Web Database*, <https://arb.ca.gov/emfac/2017/>, accessed April 14, 2022.

REGULATORY SETTING

Global Climate Change

Federal

To date, no national standards have been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007. The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding. The U.S. Environmental Protection Agency's (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO₂, CH₄, N₂O, hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆]) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Presidential Executive Order 13783. Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth (March 28, 2017), orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon, nitrous oxide, and methane.

State

Various statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term.

Executive Order S-1-07. Executive Order S-1-07 proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of statewide emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least ten percent by 2020. This order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in Assembly Bill (AB) 32. The development of the 2017 Scoping Plan Update has identified the LCFS as a regulatory measure to reduce GHG emissions to meet the 2030 emissions target. In calculating statewide emissions and targets, the 2017 Scoping Plan Update has assumed the LCFS be extended to an 18-percent reduction in carbon intensity beyond 2020. On September 27, 2018, CARB approved a rulemaking package that amended the Low Carbon Fuel Standard to relax the 2020 carbon intensity reduction from 10 percent to 7.5 percent and to require a carbon intensity reduction of 20 percent by 2030.

Executive Order S-3-05. Executive Order S-3-05 set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

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

The Executive Order directed the secretary of the California Environmental Protection Agency (Cal/EPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The secretary also submits biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of Cal/EPA created the California Climate Action Team, made up of members from various State agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through State incentive and regulatory programs.

Executive Order S-13-08. Executive Order S-13-08 seeks to enhance the State's management of climate impacts including sea level rise, increased temperatures, shifting precipitation, and extreme weather events by facilitating the development of the State's first climate adaptation strategy. This Executive Order results in consistent guidance from experts on how to address climate change impacts in the State of California.

Assembly Bill 1493. AB 1493 (also known as the Pavley Bill) requires that CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of GHG emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) in 2004 by adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 and adoption of 13 CCR Section 1961.1 require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty weight classes for passenger vehicles (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily to transport people), beginning with the 2009 model year. Emissions limits are reduced further in each model year through 2016. The near-term standards were intended to achieve a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term standards were intended to achieve a reduction of about 30 percent.

Assembly Bill 32 (California Global Warming Solutions Act of 2006). California passed the California Global Warming Solutions Act of 2006 (AB 32; *California Health and Safety Code* Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Senate Bill 32 (SB 32). Signed into law on September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

Senate Bill 100 (SB 100). SB 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kWh of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, 60 percent by December 31, 2030, and 100 percent by December 31, 2045. The bill would require the California Public Utilities Commission (CPUC), CEC, State board, and all other State agencies to incorporate that policy into all relevant planning. In addition, SB 100 would require the CPUC, CEC, and State board to utilize programs authorized under existing statutes to achieve that policy and, as part of a public process, issue a joint report to the Legislature by January 1, 2021, and every 4 years thereafter, that includes specified information relating to the implementation of the policy.

CARB Scoping Plan. On December 11, 2008, CARB adopted its Scoping Plan, which functions as a roadmap to achieve the California GHG reductions required by AB 32 through subsequently enacted regulations. CARB's Scoping Plan contains the main strategies California would implement to reduce the projected 2020 "Business-as-Usual" (BAU) emissions to 1990 levels, as required by AB 32. These strategies are intended to reduce CO₂e emissions by 174 million metric tons. This reduction of 42 million metric tons

carbon dioxide equivalent (MTCO₂e), or almost ten percent from 2002 to 2004 average emissions, would be required despite the population and economic growth forecasted through 2020.

CARB's Scoping Plan calculates 2020 BAU emissions as those expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. When CARB's Scoping Plan process was initiated, 2004 was the most recent year for which actual data was available. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal." The Scoping Plan update did not establish or propose any specific post-2020 goals, but identified such goals in water, waste, natural resources, clean energy, transportation, and land use.

On January 20, 2017, CARB released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update was approved on December 14, 2017 and reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The 2017 Scoping Plan Update establishes a new statewide emissions limit of 260 million MTCO₂e for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030. The 2017 Scoping Plan Update contains the following goals:

1. SB 350
 - Increases renewable electricity procurement goal from 33 percent to 50 percent by 2030.
 - Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard (LCFS)
 - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
 - Maintaining existing GHG standards for light- and heavy-duty vehicles.
 - Put 4.2 million zero-emission vehicles (ZEVs) on the roads.
 - Increase ZEV buses, delivery and other trucks.
4. Sustainable Freight Action Plan
 - Improve freight system efficiency.
 - Maximize use of near-zero emission vehicles and equipment powered by renewable energy.
 - Deploy over 100,000 zero-emission trucks and equipment by 2030.
5. Short-Lived Climate Pollutant (SLCP) Reduction Strategy
 - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
 - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.

6. SB 375 Sustainable Communities Strategies
 - Increased stringency of 2035 targets.
7. Post-2020 Cap-and-Trade Program
 - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
 - CARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements.
8. 20 percent reduction in GHG emissions from the refinery sector.
9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Senate Bill 375. Acknowledging the relationship between land use planning and transportation sector GHG emissions, SB 375 was passed by the State Assembly on August 25, 2008, and signed by the Governor on September 30, 2008. The legislation links regional planning for housing and transportation with the GHG reduction goals outlined in AB 32. Reductions in GHG emissions can be achieved by, for example, locating employment opportunities close to transit. Under SB 375, each Metropolitan Planning Organization (MPO) is required to adopt a Sustainable Communities Strategy (SCS) to encourage compact development that reduces passenger vehicle miles traveled (VMT) and trips so the region can meet a target, created by CARB, for reducing GHG emissions. If the SCS is unable to achieve the regional GHG emissions reduction targets, then the MPO is required to prepare an alternative planning strategy that shows how the GHG emissions reduction target can be achieved through alternative development patterns, infrastructure, and/or transportation measures.

Regional

San Diego Association of Governments

The San Diego Association of Governments (SANDAG) developed *San Diego Forward: The Regional Plan* (Regional Plan) to provide a regional growth-management strategy that targets per-capita GHG emissions reductions from passenger vehicles and light-duty trucks in the San Diego region. The Regional Plan integrates land use and transportation strategies to meet GHG emissions reduction targets that are forecasted to achieve the State's GHG reduction goals.

The latest plan is the *San Diego Forward: The 2021 Regional Plan* (2021 Regional Plan), adopted on December 10, 2021.¹⁰ The 2021 Regional Plan combines the Regional Transportation Plan (RTP), Sustainable Communities Strategy (SCS), and Regional Comprehensive Plan (RCP), and includes the mandatory policy, action, and financial elements required for the development of regional transportation plans. The 2021 Regional Plan also complies with specific State and federal mandates, including the SCS per California Senate Bill 375 (SB 375) that achieves GHG emissions reduction targets set by the California Air Resources Board; compliance with federal civil rights requirements (Title VI); environmental justice considerations; air quality conformity; and public participation. Specially, Chapter 2, *Sustainable Community Strategy – A Framework for the Future*, of the 2021 Regional Plan include three core strategies that projects, policies, and programs in accordance with the 2021 Regional Plan would be organized and implemented around:

- **Invest in a reimagined transportation system:** Build a network and fund services that include multimodal roadways; an expanded network of fast, frequent, and low-cost transit; 21st-century

¹⁰ San Diego Association of Governments, *San Diego Forward: The 2021 Regional Plan*, December 10, 2021.

technology that manages the entire transportation system and connects people to on-demand services; and zero-emission options for vehicles and micromobility.

- **Incentivize sustainable growth and development:** Collaborate with local jurisdictions and fund programs that accelerate housing production while also addressing the intertwined issues of equity, climate resilience, and mobility.
- **Implement innovative demand and system management:** Reduce solo driving and congestion through increased remote work, carsharing, vanpooling, pricing strategies, and parking-management programs that leverage partnerships and technology.

Local

City of Encinitas General Plan

The General Plan is the primary source of long-range planning and policy direction used to guide growth and preserve the quality of life in the City. The General Plan states that a goal of the City is to analyze proposed land uses to ensure that the designations would contribute to a proper balance of land uses within the community. The relevant goals and policies of the General Plan include:

Circulation Element

- **Goal 1:** Encinitas should have a transportation system that is safe, convenient and efficient, and sensitive to and compatible with surrounding community character.
 - **Policy 1.15:** The City will actively support an integrated transportation program that encourages and provides for mass-transit, bicycle transportation, pedestrians, equestrians, and car-pooling.
- **Goal 3:** The City of Encinitas will promote the use of other modes of transport to reduce the dependence on the personal automobile.
 - **Policy 3.2:** Continue to assist in expanding public transportation and emphasize public transportation in future development with preference given to cost-effective alternatives.
 - **Policy 3.3:** Create a safe and convenient circulation system for pedestrians.
 - **Policy 3.11:** The City will strive to implement a safe, direct, and convenient circulation system for commuting and recreational bicycle traffic. The City will support the development of additional bicycle facilities in the Coastal Zone, including the following:
 - All Circulation Element roads will include provisions for bicycle lanes unless precluded by design and safety considerations in which cases, alternative routes shall be provided to form a continuous network.
 - The provision of secure bicycle storage facilities at all beaches designated for high and moderate levels of use; and
 - The installation of bicycle and surfboard racks on all buses serving the Coastal Zone.

Resource Management Element

- **Goal 1:** The City will conserve, protect, and enhance the water resources in the Planning Area.

- **Policy 1.1:** Require new development to utilize measures designed to conserve water in their construction.
- **Policy 1.10:** Promote the use of water efficient sprinkling and gardening systems to include ordinances and technology to encourage drought tolerant plants.
- **Goal 6:** The City will make every effort to reduce the amount of solid and liquid waste generated in the Planning Area and will identify ways to responsibly deal with these wastes.
 - **Policy 6.1:** The City will phase in all practical forms of mandatory recycling as soon as possible.
 - **Policy 6.2:** The City will contract only with waste haulers who will willingly cooperate with the City's recycling effort.
- **Goal 9:** The City will encourage the abundant use of natural and drought tolerant landscaping in new development and preserve natural vegetation, as much as possible, in undeveloped areas.
 - **Policy 9.4:** Encourage and adopt standards for the use of drought tolerant and/ or natural landscaping and efficient irrigation systems throughout the City.
- **Goal 15:** The City will make every effort to conserve energy in the City thus reducing our dependence on fossil fuels.
 - **Policy 15.1:** The City will encourage the use of alternate energy systems, including passive solar and architectural and mechanical systems, in both commercial and residential development.
 - **Policy 15.2:** The patterns of proposed subdivisions and the orientation and design of structures on lots shall be designed with the objective of maximizing the opportunities for solar energy use and energy conservation.
 - **Policy 15.3:** Energy conserving construction standards and requirements shall be enforced in the field inspection of new construction.

Encinitas North 101 Corridor Specific Plan

The project is located within the *Encinitas North 101 Corridor Specific Plan* (Specific Plan). Chapter 9, *General Plan and Local Coastal Program Compliance*, of the Specific Plan identifies goals and policies of the General Plan that are relevant to the Specific Plan area and addresses the Specific Plan's consistency with the General Plan. Consistency with the General Plan would ensure compliance with the Specific Plan.

City of Encinitas General Plan Housing Element Update

In March 2019, the City adopted the Housing Element Update (HEU) which provides the City with a coordinated and comprehensive strategy for promoting the production of safe, decent, and affordable housing for all within the City. The purpose of the HEU is to ensure that the City establishes policies, procedures, and incentives to increase the quality and quantity of the housing supply in the City. The following goal and policy from the HEU are related to GHG reduction.

- **Goal 2:** Sound housing will be provided in the City of Encinitas for all persons.
 - **Policy 2.8:** Continue to develop and promote an energy efficiency conservation measure consistent with the strategies outlined in the City's Climate Action Plan.

Additionally, according to the HEU Environmental Assessment (EA), implementation of projects identified in the HEU would not directly conflict with the policies and reduction measures in the City's Climate Action Plan (CAP). As part of the mitigation requirements of the HEU EA, projects that exceed the City's interim screening threshold of 900 MTCO₂e per year shall prepare a project-specific GHG analysis that identifies an appropriate project-level significance threshold and project-specific mitigation measures. The project-level analysis shall demonstrate that, with implementation of the applicable mitigation measures, the project will not impede implementation of AB 32 or SB 32.

Climate Action Plan

The City's CAP was adopted in January 2018 and was most recently updated and adopted on November 18, 2020. The CAP serves as a guiding document and outlines a course of action for community and municipal operations to reduce GHG emissions and the potential impacts of climate change within the jurisdiction. The CAP benchmarks GHG emissions in 2012 and identifies what reductions are required to meet GHG reduction targets based on State goals embodied in AB 32. The 2020 CAP Update incorporates the HEU residential units into the business-as-usual projection and legislatively adjusted projection and presents associated updates and revisions to the CAP measures. The CAP aims to achieve local community wide GHG reduction targets of 13 percent below 2012 levels by 2020 and 44 percent below 2012 levels by 2030.

To achieve these objectives, the CAP identifies a summary of baseline GHG emissions and the potential growth of these emissions over time; the expected climate change effects on the City; GHG emissions reduction targets and goals to reduce the community's contribution to global warming; and identification of strategies, specific actions, and supporting measures to comply with statewide GHG reduction targets and goals, along with strategies to help the community adapt to climate change impacts.

As part of the CAP implementation, each strategy, action, and supporting measure will be continually assessed and monitored. Reporting on the status of implementation of these strategies, periodic updates to the GHG emissions inventory, and other monitoring activities will help ensure that the CAP is making progress. It should be noted that as of this time, the City has not adopted implementing ordinances for the CAP. The following strategies are applicable to the project:

- RE-2: Require New Homes to install Solar Photovoltaic Systems
- RE-3: Require Commercial Buildings to install Solar Photovoltaic Systems
- CET-4: Require Residential Electric Vehicle Charging Stations
- CET-5: Require Commercial Electric Vehicle Charging Stations

Ordinance 2021-13

Ordinance 2021-13 was adopted by the City of Encinitas to amend Section 23. 12. 080 and Section 23. 12. 110 of Chapter 23. 12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the City of Encinitas Municipal Code (Municipal Code) to implement goals and objectives set forth in the Climate Action Plan for reducing greenhouse gas (GHG) emissions, conserving water and energy, encouraging green buildings, protecting the natural environment, and protecting the health of residents and visitors. Specifically, Section 100. 0, subpart (e) of the California Energy Code is amended in Section 23. 12. 080(D) of the Municipal Code to require all newly constructed buildings to meet the requirements of an "All - Electric Building" (no natural gas or propane plumbing installed within the building and there is no gas meter connection). Under the new ordinance, restaurant use may be approved for an exception to install gas -fueled cooking appliances.

Energy

State

California Building Energy Efficiency Standards (Title 24). In 1978, the CEC established the Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as “Title 24,” California’s energy efficiency standards for residential and non-residential buildings, in response to a legislative mandate to create uniform building codes to reduce California’s energy consumption and provide energy efficiency standards for residential and non-residential buildings. The 2016 Title 24 standards went into effect on January 1, 2017. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2016 Title 24 standards are 28 percent more efficient than previous standards for residential development.¹¹ The standards offer developers better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. Further, the 2019 Building Energy Efficiency Standards, which took effect on January 1, 2020, promote photovoltaic systems in newly constructed residential buildings. With rooftop solar electricity generation, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards.¹² Additionally, under 2019 Title 24 Building Energy Efficiency Standards nonresidential buildings will use about 30 percent less energy, mainly to lighting upgrades, when compared to 2016 standards.¹³

California Green Building Standards. The California Green Building (CALGreen) Code (California Code of Regulations, Title 24, Part 11), is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2019 and went into effect on January 1, 2020. CALGreen requires new buildings to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials.

California Public Utilities Commission Energy Efficiency Strategic Plan. The CPUC prepared an Energy Efficiency Strategic Plan (Strategic Plan) in September 2008 with the goal of promoting energy efficiency and a reduction in greenhouse gases. In January 2011, a lighting chapter was adopted and added to the Strategic Plan. The Strategic Plan is California’s single roadmap to achieving maximum energy savings in the State between 2009 and 2020, and beyond 2020. The Strategic Plan contains the practical strategies and actions to attain significant statewide energy savings, as a result of a year-long collaboration by energy experts, utilities, businesses, consumer groups, and governmental organizations in California, throughout the West, nationally and internationally. The plan includes the four big bold strategies:

1. All new residential construction in California will be zero net energy by 2020.
2. All new commercial construction in California will be zero net energy by 2030.

¹¹ California Energy Commission, *2016 Building Energy Efficiency Standards, Frequently Asked Questions, Energy Standards Overview*, https://www.calbo.org/sites/main/files/file-attachments/2016_building_energy_efficiency_standards_faq.pdf?1520982927, accessed April 14, 2022.

¹² California Energy Commission, *2019 Building Energy Efficiency Standards*, March 2018.

¹³ Ibid.

3. Heating, ventilation and air condition (HVAC) will be transformed to ensure that its energy performance is optimal for California's climate.
4. All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

California Energy Commission Integrated Energy Policy Report. In 2002, the California State legislature adopted Senate Bill (SB) 1389, which requires the CEC to develop an Integrated Energy Policy Report (IEPR) every two years. SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety.

The CEC adopted the 2019 IEPR on February 20, 2020. The 2019 IEPR provides the results of the CEC's assessments of various energy issues facing California and covers a broad range of topics, including implementation of SB 100 (statewide greenhouse gas reduction targets), integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission, landscape-scale planning, electricity and natural gas demand forecast, transportation energy demand forecast, renewable gas, updates on Southern California's electricity reliability, natural gas outlook, and climate adaptation and resiliency.

Local

The applicable goals, policies, strategies, and actions from the City's General Plan, Specific Plan, and CAP that would help reduce energy consumption and increase renewable energy use in the City would also reduce GHG emissions in the City, and thus have been discussed in the Global Climate Change regulations section above.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) THRESHOLDS

The environmental analysis in this memorandum is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section.

Global Climate Change

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to GHG emissions, if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (refer to Impact Statement GHG-1); and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases (refer to Impact Statement GHG-2).

Energy

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to energy, if it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation (refer to Impact Statement EN-1); and/or

- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency (refer to Impact Statement EN-2).

METHODOLOGY

Global Climate Change

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. The amendments do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)). The California Natural Resources Agency (CNRA) has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and therefore GHG emissions should be analyzed in the context of CEQA's requirements for cumulative impact analyses (see CEQA Guidelines Section 15064(h)(3)).^{14,15} A project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements to avoid or substantially lessen the cumulative problem within the geographic area of the project.¹⁶

The City has adopted an interim screening threshold of 900 MTCO₂e per year based on guidance in the CAPCOA's *CEQA & Climate Change* report.¹⁷ The *CEQA & Climate Change* report references an annual 900 MTCO₂e guideline as a conservative threshold for requiring further analysis and is based on a project's vehicle trips, electricity generation, natural gas consumption/combustion, water usage, and solid waste generation. The HEU EA requires developments that would exceed the interim screening threshold of significance to prepare a project-specific GHG analysis that identifies an appropriate project-level significance threshold and project-specific mitigation measures. The project-level analysis shall demonstrate that, with implementation of the applicable mitigation measures, the project will not impede implementation of AB 32 or SB 32.

The project-level analysis calculates the amount of GHG emissions that would be attributable to the project using recommended model, California Emissions Estimator Model (CalEEMod), version 2020.4.0, and compares to the City's interim screening threshold of significance. GHG emissions from on-road transportation were calculated using CalEEMod default trip lengths for San Diego County, trip generation data within the *City of Encinitas Marea Village Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis* (Traffic Impact Analysis) prepared by LOS Engineering, Inc. (dated May 2022)¹⁸, emission factors from EMFAC2017, and project-specific land use data. GHG emissions from other sources were calculated using CalEEMod default emission rates for San Diego County and project-specific land use data. A CalEEMod model run was conducted to quantify the existing

¹⁴ California Natural Resources Agency, *Final Statement of Reasons for Regulatory Action* (December 2009), pp. 11-13, 14, 16, December 2009, https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/Final_Statement_of_Reasons.pdf, accessed April 14, 2022.

¹⁵ Cynthia Bryant, Director of the Office of Planning and Research, *Transmittal of the Governor's Office of Planning and Research's Proposed S897 CEQA Guidelines Amendments to the Natural Resources Agency*, April 13, 2009. <https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/C01.pdf>, accessed April 14, 2022.

¹⁶ 14 CCR Section 15064(h)(3).

¹⁷ California Air Pollution Control Officers Association, *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, January 2008.

¹⁸ LOS Engineering, Inc., *City of Encinitas Marea Village Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, dated May 2022.

GHG emissions from the operation of the existing restaurant and small commercial center. The CalEEMod model run relied on land use information and daily vehicle trips provided in the Traffic Impact Analysis. It should be noted that although the existing restaurant is currently unoccupied, consistent with the Traffic Impact Analysis, trips generated by the restaurant were accounted for in the existing conditions model.

In the *2017 Climate Change Scoping Plan Update*, CARB suggested substantial progress could be made if a regional or countywide GHG reduction plan, such as the City's CAP, targeted reducing emissions to 6 MTCO₂e per capita by 2030 and 2 MTCO₂e per capita by 2050. However, instead of purely relying on the regional/countywide projections, local data was gathered to establish a baseline to ensure that the proposed project would provide its fair share contribution toward meeting GHG reduction targets.

The significance threshold for the project was developed based on the City's CAP. During preparation of the City's baseline emissions inventory, the University of San Diego's Energy Policy Initiatives Center (EPIC) calculated GHG emissions for both community-wide sectors and County government operations for the year 2012. EPIC then projected emissions for the years 2020 and 2030 based on factors such as population and job growth. EPIC concluded that, in 2012, total emissions in the City were approximately 459,000 MTCO₂e.

To be consistent with SB 32, the City must reduce emissions by 44 percent from the baseline, which equates to a target of 254,575 MTCO₂e per year in 2030. The City's service population in 2030 is expected to be 95,585 (68,345 residents and 27,240 jobs). Therefore, to achieve a City emissions level of 254,575 MTCO₂e per year in 2030, the required per capita efficiency target would be approximately 2.7 MTCO₂e (254,575/95,585) per service population per year, which is approximately half of CARB's suggested target. Based on this approach, for the analysis in Impact Statement GHG-1, if the proposed project would generate GHG emissions equal to or less than 2.7 MTCO₂e per service population per year, the impact would be less than significant. Otherwise, mitigation measures would need to be implemented to mitigate the project's GHG emissions impacts.

The analysis in Impact Statement GHG-2 discusses the project's consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. If the project would be consistent with all applicable plans, the project would not impede implementation of AB 32 or SB 32, and the impact would be less than significant. Otherwise, mitigation measures would need to be implemented to mitigate the project's GHG emissions impacts.

Energy

Appendix F of the CEQA Guidelines is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis in Impact Statement EN-1 relies upon Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- **Criterion 1:** The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- **Criterion 2:** The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- **Criterion 3:** The effects of the project on peak and base period demands for electricity and other forms of energy.
- **Criterion 4:** The degree to which the project complies with existing energy standards.

- **Criterion 5:** The effects of the project on energy resources.
- **Criterion 6:** The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the project's energy usage is presented and addresses **Criterion 1**. The discussion on construction-related energy use focuses on **Criteria 2, 4, and 5**. The discussion on operational energy use is divided into transportation energy demand and building energy demand. The transportation energy demand analysis discusses **Criteria 2, 4, and 6**, and the building energy demand analysis discusses **Criteria 2, 3, 4, and 5**.

The analysis in Impact Statement EN-2 discusses project consistency with applicable statewide, regional, and local plans related to energy efficiency and renewable energy.

GREENHOUSE GAS EMISSIONS IMPACTS

Impact GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact with Mitigation Incorporated.

Project-Related Sources of Greenhouse Gases

The proposed project would result in direct and indirect emissions of CO₂, N₂O, and CH₄ and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Direct project related GHG emissions include emissions from construction activities, area sources, and mobile sources, while indirect sources include emissions from energy consumption, water demand, and solid waste generation.¹⁹ CalEEMod was used to calculate direct and indirect project related GHG emissions. Table 4, Annual Estimated Greenhouse Gas Emissions, presents the estimated CO₂, N₂O, and CH₄ emissions of the existing uses and the proposed project. CalEEMod outputs are contained within Appendix A, Greenhouse Gas Emissions and Energy Data.

Existing Sources of Greenhouse Gases

A CalEEMod model run was conducted to quantify the existing GHG emissions from operation of the existing uses. As shown in Table 4, the existing development emits approximately 549.02 MTCO₂e/year.

¹⁹ According to the EPA, Scope 1 GHG emissions are direct emissions from sources that are owned or controlled by the Agency, including on-site fossil fuel combustion and fleet fuel consumption. Scope 2 GHG emissions are indirect emissions from sources that are owned or controlled by the Agency, including emissions that result from the generation of electricity, heat, or steam purchased by the Agency from a utility provider.

Table 4
Annual Estimated Greenhouse Gas Emissions

Source ⁶	CO ₂	CH ₄		N ₂ O		Total Metric Tons of CO ₂ e ²
	Metric Tons/yr ¹	Metric Tons/yr ¹	Metric Tons of CO ₂ e/yr	Metric Tons/yr ¹	Metric Tons of CO ₂ e/yr	
Existing Conditions Emissions						
Direct Emissions						
Area Source	<0.01	0.00	<0.01	0.00	0.00	<0.01
Mobile Source ³	503.96	0.04	1.07	0.03	7.75	512.79
Total Direct Emissions ^{2,3}	503.96	0.04	1.07	0.03	7.75	512.79
Indirect Emissions						
Energy	29.26	0.00	0.03	<0.01	0.10	29.40
Solid Waste	1.64	0.10	2.43	0.00	0.00	4.07
Water Demand	2.20	0.02	0.44	<0.01	0.13	2.76
Total Indirect Emissions ²	33.11	0.12	2.90	<0.01	0.23	36.23
Total Existing Emissions ²	549.02 MTCO ₂ e/yr					
Proposed Project Emissions						
Direct Emissions						
Construction ⁴	32.45	<0.01	0.19	0.00	0.20	33.47
Area Source	67.78	<0.01	0.06	0.00	0.36	68.20
Mobile Source ³	1540.35	0.12	2.96	0.01	2.19	1565.21
Total Direct Emissions ³	1640.58	0.13	3.21	0.01	2.76	1666.88
Indirect Emissions						
Energy	513.49	0.02	0.61	<0.01	1.69	515.79
Solid Waste	6.22	0.37	9.20	0.00	0.00	15.42
Water Demand	43.66	0.27	6.65	0.01	1.94	52.25
Total Indirect Emissions ²	563.38	0.66	16.45	0.01	3.64	583.46
Total Project-Related Emissions ²	2,250.34MTCO ₂ e/yr					
Net Increase of Total Project-Related Emissions ²	1,701.33MTCO ₂ e/yr					
Reduction from 250 kW Solar Panels	140.26 MTCO ₂ e/yr					
Reduction from 39 EV Charging Stations	141.68 MTCO ₂ e/yr					
Reduction from Ordinance 2021-13 ⁵	54.97 MTCO ₂ e/yr					
Net Increase of Total Project-Related Emissions After Reductions ²	1,364.42 MTCO ₂ e/yr					
Total Project Service Population (Residence + Employment) ⁶	274					
Project Per Service Population Emissions	4.98 MTCO ₂ e/yr per capita					
City of Encinitas Climate Action Plan Threshold	2.7 MTCO ₂ e/yr per capita					
Is Threshold Exceeded?	Yes					

Notes:MTCO₂e/yr = Metric Tons Carbon Dioxide Equivalent per year; kW = kilowatt; EV = electric vehicle

1. Emissions calculated using the CalEEMod version 2020.4.0.

2. Totals may be slightly off due to rounding.

3. The mobile source emissions were calculated using the trip generation data provided in the LOS Engineering, Inc., *City of Encinitas Marea Village Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, dated May 2022.4. Value shown is amortized over the lifetime of the project (assumed to be 30 years). Total project construction GHG emissions equate to 1,004.16 MTCO₂e.

5. Ordinance 2021-13 required all newly constructed buildings to be "all electric". This ordinance applies to residential and commercial development; however, restaurants can apply for an exemption for natural gas cooktops. For purposes of this study, and to ensure a conservative analysis, this study assumes that the project's restaurant uses would use natural gas. Should exemptions be sought and granted, GHG emissions would be incrementally lower than reported herein.

6. Total project service population includes 236 residents and 38 employees. The 38 employees represent net increase from existing conditions (i.e., 62 employees for the project minus 24 employees for the existing uses).

Refer to [Appendix A, Greenhouse Gas Emissions and Energy Data](#), for detailed model input/output data.

Direct Project-Related Source of Greenhouse Gases

Construction Emissions. Because impacts from construction activities occur over a relatively short-term period of time, they contribute a relatively minimal portion of the overall lifetime project GHG emissions. Construction GHG emissions are amortized (i.e., total construction emissions divided by the lifetime of the project, assumed to be 30 years),²⁰ then added to the operational emissions to adequately include GHG emission from construction in the lifetime/operational GHG estimates. As seen in [Table 4](#), construction of the proposed project would result in an annual total of 33.47 MTCO₂e (amortized over 30 years) which represents a total of approximately 1,004.16 MTCO₂e from the overall construction activities.

Area Source. The project would result in nominal (68.20 MTCO₂e) area source emissions; refer to [Table 4](#). Area source emissions would be generated due to an increased demand for natural gas and fuel associated with the development of the proposed project. The primary use of natural gas and fuel producing area source emissions by the project would be for consumer products, architectural coating, natural gas hearth, and landscaping. It should be noted that per Ordinance 2021-13, no natural gas use would be associated with the proposed residential development.

Mobile Source Emissions. According to the Traffic Impact Analysis, the proposed project would generate a net increase of 1,173 daily trips, which equates to approximately 1,565.21 MTCO₂e/year of mobile source-generated GHG emissions as modeled in CalEEMod; refer to [Table 4](#).

Indirect Project-Related Source of Greenhouse Gases

Energy Consumption. Indirect consumption emissions were calculated using the CalEEMod model and project-specific land use data. Electricity would be provided to the project site via SDG&E. The project would indirectly result in 515.79 MTCO₂e/year of GHG emissions due to energy consumption; refer to [Table 4](#).

Water Demand. Emissions from indirect energy impacts due to water supply would result in 52.25 MTCO₂e/year; refer to [Table 4](#).

Solid Waste. Solid waste associated with operations of the proposed project would result in 15.42 MTCO₂e/year; refer to [Table 4](#).

Project Sustainable Design

The proposed project includes design features that would reduce project related GHG emissions. The project would install water-efficient fixtures in compliance with the 2019 CALGreen Code. The proposed project would also include recycling services per Assembly Bill 341, which would divert at least 75 percent of solid waste generated on-site away from local landfills. Further, high-efficiency lighting would be installed in compliance with 2019 Title 24 standards, which would reduce energy usage by approximately 30 percent compared to nonresidential buildings constructed under the 2016 Title 24 standards.²¹ These sustainable design features have been incorporated in CalEEMod and shown in [Table 4](#).

In addition, the project would install solar panels on-site that would produce approximately 250 kilowatts (kW) of solar power. According to the City's CAP, the City intends to increase solar capacity by 1.9 megawatts (MW) from residential and commercial development by 2030 and reduce GHG emissions by 1,066 MTCO₂e, which is equivalent to approximately 561 MTCO₂e per MW. Therefore, the proposed on-site solar panels (250 kW) would reduce GHG emissions by approximately 140.26 MTCO₂e/year. Furthermore, the project would include 39 electric vehicle charging stations (EVCS) on-site. According to

²⁰ Projected GHGs from construction have been quantified and amortized over 30 years, which is the number of years considered to represent the life of the project. The amortized construction emissions are added to the annual average operational emissions.

²¹ California Energy Commission, *2019 Building Energy Efficiency Standards*, March 2018.

the City's CAP, the City would increase the number of EVCS by 866 from residential and commercial development by 2030 and reduce GHG emissions by 3,146 MTCO₂e, which is equivalent to approximately 3.63 MTCO₂e per EVCS. Therefore, the 39 on-site EVCS would reduce GHG emissions by approximately 141.68 MTCO₂e/year.

Total Project-Related Sources of Greenhouse Gases

In addition, the project would install approximately 250 kilowatt (kW) of solar panels on-site. As shown in [Table 4](#), the total amount of project related GHG emissions from direct and indirect sources combined minus the existing uses GHG emissions would total 1,701.33 MTCO₂e/year. With the emission reductions from on-site solar panels and EVCS as well as residential natural gas use per Ordinance 2021-13, the project related GHG emissions would total approximately 1,364.42 MTCO₂e/year. The project would increase population by 236 residents and employment by 38 employees (62 employees for the proposed project minus 24 employees for the existing uses), totaling 274 service population. As such, the project would generate GHG emissions of approximately 4.98 MTCO₂e per year per service population, which would exceed the previously established significance threshold of 2.7 MTCO₂e per year per service population from the City's CAP. Therefore, the impact would be potentially significant and mitigation is required.

Mitigation Measure MM GHG-1 is proposed to require the project applicant to purchase and retire a total of approximately 18,739 MTCO₂e²² GHG offsets to reduce the project's GHG emissions to 2.7 MTCO₂e per year per service population. With implementation of Mitigation Measure MM GHG-1, the project would not exceed the GHG emissions threshold from the City's CAP, and the impact would be reduced to less than significant.

Mitigation Measures: The following mitigation measure would be required.

- MM GHG-1: **Purchase and Retire Greenhouse Gas (GHG) Offsets.** The applicant shall purchase and retire 18,739 metric tons of carbon dioxide equivalent (MTCO₂e) greenhouse gas offsets to reduce the project's GHG emissions level to 2.7 MTCO₂e per service population per year, consistent with the performance standards and requirements set forth below.
- The GHG offsets shall be secured from an accredited registry that is approved by the California Air Resources Board (CARB), or from an emissions reduction credits program that is administered by CARB.
 - The GHG offsets shall be secured from an accredited registry that uses a CARB-approved protocol which meets the requirements of California Code of Regulations, Title 17, §95972(a).
 - The GHG offsets shall be real, permanent, quantifiable, verifiable, and enforceable, as those terms are defined in Health & Safety Code §38562(d)(1) and (2) and California Code of Regulations, title 17, §95802.
 - Carbon offset credits can result from activities that reduce, avoid, destroy or sequester an amount of GHG emissions in an off-site location to offset the equivalent amount of GHG emissions occurring elsewhere. For the purpose of Project mitigation, carbon offset credits shall consist of direct emission reductions or sequestration that are used to offset the Project's direct emissions. As described in CARB Determination for State Assembly Bill 734, all carbon offset credits shall be

²² Emissions in exceedance of City's threshold multiplied by the project service population multiplied by the 30 years of proposed project life equals approximately 18,739 MTCO₂e total offsets required for the project.

purchased from a carbon offset registry which is approved by CARB and uses CARB-approved protocols, which at present include the following: the American Climate Registry, Climate Action Reserve, and Verra (formerly Verified Carbon Standard). The carbon offset credits shall be verifiable by the City and enforceable in accordance with the registry's applicable standards, practices, or protocols. The carbon offsets must substantively satisfy all six of the statutory "environmental integrity" requirements applicable to the CARB Cap-and-Trade Program, generally as set forth in both subdivisions (d)(1) and (d)(2) of California Health and Safety Code §38562: real, permanent, quantifiable, verifiable, enforceable, and additional. All offset credits shall be verified by an independent verifier who meets stringent levels of professional qualification (i.e., American National Standards Institute National Accreditation Board Accreditation Program for Greenhouse Gas Validation/Verification Bodies or a Greenhouse Gas Emissions Lead Verifier accredited by CARB), or an expert with equivalent qualifications to the extent necessary to assist with the verification. Without limiting the generality of the foregoing, in the event that an approved registry becomes no longer accredited by CARB and the offset credits cannot be transferred to another accredited registry, the project applicant shall comply with the rules and procedures for retiring and/or replacing offset credits in the manner specified by the applicable protocol or other applicable standards including (to the extent required) by purchasing an equivalent number of credits to recoup the loss.

- *Geographic Location:* Carbon offset credits shall be obtained from GHG reduction projects that occur in the following locations in order of priority: (1) off-site within the neighborhood surrounding the project site, including Encinitas; (2) the greater North County community; (3) within the San Diego County Air Basin; (4) the State of California; and (5) the United States. For offset credits from projects outside the State of California, the applicant shall demonstrate in writing to the satisfaction of the City that the offset project meets requirements equivalent to or stricter than California's laws and regulations for ensuring the validity of offset credits.
- Any offset credits used for mitigation are subject to the approval of the City. Contracts for purchase of credits shall be entered into prior to issuance of a certificate of occupancy for each building and the applicant shall provide the third-party verification report concerning those credits, and the unique serial numbers of those credits showing that they have been retired. The City shall confirm receipt of the verification reports and serial numbers prior to issuance of a certificate of occupancy.

Timing/Implementation: Prior to issuance of a certificate of occupancy.

Enforcement/Monitoring: City of Encinitas Planning Division.

Impact GHG-2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact.

Consistency with Applicable GHG Plans, Policies, or Regulations

The GHG plan consistency analysis is based on the project's consistency with the 2021 Regional Plan, the 2017 Scoping Plan Update, the City's CAP, and applicable goals found within the General Plan. The 2021 Regional Plan is a regional growth-management strategy that targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the San Diego region. The 2017 Scoping Plan Update describes the approach California will take to reduce GHG emissions by 40 percent below 1990 levels by the year 2030. The City's CAP and General Plan contain strategies, goals, and policies that would help implement energy efficient, transportation, water efficient, and waste reduction measures and would subsequently reduce GHG emissions within the City.

Consistency with the SANDAG San Diego Forward: The Regional Plan

On December 10, 2021, SANDAG adopted the 2021 Regional Plan. Specially, Chapter 2, *Sustainable Community Strategy – A Framework for the Future*, of the 2021 Regional Plan includes three core strategies that which projects, policies, and programs in accordance with the 2021 Regional Plan would be organized and implemented around. Table 5, *Consistency with the 2021 Regional Plan* shows the project's consistency with these core strategies. As shown therein, the proposed project would be consistent with the GHG emission reduction strategies contained in the 2021 Regional Plan.

Table 5
Consistency with the 2021 Regional Plan

Reduction Strategy	Project Consistency Analysis
Invest in a reimagined transportation system: Build a network and fund services that include multimodal roadways; an expanded network of fast, frequent, and low-cost transit; 21st-century technology that manages the entire transportation system and connects people to on-demand services; and zero-emission options for vehicles and micromobility.	Consistent. The project is an infill project located in urbanized area. The project would include a total of 258 parking spaces on-site, and 39 of these spaces would offer EVCS, which would constitute 15 percent of total parking spaces. Further, the project would install solar panels on-site producing approximately 250 kW of solar power, which would reduce GHG emissions by approximately 140.26 MTCO ₂ e/year. Further, the project site is located in proximity to an existing transportation network. The bus stop for North County Transit District's Bus Line 101 is located near the project's eastern boundary, and the nearest transit station serving Coaster trains is located approximately 2 miles to the north of the project site. The project would also implement Transportation Demand Management TDM strategies including a voluntary employer commute program, bikeshare program, pedestrian improvements, and provision of public transit information. Therefore, the project would be consistent with this strategy.
Incentivize sustainable growth and development: Collaborate with local jurisdictions and fund programs that accelerate housing production while also addressing the intertwined issues of equity, climate resilience, and mobility.	Consistent. The project proposes an infill mixed use project with 94 multi-family residential units, 75 of which would be rented at market rate and 19 would be affordable housing units dedicated to "low-income" (80% area median income) qualifying residents. The project also proposes hotel rooms and commercial uses that include offices, as well as a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. Therefore, the project would accelerate housing production while also addressing the intertwined issues of equity, climate resilience, and mobility via providing housing for both the general population and low-income population. The project would be consistent with this strategy.
Implement innovative demand and system management: Reduce solo driving and congestion through increased remote work, carsharing, vanpooling, pricing strategies, and parking-management programs that leverage partnerships and technology.	Consistent. As discussed above, the project would include 39 EVCS and install solar panels on-site. The project would also implement TDM strategies to provide residences and employees multiple transportation choices. Additionally, it is acknowledged that the project is located in an urbanized area near existing bus stops and a transit station. Therefore, the project would be consistent with this strategy.
Source: San Diego Association of Governments, <i>San Diego Forward: The 2021 Regional Plan</i> , December 10, 2021.	

Consistency with the 2017 CARB Scoping Plan Update

The 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan (2013). Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. Provided in [Table 6, Consistency with the 2017 Scoping Plan Update](#), is an evaluation of applicable reduction actions and strategies by emissions source category to determine how the project would be consistent with or exceed reduction actions and strategies outlined in the 2017 Scoping Plan Update.

Table 6
Consistency with the 2017 Scoping Plan Update

Actions and Strategies	Project Consistency Analysis
SB 350 Achieve a 50 percent Renewables Portfolio Standard (RPS) by 2030, with a doubling of energy efficiency savings by 2030.	Consistent. The proposed project would not be an electrical provider and would not delay the goals of SB 350. Furthermore, the project would utilize electricity from SDG&E which would be required to comply with SB 350. As such, the project would be in compliance with SB 350.
Low Carbon Fuel Standard (LCFS) Increase stringency of carbon fuel standards; reduce the carbon intensity of fuels by 18 percent by 2030, which is up from 10 percent in 2020.	Consistent. Motor vehicles driven within the project area would be required to use LCFS complaint fuels. Thus the project would be in compliance with this goal.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario) Maintain existing GHG standards of light and heavy-duty vehicles while adding an addition 4.2 million zero-emission vehicles (ZEVs) on the road. Increase the number of ZEV buses, delivery trucks, or other trucks.	Consistent. The proposed project would include residential and commercial uses which may include occasional light-, medium-, and heavy-duty truck trips. Truck uses associated with the project would be required to comply with all CARB regulations, including the LCFS and newer engine standards. The proposed project would not conflict with the CARB's goal of adding 4.2 million zero-emission (ZEVs) on the road. Furthermore, development within the project area would be required to comply with the most current version of the Title 24 and CALGreen Code at the time of construction, and install EVCS and EV parking spaces on-site. As such, the project would not conflict with the goals of the Mobile Source Strategy.
Sustainable Freight Action Plan Improve the freight system efficiency and maximize the use of near zero emission vehicles and equipment powered by renewable energy. Deploy over 100,000 zero-emission trucks and equipment by 2030.	Consistent. As described above, truck uses within the project area would be required to comply with all CARB regulations, including the LCFS and newer engine standards. Additionally, the project would not conflict with CARB's goal to deploy over 100,000 zero-emission trucks and equipment by 2030, as the project would comply with all future applicable regulatory standard adopted by CARB. The project would also install EVCS and EV parking spaces on-site, which would encourage the use of zero-emission vehicles.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy Reduce the GHG emissions of methane and hydrofluorocarbons by 40 percent below the 2013 levels by 2030. Furthermore, reduce the emissions of black carbon by 50 percent below the 2013 levels by the year 2030.	Consistent. The project does not involve sources that would emit large amounts of methane (refer to Table 4). Furthermore, the project would comply with all CARB and SDAPCD hydrofluorocarbon regulations. As such, the proposed project would not conflict with the SLCP reduction strategy.
SB 375 Sustainable Communities Strategies Increase the stringency of the 2035 GHG emission per capita reduction target for metropolitan planning organizations (MPO).	Consistent. As shown in Table 5 , the project would be consistent with the SANDAG's 2021 Regional Plan and would not conflict with the goals of SB 375. Furthermore, the project would implement TDM measures to reduce vehicle miles traveled.
Post-2020 Cap and Trade Programs The Cap-and-Trade Program will reduce greenhouse gas (GHG) emissions from major sources (covered entities) by setting a firm cap on statewide GHG emissions while employing market mechanisms to cost-effectively achieve the emission-reduction goals.	Not Applicable. As seen in Table 5 , the project would not generate GHG emissions over 25,000 metric tons per year cap and trade emission threshold. Therefore, the project would not conflict with this goal.
Source: California Air Resources Board, 2017 Scoping Plan, November 2017.	

Consistency with City of Encinitas General Plan

The City's General Plan Circulation Element, Resource Management Element, and Housing Element Update identify goals and policies that would contribute to a reduction in the City's overall GHG emissions. Table 7, Project Consistency with Applicable Goals and Policies of the City of Encinitas General Plan compares the proposed project to applicable policies from the General Plan.

Table 7
Project Consistency with Applicable Goals and Policies of the City of Encinitas General Plan

Goal/Policy	Project Consistency
Circulation Element	
<p>Goal 1: Encinitas should have a transportation system that is safe, convenient and efficient, and sensitive to and compatible with surrounding community character.</p> <ul style="list-style-type: none">Policy 1.15: The City will actively support an integrated transportation program that encourages and provides for mass-transit, bicycle transportation, pedestrians, equestrians, and car-pooling.	<p>Consistent. The project would incorporate TDM strategies that would promote alternative transportation modes and reduce the dependence on personal automobile, including:</p> <ul style="list-style-type: none">Voluntary employer commute programDevelop and/or promote bicycle usage through a bikeshare programProvide pedestrian improvements such as a connection to the hotel to the northProvide information about maps, routes, and schedules for public transit <p>In addition, the project site is located close to local bus stops and regional transit stations, and the project would provide bicycle parking spaces on-site. These measures and strategies would ensure the project's consistency with General Plan Circulation Element policies and goals.</p>
<p>Goal 3: The City of Encinitas will promote the use of other modes of transport to reduce the dependence on the personal automobile.</p> <ul style="list-style-type: none">Policy 3.2: Continue to assist in expanding public transportation and emphasize public transportation in future development with preference given to cost-effective alternatives.Policy 3.3: Create a safe and convenient circulation system for pedestrians.Policy 3.11: The City will strive to implement a safe, direct, and convenient circulation system for commuting and recreational bicycle traffic. The City will support the development of additional bicycle facilities in the Coastal Zone, including the following:<ul style="list-style-type: none">All Circulation Element roads will include provisions for bicycle lanes unless precluded by design and safety considerations in which cases, alternative routes shall be provided to form a continuous network.The provision of secure bicycle storage facilities at all beaches designated for high and moderate levels of use; andThe installation of bicycle and surfboard racks on all buses serving the Coastal Zone.	
Resource Management Element	
<p>Goal 1: The City will conserve, protect, and enhance the water resources in the Planning Area.</p> <ul style="list-style-type: none">Policy 1.1: Require new development to utilize measures designed to conserve water in their construction.Policy 1.10: Promote the use of water efficient sprinkling and gardening systems to include ordinances and technology to encourage drought tolerant plants.	<p>Consistent. The project would install water-efficient fixtures in compliance with 2019 CALGreen Code. In addition, the project would utilize low water use plants appropriate to the region and efficient irrigation system with smart controllers and rain sensors.</p>
<p>Goal 6: The City will make every effort to reduce the amount of solid and liquid waste generated in the Planning Area and will identify ways to responsibly deal with these wastes.</p> <ul style="list-style-type: none">Policy 6.1: The City will phase in all practical forms of mandatory recycling as soon as possible.Policy 6.2: The City will contract only with waste haulers who will willingly cooperate with the City's recycling effort.	<p>Consistent. The project would include recycling services per Assembly Bill 341, which would divert at least 75 percent of the solid waste generated on-site.</p>
<p>Goal 9: The City will encourage the abundant use of natural and drought tolerant landscaping in new development and preserve natural vegetation, as much as possible, in undeveloped areas.</p> <ul style="list-style-type: none">Policy 9.4: Encourage and adopt standards for the use of drought tolerant and/or natural landscaping and efficient irrigation systems throughout the City.	<p>Consistent. Refer to Goal 1 of the Resource Management Element above.</p>
<p>Goal 15: The City will make every effort to conserve energy in the City thus reducing our dependence on fossil fuels.</p>	<p>Consistent. The project would utilize renewable energy by installing solar water</p>

Table 7, continued

Goal/Policy	Project Consistency
<ul style="list-style-type: none"> Policy 15.1: The City will encourage the use of alternate energy systems, including passive solar and architectural and mechanical systems, in both commercial and residential development. Policy 15.2: The patterns of proposed subdivisions and the orientation and design of structures on lots shall be designed with the objective of maximizing the opportunities for solar energy use and energy conservation. Policy 15.3: Energy conserving construction standards and requirements shall be enforced in the field inspection of new construction. 	heaters for commercial uses and installing approximately solar panels generating 250 kW of solar power. The project would also comply with the latest energy conserving construction standards and requirements in the 2019 Title 24 Standards and CALGreen Code.
Housing Element Update	
Goal 2: Sound housing will be provided in the City of Encinitas for all persons. <ul style="list-style-type: none"> Policy 2.8: Continue to develop and promote an energy efficiency conservation measure consistent with the strategies outlined in the City's Climate Action Plan. 	Consistent. Refer to Table 8 below for discussion on project consistency with the City's Climate Action Plan energy efficiency conservation measures.
Source: City of Encinitas, <i>General Plan Circulation Element</i> , last amended January 22, 2003. City of Encinitas, <i>General Plan Resource Management Element</i> , last amended March 9, 2011. City of Encinitas, <i>2013-2021 Housing Element, Section 1: Housing Element Policy Program</i> , adopted March 13, 2019.	

Consistency with City of Encinitas Climate Action Plan

The City's CAP identifies GHG reduction strategies, goals, and actions that the City will implement to achieve its GHG reduction target by 2030. Strategies, goals, and actions focus on locally based programs, policies, and projects that will reduce GHG emissions in various categories as a complement to legislative actions taken by the federal and State governments. Table 8, Project Consistency with Applicable Strategies of the City of Encinitas Climate Action Plan compares the proposed project to applicable strategies from the CAP.

Table 8
Project Consistency with Applicable Strategies of the City of Encinitas Climate Action Plan

Strategy	Project Consistency
RE-2 Require New Homes to install Solar Photovoltaic Systems Require new multi-family homes to install at least 1 W solar per square feet (e.g., 1,000 sq. ft. home = 1 kW) or minimum 1 kW per unit, to install solar PV systems, unless the installation is impracticable due to poor solar resources.	Consistent. The project would include 72,982 square feet of multi-family residential units as well as 34 hotel rooms and commercial uses. According to Strategy RE-2, the project would be required to install 1 kW of solar panels per square feet of multi-family residential use, which is equivalent to 73 kW of solar panels in total. The project would install solar panels on-site that would generate approximately 250 kW of solar power. Therefore, the project would be consistent with these strategies. Consistent. The project would include a total of 258 parking spaces on-site, and 39 of these spaces would be equipped with EVCS, which would constitute 15 percent of total parking spaces. Therefore, the project would be consistent with these strategies by providing more than 8 percent EVCS of total parking spaces.
RE-3 Require Commercial Buildings to install Solar Photovoltaic Systems Require installation solar photovoltaic systems on all new commercial buildings, including the commercial portion of mixed-use projects, unless the installation is impracticable due to poor solar resources or other physical constraints, as approved Director of Development Services.	
CET-4 Require Residential Electric Vehicle Charging Stations Starting in 2018, require new residential units to install EVCS equipment. For Multi-Family: Install EVCS equipment at 5% of the total number of parking spaces.	
CET-5 Require Commercial Electric Vehicle Charging Stations Stating in 2018, require installation of EVCS at 8% of the total number of parking spaces. For all new commercial buildings, including the commercial portion of mixed-use projects.	
Source: City of Encinitas, <i>Climate Action Plan</i> , November 2020.	

Consistency with Applicable GHG Plans, Policies, or Regulations

In summary, the project's characteristics render it consistent with statewide, regional, and local climate change mandates, plans, policies, and recommendations. More specifically, the GHG plan consistency analysis provided above demonstrates that the project complies with the regulations and GHG reduction goals, policies, actions, and strategies outlined in the 2021 Regional Plan, the 2017 Scoping Plan Update, the City's General Plan, and the City's CAP. Consistency with these plans would reduce the impact of the project's incremental contribution of GHG emissions. Accordingly, the project would not conflict with any applicable plan, policy, regulation, or recommendation adopted for the purpose of reducing GHG emissions. Therefore, project related greenhouse gas emission impacts in relation to consistency with applicable plans, policies, and/or regulations governing GHG reductions would be less than significant.

Mitigation Measures: No mitigation measures are required.

ENERGY IMPACTS**Impact EN-1: Would the project result in wasteful, inefficient, or unnecessary consumption of energy resources?**

Electricity, natural gas, and fuel consumption associated with the proposed project has been prepared utilizing CalEEMod. Energy consumption was calculated for both the existing conditions and the proposed project; refer to [Appendix A, *Greenhouse Gas Emissions and Energy Data*](#). The project's electricity, natural gas, and fuel consumption depicted in [Table 9, *Project and Countywide Energy Consumption*](#), include energy consumption reductions from existing uses. It should be noted that per Ordinance 2021-13, no natural gas use would be associated with the proposed residential development. As shown in [Table 9](#), the project's energy usage would constitute an approximate 0.0072 percent increase over the County's typical annual electricity consumption, and an approximate 0.0064 percent increase over the County's typical annual natural gas consumption. Additionally, the project's construction fuel consumption would increase the County's consumption by 0.1 percent, and the project's operational vehicle fuel consumption would increase the County's consumption by 0.0139 percent (**Criterion 1**).

Table 9
Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption ¹	San Diego County Annual Energy Consumption ²	Percentage Increase Countywide
Electricity Consumption ³	1,368 MWh	19,044,726 MWh	0.0072%
Natural Gas Consumption ³	21,863 therms	505,216,400 therms	0.0043%
Operational Automotive Fuel Consumption ^{3,4}	184,992 gallons	1,327,707,014 gallons	0.0139%
Construction (Heavy-Duty Diesel Vehicle) Fuel Consumption	78,579 gallons	108,341,542 gallons	0.0725%
Notes: 1. As modeled in CalEEMod version 2020.4.0. 2. The project's electricity, natural gas, and fuel consumption are compared to the total consumption in San Diego County in 2020. San Diego County consumption data are shown in Table 1 , Table 2 , and Table 3 of this study. 3. The project's electricity and natural gas consumption includes reductions from existing uses. 4. Project fuel consumption is calculated based on CalEEMod results for the proposed project. Trip generation and vehicle miles traveled modeled under proposed project included reductions from existing uses. Future San Diego Countywide fuel consumption in 2024 (operation year) is from the California Air Resources Board's EMFAC2017 model. Refer to Appendix A for assumptions used in this analysis.			

Construction-Related Energy

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during demolition, grading, and construction. As indicated in [Table 9](#), the project's fuel consumption from construction would be approximately 78,579 gallons, which would increase fuel use in the County by 0.0725 percent. As such, construction would have a nominal effect on the local and regional energy supplies and would not require additional capacity (**Criterion 2**).

Some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. In addition, because the cost of fuel and transportation is a significant aspect of construction budgets, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**Criterion 4**).

Significant reductions in energy inputs for construction materials can be achieved by selecting green building materials composed of recycled materials that require less energy to produce than non-recycled materials.²³ The integration of green building materials can help reduce environmental impacts associated with the extraction, transport, processing, fabrication, installation, reuse, recycling, and disposal of these building industry source materials.²⁴ It is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment, building materials, or methods that would be less energy efficient than at comparable construction sites in the region or State. Therefore, fuel energy and construction materials consumed during construction would not represent a significant demand on energy resources (**Criterion 5**).

²³ California Department of Resources Recycling and Recovery, *Green Building Materials*, <https://calrecycle.ca.gov/greenbuilding/materials/>, accessed April 14, 2022.

²⁴ Ibid.

Therefore, construction energy use would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. A less than significant impact would occur in this regard.

Operational Energy Consumption

Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. [Table 9](#) estimates the annual fuel consumed by vehicles traveling to and from the project site. As indicated in [Table 9](#), project operations are estimated to consume a net increase of approximately 184,992 gallons of fuel per year, which would increase Countywide automotive fuel consumption by 0.0139 percent. The project does not propose any unusual features that would result in excessive long-term operational fuel consumption (**Criterion 2**).

The key drivers of transportation-related fuel consumption are job locations/commuting distance and many personal choices on when and where to drive for various purposes. Such factors are outside of the scope of the project design. However, the project would include a total of 39 EVCS in the on-site surface parking lots and in the parking garage. This project design feature would encourage and support the use of electric vehicles by residents, workers, and visitors of the proposed project and thus reduce the petroleum fuel consumption. In addition, the project would implement TDM strategies including a voluntary employer commute program, bikeshare program, pedestrian improvements, and providing public transit information. These strategies would reduce VMT and thus reduce transportation related fuel consumption (**Criterion 4** and **Criterion 6**).

Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. A less than significant impact would occur.

Building Energy Demand

The CEC developed year 2020 to 2035 forecasts for energy consumption and peak demand in support of the 2021 IEPR for each of the major electricity and natural gas planning areas and the State, based on economic and demographic growth projections.²⁵ The CEC forecasts that the statewide annual average growth rates of energy demand between 2021 and 2030 will be 1.3 percent to 2.3 percent increase for electricity and a less than 0.1 percent to 0.8 percent increase for natural gas.²⁶ As shown in [Table 9](#), operational energy consumption of the project would represent an approximately 0.0094 percent increase in electricity consumption and an approximately 0.0099 percent increase in natural gas consumption over the current Countywide usage, which would be significantly lower than the CEC's energy demand forecasts. The commercial component of the project would consume energy during the same time periods as other similar commercial developments, and the residential component of the project would consume energy evenly throughout the day. As a result, the project would not result in unique or more intensive peak or base period electricity demand (**Criterion 2** and **Criterion 3**).

The proposed project would be required to comply with the most current version of the Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building

²⁵ California Energy Commission, *Final 2021 Integrated Energy Policy Report Volume IV California Energy Demand Forecast*, February 2022. Annual average growth rates of electricity demand and natural gas per capita demand are shown in Figure 10 and Figure 14, respectively, on the document.

²⁶ Ibid.

features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the current 2019 Title 24 standards significantly reduces energy usage (30 percent for nonresidential buildings and 53 percent for residential buildings) when compared to the 2016 standards. The Title 24 Building Energy Efficiency Standards are updated every three years and become more stringent between each update; therefore, complying with the latest Title 24 standards would make the proposed project more energy efficient than existing buildings built under the earlier versions of the Title 24 standards (**Criterion 4**).

Furthermore, the electricity provider, SDG&E, is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 100 percent of total procurement by 2045. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The project would also install on-site solar panels on-site generating approximately 250 kW of solar power. The increase in reliance of renewable energy resources further ensures that the project would not result in the waste of finite energy resources (**Criterion 5**).

Therefore, the project would not result in wasteful, inefficient, and unnecessary consumption of building energy during project operation, or preempt future energy development or future energy conservation. A less than significant impact would occur.

Mitigation Measures: No mitigation measures are required.

Impact EN-2: Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

The project would comply with the most recent version Title 24 and CALGreen efficiency standards, which would ensure the project design incorporates photovoltaic solar panels, energy efficient windows, insulation, lighting, ventilation systems, water efficient fixtures, as well as green building standards. In addition, the project would comply with energy efficiency and renewable energy goals and policies found in the City's CAP and General Plan, as listed in [Table 7](#) and [Table 8](#) under the GHG impacts discussion above. Adherence to the Title 24 and CALGreen requirements and the City's CAP and General Plan goals and policies would ensure that the project would be consistent with the Energy Efficiency Strategic Plan strategies and the IEPR building energy efficiency recommendations. Therefore, the project would not conflict with or obstruct a State or local plan pertaining to renewable energy or energy efficiency. A less than significant impact would occur.

Mitigation Measures: No mitigation measures are required.

CUMULATIVE IMPACTS

Global Climate Change

Project-related GHG emissions are not confined to a particular region; instead, GHG emissions are dispersed worldwide. No single project is large enough to result in a measurable increase in global concentrations of GHG emissions. Therefore, impacts identified under Impact Statements GHG-1 and GHG-2 are not project-specific impacts to global climate change, but the proposed project's contribution to this cumulative impact. As discussed above, the proposed project would be consistent with statewide, regional, and local climate change mandates, plans, policies, and recommendations, and therefore would not impede implementation of AB 32 or SB 32. Therefore, the proposed project would not cumulatively contribute to GHG impacts and impacts in this regard would be less than significant.

Energy

The geographic context for cumulative energy consumption impacts for electricity and natural gas is County-wide and relative to SDG&E's service areas. While the geographic context for the transportation-related energy use is more difficult to define, it is meaningful to consider the project in the context of County-wide consumption. Future growth within the County is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure. As shown above, the project would nominally increase the County's electricity, natural gas, and operational fuel consumption; refer to [Table 9](#). Additionally, per the RPS, the project and cumulative projects would utilize electricity provided by SDG&E that would be comprised of approximately 60 percent renewable energy by 2030 and 100 percent renewable energy by 2045. Furthermore, the project and other cumulative projects in the site vicinity would be subject to Title 24, CALGreen Code, CPUC's Energy Efficiency Strategic Plan, and CEC's 2019 IEPR. Thus, the project and related projects would comply with energy conservation plans and efficiency standards required to ensure that energy is used efficiently. As such, implementation of the project and other cumulative projects would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

REFERENCES

Documents

1. California Air Pollution Control Officers Association, *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, January 2008.
2. California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.
3. California Department of Resources Recycling and Recovery, *Green Building Materials*, <https://calrecycle.ca.gov/greenbuilding/materials/>, accessed April 14, 2022.
4. California Department of Tax and Fee Administration, *Net Taxable Gasoline Gallons*, <https://www.cdtfa.ca.gov/taxes-and-fees/MVF-10-Year-Report.xlsx>, accessed April 14, 2022.
5. California Energy Commission, *2016 Building Energy Efficiency Standards, Frequently Asked Questions, Energy Standards Overview*, https://www.calbo.org/sites/main/files/file-attachments/2016_building_energy_efficiency_standards_faq.pdf?1520982927, accessed April 14, 2022.
6. California Energy Commission, *2019 Building Energy Efficiency Standards*, March 2018.
7. California Energy Commission, *Electricity Consumption by County*, <http://www.ecdms.energy.ca.gov/elecbycounty.aspx>, accessed March 10, 2022.
8. California Energy Commission, *Final 2021 Integrated Energy Policy Report Volume IV California Energy Demand Forecast*, February 2022.
9. California Energy Commission, *Gas Consumption by County*, <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>, accessed March 10, 2022.
10. California Energy Commission, *Supply and Demand of Natural Gas in California*, <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>, accessed April 14, 2022.
11. California Natural Resources Agency, *Final Statement of Reasons for Regulatory Action (December 2009)*, pp. 11-13, 14, 16, December 2009, https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/Final_Statement_of_Reasons.pdf, accessed April 14, 2022.
12. City of Encinitas, *2013-2021 Housing Element*, Section 1: Housing Element Policy Program, adopted March 13, 2019.
13. City of Encinitas, *Climate Action Plan*, January 2018, Interim Revision November 2020.
14. City of Encinitas, *General Plan Circulation Element*, last amended January 22, 2003.
15. City of Encinitas, *General Plan Resource Management Element*, last amended March 9, 2011.
16. City of Encinitas, *Municipal Code*, current through Ordinance 2021-25 and the January 2022 code supplement.
17. Cynthia Bryant, Director of the Office of Planning and Research, *Transmittal of the Governor's Office of Planning and Research's Proposed S897 CEQA Guidelines Amendments to the Natural Resources Agency*, April 13, 2009, <https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/C01.pdf>, accessed April 14, 2022.

18. Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report*, https://www.ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf, accessed April 14, 2022.
19. LOS Engineering, Inc., *City of Encinitas Marea Village Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, May 2022.
20. San Diego Association of Governments, *San Diego Forward: The 2021 Regional Plan*, December 10, 2021.
21. U.S. Energy Information Administration, *California State Profile and Energy Estimates*, <https://www.eia.gov/state/?sid=CA>, accessed April 14, 2022.
22. U.S. Energy Information Administration, *California Energy Consumption by End-Use Section*, 2019, <https://www.eia.gov/state/?sid=CA#tabs-1>, accessed April 14, 2022.
23. U.S. Energy Information Administration, *Table F33: Total Energy Consumption, Price, and Expenditure Estimates*, 2019, https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_te.html&sid=US, accessed April 14, 2022.
24. U.S. Environmental Protection Agency, *Inventory of United States Greenhouse Gas Emissions and Sinks 1990 to 2018, 2020*, <https://www.epa.gov/sites/production/files/2020-04/documents/us-ghg-inventory-2020-main-text.pdf>, accessed April 14, 2022.

Websites / Programs

1. Google Earth, 2022.
2. South Coast Air Quality Management District, California Emissions Estimator Model (CalEEMod), version 2020.4.0.

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Appendix A: Greenhouse Gas Emissions and Energy Data

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

Marea Village Existing Conditions
San Diego County APCD Air District, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant w/o Drive Thru	1.20	1000sqft	0.03	1,200.00	0
Strip Mall	2.25	1000sqft	0.05	2,250.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions - existing operations only.

Off-road Equipment - No construction emissions - existing operations only.

Grading -

Trips and VMT - No construction emissions - existing operations only.

Vehicle Trips - Per traffic study.

Waste Mitigation - Per AB 341.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	12/31/2010	3/7/2022

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

tblConstructionPhase	PhaseStartDate	1/1/2011	3/7/2022
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleTrips	PB_TP	15.00	12.00
tblVehicleTrips	PR_TP	45.00	48.00
tblVehicleTrips	ST_TR	696.00	700.60
tblVehicleTrips	ST_TR	42.04	40.02
tblVehicleTrips	SU_TR	500.00	700.60
tblVehicleTrips	SU_TR	20.43	40.02
tblVehicleTrips	WD_TR	346.23	700.60
tblVehicleTrips	WD_TR	44.32	40.02

2.0 Emissions Summary

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

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					
2022	8.0000e-005	8.4000e-004	1.1200e-003	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.1366	0.1366	4.0000e-005	0.0000	0.1377
Maximum	8.0000e-005	8.4000e-004	1.1200e-003	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.1366	0.1366	4.0000e-005	0.0000	0.1377

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					
2022	8.0000e-005	8.4000e-004	1.1200e-003	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.1366	0.1366	4.0000e-005	0.0000	0.1377
Maximum	8.0000e-005	8.4000e-004	1.1200e-003	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.1366	0.1366	4.0000e-005	0.0000	0.1377

[illegible]

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-7-2022	6-6-2022	0.0007	0.0007
		Highest	0.0007	0.0007

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	0.0175	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	1.1500e-003	0.0105	8.8000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	29.2605	29.2605	1.3100e-003	3.4000e-004	29.3950
Mobile	0.3629	0.3454	2.8838	5.3600e-003	0.5618	4.4000e-003	0.5662	0.1499	4.1000e-003	0.1540	0.0000	503.9631	503.9631	0.0429	0.0260	512.7868
Waste						0.0000	0.0000		0.0000	0.0000	3.2844	0.0000	3.2844	0.1941	0.0000	8.1370
Water						0.0000	0.0000		0.0000	0.0000	0.1684	2.0344	2.2028	0.0174	4.2000e-004	2.7647
Total	0.3815	0.3559	2.8927	5.4200e-003	0.5618	5.2000e-003	0.5670	0.1499	4.9000e-003	0.1548	3.4528	535.2581	538.7109	0.2557	0.0268	553.0834

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0175	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	1.1500e-003	0.0105	8.8000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	29.2605	29.2605	1.3100e-003	3.4000e-004	29.3950
Mobile	0.3629	0.3454	2.8838	5.3600e-003	0.5618	4.4000e-003	0.5662	0.1499	4.1000e-003	0.1540	0.0000	503.9631	503.9631	0.0429	0.0260	512.7868
Waste						0.0000	0.0000		0.0000	0.0000	1.6422	0.0000	1.6422	0.0971	0.0000	4.0685
Water						0.0000	0.0000		0.0000	0.0000	0.1684	2.0344	2.2028	0.0174	4.2000e-004	2.7647
Total	0.3815	0.3559	2.8927	5.4200e-003	0.5618	5.2000e-003	0.5670	0.1499	4.9000e-003	0.1548	1.8106	535.2581	537.0687	0.1587	0.0268	549.0149

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.56	0.00	0.30	37.95	0.00	0.74

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/7/2022	3/7/2022	5	1	

Acres of Grading (Site Preparation Phase): 0

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Site Preparation	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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

Unmitigated Construction On-Site

[illegible]

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

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-005	8.4000e-004	1.1200e-003	0.0000		5.0000e-005	5.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.1366	0.1366	4.0000e-005	0.0000	0.1377
Total	8.0000e-005	8.4000e-004	1.1200e-003	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.1366	0.1366	4.0000e-005	0.0000	0.1377

Mitigated Construction Off-Site

[illegible]

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3629	0.3454	2.8838	5.3600e-003	0.5618	4.4000e-003	0.5662	0.1499	4.1000e-003	0.1540	0.0000	503.9631	503.9631	0.0429	0.0260	512.7868
Unmitigated	0.3629	0.3454	2.8838	5.3600e-003	0.5618	4.4000e-003	0.5662	0.1499	4.1000e-003	0.1540	0.0000	503.9631	503.9631	0.0429	0.0260	512.7868

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	840.72	840.72	840.72	1,355,717	1,355,717
Strip Mall	90.05	90.05	90.05	146,111	146,111
Total	930.76	930.76	930.76	1,501,828	1,501,828

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
Fast Food Restaurant w/o Drive Thru	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	48	40	12

4.4 Fleet Mix

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Strip Mall	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

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	17.8503	17.8503	1.0900e-003	1.3000e-004	17.9170
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17.8503	17.8503	1.0900e-003	1.3000e-004	17.9170
NaturalGas Mitigated	1.1500e-003	0.0105	8.8000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4102	11.4102	2.2000e-004	2.1000e-004	11.4780
NaturalGas Unmitigated	1.1500e-003	0.0105	8.8000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4102	11.4102	2.2000e-004	2.1000e-004	11.4780

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

5.2 Energy by Land Use - 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					
Fast Food Restaurant w/o Drive Thru	208824	1.1300e-003	0.0102	8.6000e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	11.1436	11.1436	2.1000e-004	2.0000e-004	11.2099
Strip Mall	4995	3.0000e-005	2.4000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2666	0.2666	1.0000e-005	0.0000	0.2681
Total		1.1600e-003	0.0105	8.8100e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4102	11.4102	2.2000e-004	2.0000e-004	11.4780

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					
Fast Food Restaurant w/o Drive Thru	208824	1.1300e-003	0.0102	8.6000e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	11.1436	11.1436	2.1000e-004	2.0000e-004	11.2099
Strip Mall	4995	3.0000e-005	2.4000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2666	0.2666	1.0000e-005	0.0000	0.2681
Total		1.1600e-003	0.0105	8.8100e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4102	11.4102	2.2000e-004	2.0000e-004	11.4780

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	45384	11.1159	6.8000e-004	8.0000e-005	11.1575
Strip Mall	27495	6.7344	4.1000e-004	5.0000e-005	6.7595
Total		17.8503	1.0900e-003	1.3000e-004	17.9170

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	45384	11.1159	6.8000e-004	8.0000e-005	11.1575
Strip Mall	27495	6.7344	4.1000e-004	5.0000e-005	6.7595
Total		17.8503	1.0900e-003	1.3000e-004	17.9170

6.0 Area Detail

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

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	0.0175	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Unmitigated	0.0175	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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	4.0000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	0.0175	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.0000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	0.0175	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

7.0 Water Detail**7.1 Mitigation Measures Water**

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2028	0.0174	4.2000e-004	2.7647
Unmitigated	2.2028	0.0174	4.2000e-004	2.7647

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	0.36424 / 0.0232494	1.3405	0.0119	2.9000e-004	1.7253
Strip Mall	0.166663 / 0.102148	0.8624	5.4800e-003	1.3000e-004	1.0394
Total		2.2028	0.0174	4.2000e-004	2.7647

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	0.36424 / 0.0232494	1.3405	0.0119	2.9000e-004	1.7253
Strip Mall	0.166663 / 0.102148	0.8624	5.4800e-003	1.3000e-004	1.0394
Total		2.2028	0.0174	4.2000e-004	2.7647

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.6422	0.0971	0.0000	4.0685
Unmitigated	3.2844	0.1941	0.0000	8.1370

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	13.82	2.8053	0.1658	0.0000	6.9501
Strip Mall	2.36	0.4791	0.0283	0.0000	1.1869
Total		3.2844	0.1941	0.0000	8.1370

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	6.91	1.4027	0.0829	0.0000	3.4751
Strip Mall	1.18	0.2395	0.0142	0.0000	0.5934
Total		1.6422	0.0971	0.0000	4.0685

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

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

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

Marea Village Existing Conditions
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant w/o Drive Thru	1.20	1000sqft	0.03	1,200.00	0
Strip Mall	2.25	1000sqft	0.05	2,250.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions - existing operations only.

Off-road Equipment - No construction emissions - existing operations only.

Grading -

Trips and VMT - No construction emissions - existing operations only.

Vehicle Trips - Per traffic study.

Waste Mitigation - Per AB 341.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	12/31/2010	3/7/2022

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

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

tblConstructionPhase	PhaseStartDate	1/1/2011	3/7/2022
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleTrips	PB_TP	15.00	12.00
tblVehicleTrips	PR_TP	45.00	48.00
tblVehicleTrips	ST_TR	696.00	700.60
tblVehicleTrips	ST_TR	42.04	40.02
tblVehicleTrips	SU_TR	500.00	700.60
tblVehicleTrips	SU_TR	20.43	40.02
tblVehicleTrips	WD_TR	346.23	700.60
tblVehicleTrips	WD_TR	44.32	40.02

2.0 Emissions Summary

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

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746
Maximum	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746
Maximum	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746

[illegible]

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Energy	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
Mobile	2.1124	1.7709	15.4401	0.0306	3.1615	0.0242	3.1857	0.8422	0.0226	0.8647		3,170.5179	3,170.5179	0.2465	0.1507	3,221.5789
Total	2.2144	1.8283	15.4887	0.0310	3.1615	0.0286	3.1901	0.8422	0.0269	0.8691		3,239.4369	3,239.4369	0.2478	0.1519	3,290.9076

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Energy	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
Mobile	2.1124	1.7709	15.4401	0.0306	3.1615	0.0242	3.1857	0.8422	0.0226	0.8647		3,170.5179	3,170.5179	0.2465	0.1507	3,221.5789
Total	2.2144	1.8283	15.4887	0.0310	3.1615	0.0286	3.1901	0.8422	0.0269	0.8691		3,239.4369	3,239.4369	0.2478	0.1519	3,290.9076

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Site Preparation	Site Preparation	3/7/2022	3/7/2022	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
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Site Preparation	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829		301.2390	301.2390	0.0974		303.6746
Total	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829		301.2390	301.2390	0.0974		303.6746

Unmitigated Construction Off-Site

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

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829	0.0000	301.2390	301.2390	0.0974		303.6746
Total	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974		303.6746

Mitigated Construction Off-Site

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

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.1124	1.7709	15.4401	0.0306	3.1615	0.0242	3.1857	0.8422	0.0226	0.8647		3,170.5179	3,170.5179	0.2465	0.1507	3,221.5789
Unmitigated	2.1124	1.7709	15.4401	0.0306	3.1615	0.0242	3.1857	0.8422	0.0226	0.8647		3,170.5179	3,170.5179	0.2465	0.1507	3,221.5789

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	840.72	840.72	840.72	1,355,717	1,355,717
Strip Mall	90.05	90.05	90.05	146,111	146,111
Total	930.76	930.76	930.76	1,501,828	1,501,828

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive Thru	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	48	40	12

4.4 Fleet Mix

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Strip Mall	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

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	lb/day										lb/day					
NaturalGas Mitigated	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
NaturalGas Unmitigated	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	572.121	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.3083	67.3083	1.2900e-003	1.2300e-003	67.7083
Strip Mall	13.6849	1.5000e-004	1.3400e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6100	1.6100	3.0000e-005	3.0000e-005	1.6196
Total		6.3200e-003	0.0574	0.0483	3.5000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	0.572121	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.3083	67.3083	1.2900e-003	1.2300e-003	67.7083
Strip Mall	0.0136849	1.5000e-004	1.3400e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6100	1.6100	3.0000e-005	3.0000e-005	1.6196
Total		6.3200e-003	0.0574	0.0483	3.5000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278

6.0 Area Detail

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Unmitigated	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0738					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Total	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0738					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Total	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

Marea Village Existing Conditions
San Diego County APCD Air District, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant w/o Drive Thru	1.20	1000sqft	0.03	1,200.00	0
Strip Mall	2.25	1000sqft	0.05	2,250.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions - existing operations only.

Off-road Equipment - No construction emissions - existing operations only.

Grading -

Trips and VMT - No construction emissions - existing operations only.

Vehicle Trips - Per traffic study.

Waste Mitigation - Per AB 341.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	12/31/2010	3/7/2022

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

tblConstructionPhase	PhaseStartDate	1/1/2011	3/7/2022
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleTrips	PB_TP	15.00	12.00
tblVehicleTrips	PR_TP	45.00	48.00
tblVehicleTrips	ST_TR	696.00	700.60
tblVehicleTrips	ST_TR	42.04	40.02
tblVehicleTrips	SU_TR	500.00	700.60
tblVehicleTrips	SU_TR	20.43	40.02
tblVehicleTrips	WD_TR	346.23	700.60
tblVehicleTrips	WD_TR	44.32	40.02

2.0 Emissions Summary

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

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746
Maximum	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746
Maximum	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746

[illegible]

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Energy	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
Mobile	2.0363	1.9247	16.2723	0.0293	3.1615	0.0242	3.1857	0.8422	0.0226	0.8648		3,036.0046	3,036.0046	0.2662	0.1596	3,090.2054
Total	2.1384	1.9822	16.3209	0.0296	3.1615	0.0286	3.1901	0.8422	0.0269	0.8691		3,104.9237	3,104.9237	0.2676	0.1608	3,159.5340

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Energy	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
Mobile	2.0363	1.9247	16.2723	0.0293	3.1615	0.0242	3.1857	0.8422	0.0226	0.8648		3,036.0046	3,036.0046	0.2662	0.1596	3,090.2054
Total	2.1384	1.9822	16.3209	0.0296	3.1615	0.0286	3.1901	0.8422	0.0269	0.8691		3,104.9237	3,104.9237	0.2676	0.1608	3,159.5340

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Site Preparation	Site Preparation	3/7/2022	3/7/2022	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
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Site Preparation	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829		301.2390	301.2390	0.0974		303.6746
Total	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829		301.2390	301.2390	0.0974		303.6746

Unmitigated Construction Off-Site

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

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829	0.0000	301.2390	301.2390	0.0974		303.6746
Total	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974		303.6746

Mitigated Construction Off-Site

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

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0363	1.9247	16.2723	0.0293	3.1615	0.0242	3.1857	0.8422	0.0226	0.8648		3,036.0046	3,036.0046	0.2662	0.1596	3,090.2054
Unmitigated	2.0363	1.9247	16.2723	0.0293	3.1615	0.0242	3.1857	0.8422	0.0226	0.8648		3,036.0046	3,036.0046	0.2662	0.1596	3,090.2054

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	840.72	840.72	840.72	1,355,717	1,355,717
Strip Mall	90.05	90.05	90.05	146,111	146,111
Total	930.76	930.76	930.76	1,501,828	1,501,828

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive Thru	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	48	40	12

4.4 Fleet Mix

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Strip Mall	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

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	lb/day										lb/day					
NaturalGas Mitigated	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
NaturalGas Unmitigated	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	572.121	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.3083	67.3083	1.2900e-003	1.2300e-003	67.7083
Strip Mall	13.6849	1.5000e-004	1.3400e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6100	1.6100	3.0000e-005	3.0000e-005	1.6196
Total		6.3200e-003	0.0574	0.0483	3.5000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	0.572121	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.3083	67.3083	1.2900e-003	1.2300e-003	67.7083
Strip Mall	0.0136849	1.5000e-004	1.3400e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6100	1.6100	3.0000e-005	3.0000e-005	1.6196
Total		6.3200e-003	0.0574	0.0483	3.5000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278

6.0 Area Detail

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Unmitigated	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0738					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Total	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0738					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Total	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Marea Village - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Marea Village****San Diego County APCD Air District, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.64	1000sqft	0.08	3,638.00	0
Enclosed Parking with Elevator	216.00	Space	0.00	78,158.00	0
Parking Lot	42.00	Space	0.38	16,800.00	0
City Park	0.65	Acre	0.65	27,194.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.00	3,905.00	0
Hotel	34.00	Room	1.13	18,109.00	0
Quality Restaurant	2.13	1000sqft	0.00	2,134.00	0
Apartments Low Rise	94.00	Dwelling Unit	1.56	72,982.00	269
Strip Mall	8.58	1000sqft	0.00	8,584.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	539.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per traffic study and site plan; total lot 3.8 acres, therefore lot acreage modified to match.

Construction Phase - Per PD, assuming utilities/infrastructure and Hwy 101 improvements would occur during Building Construction phase.

Marea Village - San Diego County APCD Air District, Annual

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

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - No construction emissions - existing operations only.

Trips and VMT - Demolition materials would be hauled 25 miles (project site to Miramar Landfill); earthwork materials from grading activities would be hauled max. 3 miles (project site to the nearest beach).

Demolition -

Grading -

Architectural Coating - Per SDAPCD Rule 67.0.1

Vehicle Trips - Per traffic study.

Area Coating - Per SDAPCD Rule 67.0.1

Construction Off-road Equipment Mitigation - Per construction questionnaire, there would be dust control implemented (water exposed area three times a day) as a project design feature.

Area Mitigation - No wood-burning associated hearth would be produced.

Energy Mitigation - Per operational questionnaire, high efficiency lighting would be installed as a project design feature.

Waste Mitigation - Per AB 341.

Water Mitigation - Per operational questionnaire, low-flow water fixtures would be installed as a project design feature.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

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tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	77.00
tblConstructionPhase	NumDays	230.00	217.00
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	18.00	77.00
tblConstructionPhase	PhaseEndDate	9/28/2021	2/1/2023
tblConstructionPhase	PhaseEndDate	10/8/2021	5/4/2023
tblConstructionPhase	PhaseEndDate	8/26/2022	1/2/2024
tblConstructionPhase	PhaseEndDate	10/17/2022	4/26/2024
tblConstructionPhase	PhaseEndDate	9/21/2022	5/24/2024
tblConstructionPhase	PhaseStartDate	9/1/2021	1/3/2023
tblConstructionPhase	PhaseStartDate	9/29/2021	1/18/2023
tblConstructionPhase	PhaseStartDate	10/9/2021	3/6/2023
tblConstructionPhase	PhaseStartDate	9/22/2022	10/26/2023
tblConstructionPhase	PhaseStartDate	8/27/2022	2/8/2024
tblGrading	MaterialExported	0.00	48,400.00
tblLandUse	LandUseSquareFeet	3,640.00	3,638.00
tblLandUse	LandUseSquareFeet	86,400.00	78,158.00
tblLandUse	LandUseSquareFeet	28,314.00	27,194.00
tblLandUse	LandUseSquareFeet	3,900.00	3,905.00
tblLandUse	LandUseSquareFeet	49,368.00	18,109.00
tblLandUse	LandUseSquareFeet	2,130.00	2,134.00
tblLandUse	LandUseSquareFeet	94,000.00	72,982.00
tblLandUse	LandUseSquareFeet	8,580.00	8,584.00
tblLandUse	LotAcreage	1.94	0.00
tblLandUse	LotAcreage	0.09	0.00
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	5.88	1.56

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tblLandUse	LotAcreage	0.20	0.00
tblOffRoadEquipment	HorsePower	187.00	9.00
tblOffRoadEquipment	HorsePower	221.00	158.00
tblOffRoadEquipment	HorsePower	172.00	89.00
tblOffRoadEquipment	HorsePower	132.00	84.00
tblOffRoadEquipment	HorsePower	231.00	187.00
tblOffRoadEquipment	HorsePower	402.00	130.00
tblOffRoadEquipment	HorsePower	212.00	247.00
tblOffRoadEquipment	HorsePower	100.00	97.00
tblOffRoadEquipment	HorsePower	158.00	97.00
tblOffRoadEquipment	HorsePower	203.00	97.00
tblOffRoadEquipment	HorsePower	203.00	46.00
tblOffRoadEquipment	LoadFactor	0.41	0.56
tblOffRoadEquipment	LoadFactor	0.50	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.20
tblOffRoadEquipment	LoadFactor	0.36	0.74
tblOffRoadEquipment	LoadFactor	0.29	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.42
tblOffRoadEquipment	LoadFactor	0.43	0.40
tblOffRoadEquipment	LoadFactor	0.40	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.45
tblOffRoadEquipment	OffRoadEquipmentType	Cement and Mortar Mixers	Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType	Excavators	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Paving Equipment

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tblOffRoadEquipment	OffRoadEquipmentType	Graders	Cranes
tblOffRoadEquipment	OffRoadEquipmentType	Pavers	Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

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

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	25.00
tblTripsAndVMT	HaulingTripLength	20.00	3.00
tblVehicleTrips	PB_TP	43.00	12.00
tblVehicleTrips	PB_TP	44.00	12.00
tblVehicleTrips	PR_TP	37.00	68.00
tblVehicleTrips	PR_TP	38.00	70.00
tblVehicleTrips	ST_TR	8.14	6.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	20.07
tblVehicleTrips	ST_TR	122.40	160.05
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	90.04	99.81
tblVehicleTrips	ST_TR	42.04	39.96
tblVehicleTrips	SU_TR	6.28	6.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	20.07
tblVehicleTrips	SU_TR	142.64	160.05
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	71.97	99.81
tblVehicleTrips	SU_TR	20.43	39.96
tblVehicleTrips	WD_TR	7.32	6.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	20.07
tblVehicleTrips	WD_TR	112.18	160.05
tblVehicleTrips	WD_TR	8.36	10.00

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

tblVehicleTrips	WD_TR	83.84	99.81
tblVehicleTrips	WD_TR	44.32	39.96

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.6524	3.8762	4.2918	8.9200e-003	0.2379	0.1684	0.4062	0.0532	0.1557	0.2089	0.0000	795.7306	795.7306	0.1849	0.0199	806.2696
2024	0.5091	0.7344	1.1895	2.0400e-003	0.0222	0.0352	0.0575	5.9200e-003	0.0328	0.0387	0.0000	177.7982	177.7982	0.0480	5.6000e-004	179.1629
Maximum	0.6524	3.8762	4.2918	8.9200e-003	0.2379	0.1684	0.4062	0.0532	0.1557	0.2089	0.0000	795.7306	795.7306	0.1849	0.0199	806.2696

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					
2023	0.6524	3.8762	4.2918	8.9200e-003	0.1951	0.1684	0.3635	0.0484	0.1557	0.2041	0.0000	795.7299	795.7299	0.1849	0.0199	806.2689
2024	0.5091	0.7344	1.1895	2.0400e-003	0.0222	0.0352	0.0575	5.9200e-003	0.0328	0.0387	0.0000	177.7980	177.7980	0.0480	5.6000e-004	179.1627
Maximum	0.6524	3.8762	4.2918	8.9200e-003	0.1951	0.1684	0.3635	0.0484	0.1557	0.2041	0.0000	795.7299	795.7299	0.1849	0.0199	806.2689

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	16.45	0.00	9.22	8.20	0.00	1.96	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)
6	12-1-2022	2-28-2023	0.9004	0.9004
7	3-1-2023	5-31-2023	1.6068	1.6068
8	6-1-2023	8-31-2023	0.7439	0.7439
9	9-1-2023	11-30-2023	0.8837	0.8837
10	12-1-2023	2-29-2024	0.7849	0.7849
11	3-1-2024	5-31-2024	0.8164	0.8164
		Highest	1.6068	1.6068

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.4486	0.1233	7.9811	0.0132		1.0247	1.0247		1.0247	1.0247	97.0980	41.8672	138.9652	0.0907	7.6400e-003	143.5090
Energy	0.0173	0.1546	0.1103	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	518.4916	518.4916	0.0245	5.7200e-003	520.8071
Mobile	0.9469	0.9872	8.2173	0.0164	1.7359	0.0131	1.7490	0.4633	0.0122	0.4755	0.0000	1,540.3470	1,540.3470	0.1182	0.0735	1,565.2084
Waste						0.0000	0.0000		0.0000	0.0000	24.8989	0.0000	24.8989	1.4715	0.0000	61.6859
Water						0.0000	0.0000		0.0000	0.0000	3.2042	47.5424	50.7466	0.3320	8.1200e-003	61.4674
Total	7.4129	1.2651	16.3088	0.0306	1.7359	1.0498	2.7857	0.4633	1.0489	1.5122	125.2011	2,148.2482	2,273.4492	2.0369	0.0950	2,352.6777

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5572	0.0656	0.7250	4.0000e-004		8.5300e-003	8.5300e-003		8.5300e-003	8.5300e-003	0.0000	67.7808	67.7808	2.3900e-003	1.2200e-003	68.2045
Energy	0.0173	0.1546	0.1103	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	513.4887	513.4887	0.0242	5.6800e-003	515.7854
Mobile	0.9469	0.9872	8.2173	0.0164	1.7359	0.0131	1.7490	0.4633	0.0122	0.4755	0.0000	1,540.3470	1,540.3470	0.1182	0.0735	1,565.2084
Waste						0.0000	0.0000		0.0000	0.0000	6.2247	0.0000	6.2247	0.3679	0.0000	15.4215
Water						0.0000	0.0000		0.0000	0.0000	2.5634	41.1003	43.6636	0.2658	6.5200e-003	52.2517
Total	1.5215	1.2075	9.0526	0.0177	1.7359	0.0336	1.7695	0.4633	0.0327	0.4960	8.7881	2,162.7168	2,171.5049	0.7784	0.0869	2,216.8715

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	79.48	4.56	44.49	41.97	0.00	96.80	36.48	0.00	96.88	67.20	92.98	-0.67	4.48	61.78	8.49	5.77

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	1/3/2023	2/1/2023	5	22	
2	Grading	Grading	1/18/2023	5/4/2023	5	77	
3	Building Construction	Building Construction	3/6/2023	1/2/2024	5	217	

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4	Paving	Paving	2/8/2024	5/24/2024	5	77
5	Architectural Coating	Architectural Coating	10/26/2023	4/26/2024	5	132

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 115.5****Acres of Paving: 0.38**

Residential Indoor: 147,789; Residential Outdoor: 49,263; Non-Residential Indoor: 54,555; Non-Residential Outdoor: 18,185; Striped Parking Area: 5,697 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	212	0.43
Grading	Rollers	1	8.00	80	0.38
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Rough Terrain Forklifts	2	8.00	100	0.40
Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	1	8.00	367	0.48
Grading	Bore/Drill Rigs	2	8.00	158	0.38
Grading	Cranes	1	8.00	187	0.41
Grading	Signal Boards	2	8.00	6	0.82
Grading	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Signal Boards	2	8.00	6	0.82
Grading	Crawler Tractors	1	8.00	247	0.40
Building Construction	Skid Steer Loaders	1	8.00	65	0.37

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Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Signal Boards	2	8.00	6	0.82
Paving	Surfacing Equipment	1	8.00	263	0.30
Grading	Excavators	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Other Construction Equipment	3	8.00	89	0.20
Building Construction	Paving Equipment	1	8.00	84	0.74
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Rough Terrain Forklifts	2	8.00	97	0.37
Building Construction	Rubber Tired Loaders	1	8.00	46	0.45
Paving	Graders	1	8.00	9	0.56
Paving	Off-Highway Trucks	4	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Rubber Tired Loaders	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	7	18.00	0.00	50.00	10.80	7.30	25.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	6,050.00	10.80	7.30	3.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	133.00	36.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	15	38.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					5.4800e-003	0.0000	5.4800e-003	8.3000e-004	0.0000	8.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0308	0.2887	0.2706	5.2000e-004		0.0136	0.0136		0.0128	0.0128	0.0000	45.2958	45.2958	0.0113	0.0000	45.5778
Total	0.0308	0.2887	0.2706	5.2000e-004	5.4800e-003	0.0136	0.0191	8.3000e-004	0.0128	0.0136	0.0000	45.2958	45.2958	0.0113	0.0000	45.5778

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

3.2 Demolition - 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	6.0000e-005	4.1300e-003	1.0400e-003	2.0000e-005	5.4000e-004	3.0000e-005	5.7000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	1.8597	1.8597	9.0000e-005	3.0000e-004	1.9502
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.7000e-004	4.5200e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2722	1.2722	4.0000e-005	4.0000e-005	1.2835
Total	6.0000e-004	4.5000e-003	5.5600e-003	3.0000e-005	2.1300e-003	4.0000e-005	2.1700e-003	5.7000e-004	4.0000e-005	6.1000e-004	0.0000	3.1318	3.1318	1.3000e-004	3.4000e-004	3.2337

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					2.1400e-003	0.0000	2.1400e-003	3.2000e-004	0.0000	3.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0308	0.2887	0.2706	5.2000e-004		0.0136	0.0136		0.0128	0.0128	0.0000	45.2957	45.2957	0.0113	0.0000	45.5778
Total	0.0308	0.2887	0.2706	5.2000e-004	2.1400e-003	0.0136	0.0157	3.2000e-004	0.0128	0.0131	0.0000	45.2957	45.2957	0.0113	0.0000	45.5778

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 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	6.0000e-005	4.1300e-003	1.0400e-003	2.0000e-005	5.4000e-004	3.0000e-005	5.7000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	1.8597	1.8597	9.0000e-005	3.0000e-004	1.9502
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.7000e-004	4.5200e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2722	1.2722	4.0000e-005	4.0000e-005	1.2835
Total	6.0000e-004	4.5000e-003	5.5600e-003	3.0000e-005	2.1300e-003	4.0000e-005	2.1700e-003	5.7000e-004	4.0000e-005	6.1000e-004	0.0000	3.1318	3.1318	1.3000e-004	3.4000e-004	3.2337

3.3 Grading - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0646	0.0000	0.0646	7.1300e-003	0.0000	7.1300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1202	1.2570	1.2195	2.5800e-003		0.0506	0.0506		0.0467	0.0467	0.0000	224.7212	224.7212	0.0714	0.0000	226.5061
Total	0.1202	1.2570	1.2195	2.5800e-003	0.0646	0.0506	0.1153	7.1300e-003	0.0467	0.0539	0.0000	224.7212	224.7212	0.0714	0.0000	226.5061

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

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5700e-003	0.1092	0.0545	3.4000e-004	7.8300e-003	5.4000e-004	8.3600e-003	2.1500e-003	5.1000e-004	2.6700e-003	0.0000	33.7206	33.7206	1.5500e-003	5.3600e-003	35.3560
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1700e-003	2.8800e-003	0.0352	1.1000e-004	0.0124	7.0000e-005	0.0124	3.2800e-003	6.0000e-005	3.3400e-003	0.0000	9.8946	9.8946	2.9000e-004	2.7000e-004	9.9831
Total	7.7400e-003	0.1121	0.0897	4.5000e-004	0.0202	6.1000e-004	0.0208	5.4300e-003	5.7000e-004	6.0100e-003	0.0000	43.6152	43.6152	1.8400e-003	5.6300e-003	45.3391

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					0.0252	0.0000	0.0252	2.7800e-003	0.0000	2.7800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1202	1.2570	1.2195	2.5800e-003		0.0506	0.0506		0.0467	0.0467	0.0000	224.7210	224.7210	0.0714	0.0000	226.5058
Total	0.1202	1.2570	1.2195	2.5800e-003	0.0252	0.0506	0.0758	2.7800e-003	0.0467	0.0495	0.0000	224.7210	224.7210	0.0714	0.0000	226.5058

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 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	3.5700e-003	0.1092	0.0545	3.4000e-004	7.8300e-003	5.4000e-004	8.3600e-003	2.1500e-003	5.1000e-004	2.6700e-003	0.0000	33.7206	33.7206	1.5500e-003	5.3600e-003	35.3560
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1700e-003	2.8800e-003	0.0352	1.1000e-004	0.0124	7.0000e-005	0.0124	3.2800e-003	6.0000e-005	3.3400e-003	0.0000	9.8946	9.8946	2.9000e-004	2.7000e-004	9.9831
Total	7.7400e-003	0.1121	0.0897	4.5000e-004	0.0202	6.1000e-004	0.0208	5.4300e-003	5.7000e-004	6.0100e-003	0.0000	43.6152	43.6152	1.8400e-003	5.6300e-003	45.3391

3.4 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	0.2163	1.9835	2.2622	3.4500e-003		0.1002	0.1002		0.0924	0.0924	0.0000	299.3758	299.3758	0.0947	0.0000	301.7436
Total	0.2163	1.9835	2.2622	3.4500e-003		0.1002	0.1002		0.0924	0.0924	0.0000	299.3758	299.3758	0.0947	0.0000	301.7436

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 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	4.5400e-003	0.1718	0.0606	7.9000e-004	0.0257	1.0100e-003	0.0267	7.4200e-003	9.7000e-004	8.3900e-003	0.0000	77.6517	77.6517	2.3500e-003	0.0113	81.0634
Worker	0.0387	0.0268	0.3267	9.9000e-004	0.1147	6.3000e-004	0.1153	0.0305	5.8000e-004	0.0311	0.0000	91.8621	91.8621	2.6900e-003	2.5300e-003	92.6837
Total	0.0432	0.1986	0.3873	1.7800e-003	0.1404	1.6400e-003	0.1420	0.0379	1.5500e-003	0.0394	0.0000	169.5138	169.5138	5.0400e-003	0.0138	173.7471

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	0.2163	1.9835	2.2622	3.4500e-003		0.1002	0.1002		0.0924	0.0924	0.0000	299.3755	299.3755	0.0947	0.0000	301.7433
Total	0.2163	1.9835	2.2622	3.4500e-003		0.1002	0.1002		0.0924	0.0924	0.0000	299.3755	299.3755	0.0947	0.0000	301.7433

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 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	4.5400e-003	0.1718	0.0606	7.9000e-004	0.0257	1.0100e-003	0.0267	7.4200e-003	9.7000e-004	8.3900e-003	0.0000	77.6517	77.6517	2.3500e-003	0.0113	81.0634
Worker	0.0387	0.0268	0.3267	9.9000e-004	0.1147	6.3000e-004	0.1153	0.0305	5.8000e-004	0.0311	0.0000	91.8621	91.8621	2.6900e-003	2.5300e-003	92.6837
Total	0.0432	0.1986	0.3873	1.7800e-003	0.1404	1.6400e-003	0.1420	0.0379	1.5500e-003	0.0394	0.0000	169.5138	169.5138	5.0400e-003	0.0138	173.7471

3.4 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	1.9200e-003	0.0175	0.0210	3.0000e-005		8.5000e-004	8.5000e-004		7.8000e-004	7.8000e-004	0.0000	2.7850	2.7850	8.8000e-004	0.0000	2.8070
Total	1.9200e-003	0.0175	0.0210	3.0000e-005		8.5000e-004	8.5000e-004		7.8000e-004	7.8000e-004	0.0000	2.7850	2.7850	8.8000e-004	0.0000	2.8070

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 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	4.0000e-005	1.5900e-003	5.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7098	0.7098	2.0000e-005	1.0000e-004	0.7410
Worker	3.4000e-004	2.2000e-004	2.8400e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8331	0.8331	2.0000e-005	2.0000e-005	0.8402
Total	3.8000e-004	1.8100e-003	3.3900e-003	2.0000e-005	1.3100e-003	2.0000e-005	1.3200e-003	3.5000e-004	2.0000e-005	3.7000e-004	0.0000	1.5429	1.5429	4.0000e-005	1.2000e-004	1.5812

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9200e-003	0.0175	0.0210	3.0000e-005		8.5000e-004	8.5000e-004		7.8000e-004	7.8000e-004	0.0000	2.7850	2.7850	8.8000e-004	0.0000	2.8070
Total	1.9200e-003	0.0175	0.0210	3.0000e-005		8.5000e-004	8.5000e-004		7.8000e-004	7.8000e-004	0.0000	2.7850	2.7850	8.8000e-004	0.0000	2.8070

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 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	4.0000e-005	1.5900e-003	5.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7098	0.7098	2.0000e-005	1.0000e-004	0.7410
Worker	3.4000e-004	2.2000e-004	2.8400e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8331	0.8331	2.0000e-005	2.0000e-005	0.8402
Total	3.8000e-004	1.8100e-003	3.3900e-003	2.0000e-005	1.3100e-003	2.0000e-005	1.3200e-003	3.5000e-004	2.0000e-005	3.7000e-004	0.0000	1.5429	1.5429	4.0000e-005	1.2000e-004	1.5812

3.5 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	0.0809	0.6589	1.0323	1.6900e-003		0.0317	0.0317		0.0293	0.0293	0.0000	146.2668	146.2668	0.0460	0.0000	147.4160
Paving	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0814	0.6589	1.0323	1.6900e-003		0.0317	0.0317		0.0293	0.0293	0.0000	146.2668	146.2668	0.0460	0.0000	147.4160

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 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	3.7200e-003	2.4600e-003	0.0313	1.0000e-004	0.0117	6.0000e-005	0.0118	3.1200e-003	6.0000e-005	3.1700e-003	0.0000	9.1643	9.1643	2.5000e-004	2.4000e-004	9.2427
Total	3.7200e-003	2.4600e-003	0.0313	1.0000e-004	0.0117	6.0000e-005	0.0118	3.1200e-003	6.0000e-005	3.1700e-003	0.0000	9.1643	9.1643	2.5000e-004	2.4000e-004	9.2427

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	0.0809	0.6589	1.0323	1.6900e-003		0.0317	0.0317		0.0293	0.0293	0.0000	146.2666	146.2666	0.0460	0.0000	147.4158
Paving	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0814	0.6589	1.0323	1.6900e-003		0.0317	0.0317		0.0293	0.0293	0.0000	146.2666	146.2666	0.0460	0.0000	147.4158

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 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	3.7200e-003	2.4600e-003	0.0313	1.0000e-004	0.0117	6.0000e-005	0.0118	3.1200e-003	6.0000e-005	3.1700e-003	0.0000	9.1643	9.1643	2.5000e-004	2.4000e-004	9.2427
Total	3.7200e-003	2.4600e-003	0.0313	1.0000e-004	0.0117	6.0000e-005	0.0118	3.1200e-003	6.0000e-005	3.1700e-003	0.0000	9.1643	9.1643	2.5000e-004	2.4000e-004	9.2427

3.6 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	0.2273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0306	0.0426	7.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	6.0002	6.0002	3.6000e-004	0.0000	6.0091
Total	0.2318	0.0306	0.0426	7.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	6.0002	6.0002	3.6000e-004	0.0000	6.0091

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	1.7200e-003	1.1900e-003	0.0145	4.0000e-005	5.0900e-003	3.0000e-005	5.1200e-003	1.3500e-003	3.0000e-005	1.3800e-003	0.0000	4.0767	4.0767	1.2000e-004	1.1000e-004	4.1132
Total	1.7200e-003	1.1900e-003	0.0145	4.0000e-005	5.0900e-003	3.0000e-005	5.1200e-003	1.3500e-003	3.0000e-005	1.3800e-003	0.0000	4.0767	4.0767	1.2000e-004	1.1000e-004	4.1132

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0306	0.0426	7.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	6.0001	6.0001	3.6000e-004	0.0000	6.0091
Total	0.2318	0.0306	0.0426	7.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	6.0001	6.0001	3.6000e-004	0.0000	6.0091

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	1.7200e-003	1.1900e-003	0.0145	4.0000e-005	5.0900e-003	3.0000e-005	5.1200e-003	1.3500e-003	3.0000e-005	1.3800e-003	0.0000	4.0767	4.0767	1.2000e-004	1.1000e-004	4.1132
Total	1.7200e-003	1.1900e-003	0.0145	4.0000e-005	5.0900e-003	3.0000e-005	5.1200e-003	1.3500e-003	3.0000e-005	1.3800e-003	0.0000	4.0767	4.0767	1.2000e-004	1.1000e-004	4.1132

3.6 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6800e-003	0.0518	0.0769	1.3000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003	0.0000	10.8513	10.8513	6.1000e-004	0.0000	10.8666
Total	0.4188	0.0518	0.0769	1.3000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003	0.0000	10.8513	10.8513	6.1000e-004	0.0000	10.8666

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	2.9200e-003	1.9300e-003	0.0245	8.0000e-005	9.2000e-003	5.0000e-005	9.2500e-003	2.4500e-003	4.0000e-005	2.4900e-003	0.0000	7.1880	7.1880	2.0000e-004	1.9000e-004	7.2495
Total	2.9200e-003	1.9300e-003	0.0245	8.0000e-005	9.2000e-003	5.0000e-005	9.2500e-003	2.4500e-003	4.0000e-005	2.4900e-003	0.0000	7.1880	7.1880	2.0000e-004	1.9000e-004	7.2495

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6800e-003	0.0518	0.0769	1.3000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003	0.0000	10.8513	10.8513	6.1000e-004	0.0000	10.8666
Total	0.4188	0.0518	0.0769	1.3000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003	0.0000	10.8513	10.8513	6.1000e-004	0.0000	10.8666

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	2.9200e-003	1.9300e-003	0.0245	8.0000e-005	9.2000e-003	5.0000e-005	9.2500e-003	2.4500e-003	4.0000e-005	2.4900e-003	0.0000	7.1880	7.1880	2.0000e-004	1.9000e-004	7.2495
Total	2.9200e-003	1.9300e-003	0.0245	8.0000e-005	9.2000e-003	5.0000e-005	9.2500e-003	2.4500e-003	4.0000e-005	2.4900e-003	0.0000	7.1880	7.1880	2.0000e-004	1.9000e-004	7.2495

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9469	0.9872	8.2173	0.0164	1.7359	0.0131	1.7490	0.4633	0.0122	0.4755	0.0000	1,540.347 0	1,540.347 0	0.1182	0.0735	1,565.208 4
Unmitigated	0.9469	0.9872	8.2173	0.0164	1.7359	0.0131	1.7490	0.4633	0.0122	0.4755	0.0000	1,540.347 0	1,540.347 0	0.1182	0.0735	1,565.208 4

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	564.00	564.00	564.00	1,610,391	1,610,391
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	73.05	73.05	73.05	174,583	174,583
High Turnover (Sit Down Restaurant)	624.20	624.20	624.20	1,244,529	1,244,529
Hotel	340.00	340.00	340.00	645,976	645,976
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	212.60	212.60	212.60	437,005	437,005
Strip Mall	342.86	342.86	342.86	528,011	528,011
Total	2,156.70	2,156.70	2,156.70	4,640,495	4,640,495

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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

	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
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	68	20	12
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	70	18	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
City Park	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Enclosed Parking with Elevator	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
General Office Building	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
High Turnover (Sit Down Restaurant)	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Hotel	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Parking Lot	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Quality Restaurant	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Strip Mall	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	341.9020	341.9020	0.0209	2.5300e-003	343.1791
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	346.9050	346.9050	0.0212	2.5700e-003	348.2008
NaturalGas Mitigated	0.0173	0.1546	0.1103	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.5867	171.5867	3.2900e-003	3.1500e-003	172.6063
NaturalGas Unmitigated	0.0173	0.1546	0.1103	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.5867	171.5867	3.2900e-003	3.1500e-003	172.6063

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.02407e+006	5.5200e-003	0.0472	0.0201	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6482	54.6482	1.0500e-003	1.0000e-003	54.9730
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
Enclosed Parking with Elevator	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
General Office Building	72869.1	3.9000e-004	3.5700e-003	3.0000e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.8886	3.8886	7.0000e-005	7.0000e-005	3.9117
High Turnover (Sit Down Restaurant)	679548	3.6600e-003	0.0333	0.0280	2.0000e-004		2.5300e-003	2.5300e-003		2.5300e-003	2.5300e-003	0.0000	36.2633	36.2633	7.0000e-004	6.6000e-004	36.4788
Hotel	1.04851e+006	5.6500e-003	0.0514	0.0432	3.1000e-004		3.9100e-003	3.9100e-003		3.9100e-003	3.9100e-003	0.0000	55.9526	55.9526	1.0700e-003	1.0300e-003	56.2850
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	371359	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003	0.0000	19.8171	19.8171	3.8000e-004	3.6000e-004	19.9349
Strip Mall	19056.5	1.0000e-004	9.3000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0169	1.0169	2.0000e-005	2.0000e-005	1.0230
Total		0.0173	0.1546	0.1103	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.5867	171.5867	3.2900e-003	3.1400e-003	172.6063

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.02407e+006	5.5200e-003	0.0472	0.0201	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6482	54.6482	1.0500e-003	1.0000e-003	54.9730
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
Enclosed Parking with Elevator	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
General Office Building	72869.1	3.9000e-004	3.5700e-003	3.0000e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.8886	3.8886	7.0000e-005	7.0000e-005	3.9117
High Turnover (Sit Down Restaurant)	679548	3.6600e-003	0.0333	0.0280	2.0000e-004		2.5300e-003	2.5300e-003		2.5300e-003	2.5300e-003	0.0000	36.2633	36.2633	7.0000e-004	6.6000e-004	36.4788
Hotel	1.04851e+006	5.6500e-003	0.0514	0.0432	3.1000e-004		3.9100e-003	3.9100e-003		3.9100e-003	3.9100e-003	0.0000	55.9526	55.9526	1.0700e-003	1.0300e-003	56.2850
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	371359	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003	0.0000	19.8171	19.8171	3.8000e-004	3.6000e-004	19.9349
Strip Mall	19056.5	1.0000e-004	9.3000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0169	1.0169	2.0000e-005	2.0000e-005	1.0230
Total		0.0173	0.1546	0.1103	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.5867	171.5867	3.2900e-003	3.1400e-003	172.6063

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	379636	92.9845	5.6800e-003	6.9000e-004	93.3319
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	425180	104.1396	6.3600e-003	7.7000e-004	104.5286
General Office Building	47075.7	11.5303	7.0000e-004	9.0000e-005	11.5734
High Turnover (Sit Down Restaurant)	147687	36.1731	2.2100e-003	2.7000e-004	36.3082
Hotel	225276	55.1770	3.3700e-003	4.1000e-004	55.3831
Parking Lot	5880	1.4402	9.0000e-005	1.0000e-005	1.4456
Quality Restaurant	80707.9	19.7679	1.2100e-003	1.5000e-004	19.8417
Strip Mall	104896	25.6924	1.5700e-003	1.9000e-004	25.7884
Total		346.9049	0.0212	2.5800e-003	348.2008

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	375827	92.0517	5.6300e-003	6.8000e-004	92.3955
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	418341	102.4645	6.2600e-003	7.6000e-004	102.8473
General Office Building	46382.7	11.3606	6.9000e-004	8.0000e-005	11.4030
High Turnover (Sit Down Restaurant)	146363	35.8489	2.1900e-003	2.7000e-004	35.9828
Hotel	221201	54.1791	3.3100e-003	4.0000e-004	54.3814
Parking Lot	5586	1.3682	8.0000e-005	1.0000e-005	1.3733
Quality Restaurant	79984.5	19.5907	1.2000e-003	1.5000e-004	19.6638
Strip Mall	102227	25.0385	1.5300e-003	1.9000e-004	25.1320
Total		341.9020	0.0209	2.5400e-003	343.1791

6.0 Area Detail**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5572	0.0656	0.7250	4.0000e-004		8.5300e-003	8.5300e-003		8.5300e-003	8.5300e-003	0.0000	67.7808	67.7808	2.3900e-003	1.2200e-003	68.2045
Unmitigated	6.4486	0.1233	7.9811	0.0132		1.0247	1.0247		1.0247	1.0247	97.0980	41.8672	138.9652	0.0907	7.6400e-003	143.5090

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0958					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4335					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.8981	0.1152	7.2806	0.0132		1.0208	1.0208		1.0208	1.0208	97.0980	40.7215	137.8195	0.0896	7.6400e-003	142.3356
Landscaping	0.0212	8.0600e-003	0.7005	4.0000e-005		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	1.1457	1.1457	1.1100e-003	0.0000	1.1734
Total	6.4486	0.1232	7.9811	0.0132		1.0247	1.0247		1.0247	1.0247	97.0980	41.8672	138.9652	0.0907	7.6400e-003	143.5090

Marea Village - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0958					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4335					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.7300e-003	0.0575	0.0245	3.7000e-004		4.6500e-003	4.6500e-003		4.6500e-003	4.6500e-003	0.0000	66.6352	66.6352	1.2800e-003	1.2200e-003	67.0312
Landscaping	0.0212	8.0600e-003	0.7005	4.0000e-005		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	1.1457	1.1457	1.1100e-003	0.0000	1.1734
Total	0.5572	0.0656	0.7250	4.1000e-004		8.5300e-003	8.5300e-003		8.5300e-003	8.5300e-003	0.0000	67.7808	67.7808	2.3900e-003	1.2200e-003	68.2045

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Marea Village - San Diego County APCD Air District, Annual

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	43.6636	0.2658	6.5200e-003	52.2517
Unmitigated	50.7466	0.3320	8.1200e-003	61.4674

Marea Village - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	6.12448 / 3.86108	31.9822	0.2014	4.9300e-003	38.4878
City Park	0 / 0.774463	2.1075	1.3000e-004	2.0000e-005	2.1153
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0.646951 / 0.396518	3.3475	0.0213	5.2000e-004	4.0346
High Turnover (Sit Down Restaurant)	1.18378 / 0.0755605	4.3565	0.0388	9.4000e-004	5.6072
Hotel	0.86247 / 0.09583	3.2850	0.0283	6.9000e-004	4.1966
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.646527 / 0.0412677	2.3793	0.0212	5.1000e-004	3.0624
Strip Mall	0.635542 / 0.389526	3.2885	0.0209	5.1000e-004	3.9635
Total		50.7466	0.3320	8.1200e-003	61.4674

Marea Village - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	4.89958 / 3.86108	27.6871	0.1613	3.9600e-003	32.8994
City Park	0 / 0.774463	2.1075	1.3000e-004	2.0000e-005	2.1153
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0.517561 / 0.396518	2.8938	0.0170	4.2000e-004	3.4443
High Turnover (Sit Down Restaurant)	0.947025 / 0.0755605	3.5264	0.0311	7.5000e-004	4.5270
Hotel	0.689976 / 0.09583	2.6802	0.0226	5.5000e-004	3.4096
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.517221 / 0.0412677	1.9259	0.0170	4.1000e-004	2.4725
Strip Mall	0.508434 / 0.389526	2.8428	0.0167	4.1000e-004	3.3836
Total		43.6636	0.2658	6.5200e-003	52.2517

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

Marea Village - San Diego County APCD Air District, Annual

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.2247	0.3679	0.0000	15.4215
Unmitigated	24.8989	1.4715	0.0000	61.6859

Marea Village - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	43.24	8.7773	0.5187	0.0000	21.7455
City Park	0.06	0.0122	7.2000e- 004	0.0000	0.0302
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	3.39	0.6881	0.0407	0.0000	1.7048
High Turnover (Sit Down Restaurant)	46.41	9.4208	0.5568	0.0000	23.3397
Hotel	18.61	3.7777	0.2233	0.0000	9.3590
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.94	0.3938	0.0233	0.0000	0.9756
Strip Mall	9.01	1.8290	0.1081	0.0000	4.5311
Total		24.8989	1.4715	0.0000	61.6859

Marea Village - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	10.81	2.1943	0.1297	0.0000	5.4364
City Park	0.015	3.0400e-003	1.8000e-004	0.0000	7.5400e-003
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0.8475	0.1720	0.0102	0.0000	0.4262
High Turnover (Sit Down Restaurant)	11.6025	2.3552	0.1392	0.0000	5.8349
Hotel	4.6525	0.9444	0.0558	0.0000	2.3398
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.485	0.0985	5.8200e-003	0.0000	0.2439
Strip Mall	2.2525	0.4572	0.0270	0.0000	1.1328
Total		6.2247	0.3679	0.0000	15.4215

9.0 Operational Offroad

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

Marea Village - San Diego County APCD Air District, Annual

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Marea Village****San Diego County APCD Air District, Summer****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.64	1000sqft	0.08	3,638.00	0
Enclosed Parking with Elevator	216.00	Space	0.00	78,158.00	0
Parking Lot	42.00	Space	0.38	16,800.00	0
City Park	0.65	Acre	0.65	27,194.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.00	3,905.00	0
Hotel	34.00	Room	1.13	18,109.00	0
Quality Restaurant	2.13	1000sqft	0.00	2,134.00	0
Apartments Low Rise	94.00	Dwelling Unit	1.56	72,982.00	269
Strip Mall	8.58	1000sqft	0.00	8,584.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per traffic study and site plan; total lot 3.8 acres, therefore lot acreage modified to match.

Construction Phase - Per PD, assuming utilities/infrastructure and Hwy 101 improvements would occur during Building Construction phase.

Marea Village - San Diego County APCD Air District, Summer

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

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - No construction emissions - existing operations only.

Trips and VMT - Demolition materials would be hauled 25 miles (project site to Miramar Landfill); earthwork materials from grading activities would be hauled max. 3 miles (project site to the nearest beach).

Demolition -

Grading -

Architectural Coating - Per SDAPCD Rule 67.0.1

Vehicle Trips - Per traffic study.

Area Coating - Per SDAPCD Rule 67.0.1

Construction Off-road Equipment Mitigation - Per construction questionnaire, there would be dust control implemented (water exposed area three times a day) as a project design feature.

Area Mitigation - No wood-burning associated hearth would be produced.

Energy Mitigation - Per operational questionnaire, high efficiency lighting would be installed as a project design feature.

Waste Mitigation - Per AB 341.

Water Mitigation - Per operational questionnaire, low-flow water fixtures would be installed as a project design feature.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

Marea Village - San Diego County APCD Air District, Summer

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

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	77.00
tblConstructionPhase	NumDays	230.00	217.00
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	18.00	77.00
tblConstructionPhase	PhaseEndDate	9/28/2021	2/1/2023
tblConstructionPhase	PhaseEndDate	10/8/2021	5/4/2023
tblConstructionPhase	PhaseEndDate	8/26/2022	1/2/2024
tblConstructionPhase	PhaseEndDate	10/17/2022	4/26/2024
tblConstructionPhase	PhaseEndDate	9/21/2022	5/24/2024
tblConstructionPhase	PhaseStartDate	9/1/2021	1/3/2023
tblConstructionPhase	PhaseStartDate	9/29/2021	1/18/2023
tblConstructionPhase	PhaseStartDate	10/9/2021	3/6/2023
tblConstructionPhase	PhaseStartDate	9/22/2022	10/26/2023
tblConstructionPhase	PhaseStartDate	8/27/2022	2/8/2024
tblGrading	MaterialExported	0.00	48,400.00
tblLandUse	LandUseSquareFeet	3,640.00	3,638.00
tblLandUse	LandUseSquareFeet	86,400.00	78,158.00
tblLandUse	LandUseSquareFeet	28,314.00	27,194.00
tblLandUse	LandUseSquareFeet	3,900.00	3,905.00
tblLandUse	LandUseSquareFeet	49,368.00	18,109.00
tblLandUse	LandUseSquareFeet	2,130.00	2,134.00
tblLandUse	LandUseSquareFeet	94,000.00	72,982.00
tblLandUse	LandUseSquareFeet	8,580.00	8,584.00
tblLandUse	LotAcreage	1.94	0.00
tblLandUse	LotAcreage	0.09	0.00
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	5.88	1.56

Marea Village - San Diego County APCD Air District, Summer

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

tblLandUse	LotAcreage	0.20	0.00
tblOffRoadEquipment	HorsePower	187.00	9.00
tblOffRoadEquipment	HorsePower	221.00	158.00
tblOffRoadEquipment	HorsePower	172.00	89.00
tblOffRoadEquipment	HorsePower	132.00	84.00
tblOffRoadEquipment	HorsePower	231.00	187.00
tblOffRoadEquipment	HorsePower	402.00	130.00
tblOffRoadEquipment	HorsePower	212.00	247.00
tblOffRoadEquipment	HorsePower	100.00	97.00
tblOffRoadEquipment	HorsePower	158.00	97.00
tblOffRoadEquipment	HorsePower	203.00	97.00
tblOffRoadEquipment	HorsePower	203.00	46.00
tblOffRoadEquipment	LoadFactor	0.41	0.56
tblOffRoadEquipment	LoadFactor	0.50	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.20
tblOffRoadEquipment	LoadFactor	0.36	0.74
tblOffRoadEquipment	LoadFactor	0.29	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.42
tblOffRoadEquipment	LoadFactor	0.43	0.40
tblOffRoadEquipment	LoadFactor	0.40	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.45
tblOffRoadEquipment	OffRoadEquipmentType	Cement and Mortar Mixers	Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType	Excavators	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Paving Equipment

Marea Village - San Diego County APCD Air District, Summer

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

tblOffRoadEquipment	OffRoadEquipmentType	Graders	Cranes
tblOffRoadEquipment	OffRoadEquipmentType	Pavers	Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

Marea Village - San Diego County APCD Air District, Summer

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

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	25.00
tblTripsAndVMT	HaulingTripLength	20.00	3.00
tblVehicleTrips	PB_TP	43.00	12.00
tblVehicleTrips	PB_TP	44.00	12.00
tblVehicleTrips	PR_TP	37.00	68.00
tblVehicleTrips	PR_TP	38.00	70.00
tblVehicleTrips	ST_TR	8.14	6.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	20.07
tblVehicleTrips	ST_TR	122.40	160.05
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	90.04	99.81
tblVehicleTrips	ST_TR	42.04	39.96
tblVehicleTrips	SU_TR	6.28	6.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	20.07
tblVehicleTrips	SU_TR	142.64	160.05
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	71.97	99.81
tblVehicleTrips	SU_TR	20.43	39.96
tblVehicleTrips	WD_TR	7.32	6.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	20.07
tblVehicleTrips	WD_TR	112.18	160.05
tblVehicleTrips	WD_TR	8.36	10.00

Marea Village - San Diego County APCD Air District, Summer

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

tblVehicleTrips	WD_TR	83.84	99.81
tblVehicleTrips	WD_TR	44.32	39.96

2.0 Emissions Summary

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	12.3580	62.0951	59.1590	0.1289	3.5516	2.5706	5.8292	0.6893	2.3920	2.8496	0.0000	12,553.69 56	12,553.69 56	3.2402	0.2999	12,715.50 65
2024	12.2247	20.4998	30.0849	0.0535	1.5582	0.9254	2.4836	0.4188	0.8588	1.2776	0.0000	5,291.919 6	5,291.919 6	1.3438	0.1406	5,359.821 4
Maximum	12.3580	62.0951	59.1590	0.1289	3.5516	2.5706	5.8292	0.6893	2.3920	2.8496	0.0000	12,553.69 56	12,553.69 56	3.2402	0.2999	12,715.50 65

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	12.3580	62.0951	59.1590	0.1289	2.5274	2.5706	4.8050	0.5764	2.3920	2.6906	0.0000	12,553.69 56	12,553.69 56	3.2402	0.2999	12,715.50 65
2024	12.2247	20.4998	30.0849	0.0535	1.5582	0.9254	2.4836	0.4188	0.8588	1.2776	0.0000	5,291.919 6	5,291.919 6	1.3438	0.1406	5,359.821 4
Maximum	12.3580	62.0951	59.1590	0.1289	2.5274	2.5706	4.8050	0.5764	2.3920	2.6906	0.0000	12,553.69 56	12,553.69 56	3.2402	0.2999	12,715.50 65

Marea Village - San Diego County APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	20.04	0.00	12.32	10.19	0.00	3.85	0.00	0.00	0.00	0.00	0.00	0.00

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	146.9931	2.8990	185.3596	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8555	3,719.3982	2.4227	0.2053	3,841.1560
Energy	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
Mobile	5.4674	5.0618	44.5105	0.0936	9.7687	0.0720	9.8408	2.6022	0.0671	2.6694		9,695.6962	9,695.6962	0.6846	0.4264	9,839.8862
Total	152.5554	8.8079	230.4745	0.4209	9.7687	25.0786	34.8473	2.6022	25.0737	27.6759	2,610.5427	11,840.9457	14,451.4884	3.1271	0.6508	14,723.5950

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3002	1.4930	8.3807	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5614	1,805.5614	0.0479	0.0328	1,816.5469
Energy	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
Mobile	5.4674	5.0618	44.5105	0.0936	9.7687	0.0720	9.8408	2.6022	0.0671	2.6694		9,695.6962	9,695.6962	0.6846	0.4264	9,839.8862
Total	8.8625	7.4019	53.4957	0.1081	9.7687	0.2942	10.0629	2.6022	0.2893	2.8915	0.0000	12,537.6516	12,537.6516	0.7523	0.4783	12,698.9859

Marea Village - San Diego County APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	94.19	15.96	76.79	74.31	0.00	98.83	71.12	0.00	98.85	89.55	100.00	-5.88	13.24	75.94	26.51	13.75

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	1/3/2023	2/1/2023	5	22	
2	Grading	Grading	1/18/2023	5/4/2023	5	77	
3	Building Construction	Building Construction	3/6/2023	1/2/2024	5	217	
4	Paving	Paving	2/8/2024	5/24/2024	5	77	
5	Architectural Coating	Architectural Coating	10/26/2023	4/26/2024	5	132	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 115.5****Acres of Paving: 0.38****Residential Indoor: 147,789; Residential Outdoor: 49,263; Non-Residential Indoor: 54,555; Non-Residential Outdoor: 18,185; Striped Parking Area: 5,697 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	212	0.43
Grading	Rollers	1	8.00	80	0.38
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Rough Terrain Forklifts	2	8.00	100	0.40

Marea Village - San Diego County APCD Air District, Summer

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

Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	1	8.00	367	0.48
Grading	Bore/Drill Rigs	2	8.00	158	0.38
Grading	Cranes	1	8.00	187	0.41
Grading	Signal Boards	2	8.00	6	0.82
Grading	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Signal Boards	2	8.00	6	0.82
Grading	Crawler Tractors	1	8.00	247	0.40
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Signal Boards	2	8.00	6	0.82
Paving	Surfacing Equipment	1	8.00	263	0.30
Grading	Excavators	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Other Construction Equipment	3	8.00	89	0.20
Building Construction	Paving Equipment	1	8.00	84	0.74
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Rough Terrain Forklifts	2	8.00	97	0.37
Building Construction	Rubber Tired Loaders	1	8.00	46	0.45
Paving	Graders	1	8.00	9	0.56
Paving	Off-Highway Trucks	4	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Rubber Tired Loaders	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	7	18.00	0.00	50.00	10.80	7.30	25.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	6,050.00	10.80	7.30	3.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	133.00	36.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	15	38.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4983	0.0000	0.4983	0.0755	0.0000	0.0755			0.0000			0.0000
Off-Road	2.7983	26.2443	24.5969	0.0472		1.2360	1.2360		1.1598	1.1598		4,539.0972	4,539.0972	1.1304		4,567.3570
Total	2.7983	26.2443	24.5969	0.0472	0.4983	1.2360	1.7343	0.0755	1.1598	1.2352		4,539.0972	4,539.0972	1.1304		4,567.3570

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.8300e-003	0.3614	0.0938	1.6900e-003	0.0497	3.1500e-003	0.0528	0.0136	3.0100e-003	0.0166		186.2976	186.2976	9.4200e-003	0.0296	195.3621
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0306	0.4332	1.3100e-003	0.1479	8.0000e-004	0.1487	0.0392	7.3000e-004	0.0400		133.7136	133.7136	3.5800e-003	3.2900e-003	134.7841
Total	0.0551	0.3920	0.5269	3.0000e-003	0.1976	3.9500e-003	0.2015	0.0528	3.7400e-003	0.0566		320.0113	320.0113	0.0130	0.0329	330.1462

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1943	0.0000	0.1943	0.0294	0.0000	0.0294			0.0000			0.0000
Off-Road	2.7983	26.2443	24.5969	0.0472		1.2360	1.2360		1.1598	1.1598	0.0000	4,539.0972	4,539.0972	1.1304		4,567.3570
Total	2.7983	26.2443	24.5969	0.0472	0.1943	1.2360	1.4304	0.0294	1.1598	1.1892	0.0000	4,539.0972	4,539.0972	1.1304		4,567.3570

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.8300e-003	0.3614	0.0938	1.6900e-003	0.0497	3.1500e-003	0.0528	0.0136	3.0100e-003	0.0166		186.2976	186.2976	9.4200e-003	0.0296	195.3621
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0306	0.4332	1.3100e-003	0.1479	8.0000e-004	0.1487	0.0392	7.3000e-004	0.0400		133.7136	133.7136	3.5800e-003	3.2900e-003	134.7841
Total	0.0551	0.3920	0.5269	3.0000e-003	0.1976	3.9500e-003	0.2015	0.0528	3.7400e-003	0.0566		320.0113	320.0113	0.0130	0.0329	330.1462

3.3 Grading - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6791	0.0000	1.6791	0.1851	0.0000	0.1851			0.0000			0.0000
Off-Road	3.1227	32.6504	31.6740	0.0671		1.3150	1.3150		1.2136	1.2136		6,434.0978	6,434.0978	2.0441		6,485.2007
Total	3.1227	32.6504	31.6740	0.0671	1.6791	1.3150	2.9941	0.1851	1.2136	1.3988		6,434.0978	6,434.0978	2.0441		6,485.2007

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0971	2.7406	1.3987	8.7500e-003	0.2076	0.0139	0.2214	0.0570	0.0133	0.0703		963.3479	963.3479	0.0448	0.1531	1,010.0758
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1094	0.0679	0.9626	2.9000e-003	0.3286	1.7700e-003	0.3304	0.0872	1.6300e-003	0.0888		297.1414	297.1414	7.9500e-003	7.3200e-003	299.5203
Total	0.2065	2.8085	2.3613	0.0117	0.5361	0.0156	0.5518	0.1442	0.0149	0.1591		1,260.4893	1,260.4893	0.0527	0.1604	1,309.5961

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6548	0.0000	0.6548	0.0722	0.0000	0.0722			0.0000			0.0000
Off-Road	3.1227	32.6504	31.6740	0.0671		1.3150	1.3150		1.2136	1.2136	0.0000	6,434.0978	6,434.0978	2.0441		6,485.2007
Total	3.1227	32.6504	31.6740	0.0671	0.6548	1.3150	1.9699	0.0722	1.2136	1.2858	0.0000	6,434.0978	6,434.0978	2.0441		6,485.2007

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0971	2.7406	1.3987	8.7500e-003	0.2076	0.0139	0.2214	0.0570	0.0133	0.0703		963.3479	963.3479	0.0448	0.1531	1,010.0758
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1094	0.0679	0.9626	2.9000e-003	0.3286	1.7700e-003	0.3304	0.0872	1.6300e-003	0.0888		297.1414	297.1414	7.9500e-003	7.3200e-003	299.5203
Total	0.2065	2.8085	2.3613	0.0117	0.5361	0.0156	0.5518	0.1442	0.0149	0.1591		1,260.4893	1,260.4893	0.0527	0.1604	1,309.5961

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594		3,069.8172	3,069.8172	0.9712		3,094.0968
Total	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594		3,069.8172	3,069.8172	0.9712		3,094.0968

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0430	1.5432	0.5561	7.3700e-003	0.2438	9.4000e-003	0.2532	0.0702	8.9900e-003	0.0792		795.7690	795.7690	0.0241	0.1152	830.7079
Worker	0.3637	0.2259	3.2005	9.6500e-003	1.0926	5.8800e-003	1.0984	0.2898	5.4100e-003	0.2952		987.9952	987.9952	0.0265	0.0243	995.9050
Total	0.4067	1.7691	3.7566	0.0170	1.3364	0.0153	1.3517	0.3600	0.0144	0.3744		1,783.7642	1,783.7642	0.0506	0.1395	1,826.6129

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594	0.0000	3,069.8172	3,069.8172	0.9712		3,094.0968
Total	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594	0.0000	3,069.8172	3,069.8172	0.9712		3,094.0968

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0430	1.5432	0.5561	7.3700e-003	0.2438	9.4000e-003	0.2532	0.0702	8.9900e-003	0.0792		795.7690	795.7690	0.0241	0.1152	830.7079
Worker	0.3637	0.2259	3.2005	9.6500e-003	1.0926	5.8800e-003	1.0984	0.2898	5.4100e-003	0.2952		987.9952	987.9952	0.0265	0.0243	995.9050
Total	0.4067	1.7691	3.7566	0.0170	1.3364	0.0153	1.3517	0.3600	0.0144	0.3744		1,783.7642	1,783.7642	0.0506	0.1395	1,826.6129

3.4 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	lb/day										lb/day					
Off-Road	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826		3,069.9241	3,069.9241	0.9712		3,094.2045
Total	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826		3,069.9241	3,069.9241	0.9712		3,094.2045

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0414	1.5327	0.5431	7.2300e-003	0.2438	9.4500e-003	0.2533	0.0702	9.0400e-003	0.0792		781.8950	781.8950	0.0247	0.1132	816.2471
Worker	0.3416	0.2032	2.9908	9.3400e-003	1.0926	5.6000e-003	1.0982	0.2898	5.1600e-003	0.2950		963.1299	963.1299	0.0241	0.0227	970.5057
Total	0.3830	1.7359	3.5340	0.0166	1.3364	0.0151	1.3514	0.3600	0.0142	0.3742		1,745.0249	1,745.0249	0.0487	0.1359	1,786.7527

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826	0.0000	3,069.9241	3,069.9241	0.9712		3,094.2045
Total	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826	0.0000	3,069.9241	3,069.9241	0.9712		3,094.2045

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0414	1.5327	0.5431	7.2300e-003	0.2438	9.4500e-003	0.2533	0.0702	9.0400e-003	0.0792		781.8950	781.8950	0.0247	0.1132	816.2471
Worker	0.3416	0.2032	2.9908	9.3400e-003	1.0926	5.6000e-003	1.0982	0.2898	5.1600e-003	0.2950		963.1299	963.1299	0.0241	0.0227	970.5057
Total	0.3830	1.7359	3.5340	0.0166	1.3364	0.0151	1.3514	0.3600	0.0142	0.3742		1,745.0249	1,745.0249	0.0487	0.1359	1,786.7527

3.5 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1012	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602		4,187.8320	4,187.8320	1.3161		4,220.7353
Paving	0.0129					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.1141	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602		4,187.8320	4,187.8320	1.3161		4,220.7353

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0976	0.0581	0.8545	2.6700e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		275.1800	275.1800	6.8800e-003	6.4900e-003	277.2873
Total	0.0976	0.0581	0.8545	2.6700e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		275.1800	275.1800	6.8800e-003	6.4900e-003	277.2873

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1012	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602	0.0000	4,187.8320	4,187.8320	1.3161		4,220.7353
Paving	0.0129					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.1141	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602	0.0000	4,187.8320	4,187.8320	1.3161		4,220.7353

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0976	0.0581	0.8545	2.6700e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		275.1800	275.1800	6.8800e-003	6.4900e-003	277.2873
Total	0.0976	0.0581	0.8545	2.6700e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		275.1800	275.1800	6.8800e-003	6.4900e-003	277.2873

3.6 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	lb/day										lb/day					
Archit. Coating	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	9.8651	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0738	0.0459	0.6497	1.9600e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		200.5705	200.5705	5.3700e-003	4.9400e-003	202.1762
Total	0.0738	0.0459	0.6497	1.9600e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		200.5705	200.5705	5.3700e-003	4.9400e-003	202.1762

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	9.8651	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0738	0.0459	0.6497	1.9600e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		200.5705	200.5705	5.3700e-003	4.9400e-003	202.1762
Total	0.0738	0.0459	0.6497	1.9600e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		200.5705	200.5705	5.3700e-003	4.9400e-003	202.1762

3.6 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	9.8542	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0694	0.0413	0.6072	1.9000e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		195.5226	195.5226	4.8900e-003	4.6100e-003	197.0199
Total	0.0694	0.0413	0.6072	1.9000e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		195.5226	195.5226	4.8900e-003	4.6100e-003	197.0199

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	9.8542	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0694	0.0413	0.6072	1.9000e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		195.5226	195.5226	4.8900e-003	4.6100e-003	197.0199
Total	0.0694	0.0413	0.6072	1.9000e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		195.5226	195.5226	4.8900e-003	4.6100e-003	197.0199

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Marea Village - San Diego County APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4674	5.0618	44.5105	0.0936	9.7687	0.0720	9.8408	2.6022	0.0671	2.6694		9,695.696 2	9,695.696 2	0.6846	0.4264	9,839.886 2
Unmitigated	5.4674	5.0618	44.5105	0.0936	9.7687	0.0720	9.8408	2.6022	0.0671	2.6694		9,695.696 2	9,695.696 2	0.6846	0.4264	9,839.886 2

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	564.00	564.00	564.00	1,610,391	1,610,391
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	73.05	73.05	73.05	174,583	174,583
High Turnover (Sit Down Restaurant)	624.20	624.20	624.20	1,244,529	1,244,529
Hotel	340.00	340.00	340.00	645,976	645,976
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	212.60	212.60	212.60	437,005	437,005
Strip Mall	342.86	342.86	342.86	528,011	528,011
Total	2,156.70	2,156.70	2,156.70	4,640,495	4,640,495

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

Marea Village - San Diego County APCD Air District, Summer

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

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	68	20	12
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	70	18	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
City Park	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Enclosed Parking with Elevator	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
General Office Building	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
High Turnover (Sit Down Restaurant)	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Hotel	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Parking Lot	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Quality Restaurant	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Strip Mall	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Marea Village - San Diego County APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
NaturalGas Unmitigated	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2805.67	0.0303	0.2586	0.1100	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.0786	330.0786	6.3300e-003	6.0500e-003	332.0401
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
Enclosed Parking with Elevator	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
General Office Building	199.641	2.1500e-003	0.0196	0.0164	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003		23.4872	23.4872	4.5000e-004	4.3000e-004	23.6268
High Turnover (Sit Down Restaurant)	1861.78	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0324	219.0324	4.2000e-003	4.0200e-003	220.3340
Hotel	2872.63	0.0310	0.2816	0.2366	1.6900e-003		0.0214	0.0214		0.0214	0.0214		337.9568	337.9568	6.4800e-003	6.2000e-003	339.9652
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1017.42	0.0110	0.0998	0.0838	6.0000e-004		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003		119.6966	119.6966	2.2900e-003	2.1900e-003	120.4079
Strip Mall	52.2095	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1423	6.1423	1.2000e-004	1.1000e-004	6.1788
Total		0.0950	0.8472	0.6045	5.1900e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2.80567	0.0303	0.2586	0.1100	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.0786	330.0786	6.3300e-003	6.0500e-003	332.0401
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
Enclosed Parking with Elevator	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
General Office Building	0.199641	2.1500e-003	0.0196	0.0164	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003		23.4872	23.4872	4.5000e-004	4.3000e-004	23.6268
High Turnover (Sit Down Restaurant)	1.86178	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0324	219.0324	4.2000e-003	4.0200e-003	220.3340
Hotel	2.87263	0.0310	0.2816	0.2366	1.6900e-003		0.0214	0.0214		0.0214	0.0214		337.9568	337.9568	6.4800e-003	6.2000e-003	339.9652
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.01742	0.0110	0.0998	0.0838	6.0000e-004		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003		119.6966	119.6966	2.2900e-003	2.1900e-003	120.4079
Strip Mall	0.0522095	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1423	6.1423	1.2000e-004	1.1000e-004	6.1788
Total		0.0950	0.8472	0.6045	5.1900e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528

6.0 Area Detail**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

Marea Village - San Diego County APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.3002	1.4930	8.3807	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5614	1,805.5614	0.0479	0.0328	1,816.5469
Unmitigated	146.9931	2.8990	185.3596	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8555	3,719.3982	2.4227	0.2053	3,841.1560

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	143.8571	2.8094	177.5760	0.3217		24.8979	24.8979		24.8979	24.8979	2,610.5427	1,094.8235	3,705.3662	2.4091	0.2053	3,826.7847
Landscaping	0.2360	0.0896	7.7836	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0320	14.0320	0.0136		14.3714
Total	146.9931	2.8990	185.3596	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8555	3,719.3982	2.4227	0.2053	3,841.1560

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1642	1.4034	0.5972	8.9600e-003		0.1135	0.1135		0.1135	0.1135	0.0000	1,791.5294	1,791.5294	0.0343	0.0328	1,802.1756
Landscaping	0.2360	0.0896	7.7836	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0320	14.0320	0.0136		14.3714
Total	3.3002	1.4930	8.3807	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5614	1,805.5614	0.0479	0.0328	1,816.5469

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Marea Village - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Marea Village****San Diego County APCD Air District, Winter****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.64	1000sqft	0.08	3,638.00	0
Enclosed Parking with Elevator	216.00	Space	0.00	78,158.00	0
Parking Lot	42.00	Space	0.38	16,800.00	0
City Park	0.65	Acre	0.65	27,194.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.00	3,905.00	0
Hotel	34.00	Room	1.13	18,109.00	0
Quality Restaurant	2.13	1000sqft	0.00	2,134.00	0
Apartments Low Rise	94.00	Dwelling Unit	1.56	72,982.00	269
Strip Mall	8.58	1000sqft	0.00	8,584.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per traffic study and site plan; total lot 3.8 acres, therefore lot acreage modified to match.

Construction Phase - Per PD, assuming utilities/infrastructure and Hwy 101 improvements would occur during Building Construction phase.

Marea Village - San Diego County APCD Air District, Winter

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

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - No construction emissions - existing operations only.

Trips and VMT - Demolition materials would be hauled 25 miles (project site to Miramar Landfill); earthwork materials from grading activities would be hauled max. 3 miles (project site to the nearest beach).

Demolition -

Grading -

Architectural Coating - Per SDAPCD Rule 67.0.1

Vehicle Trips - Per traffic study.

Area Coating - Per SDAPCD Rule 67.0.1

Construction Off-road Equipment Mitigation - Per construction questionnaire, there would be dust control implemented (water exposed area three times a day) as a project design feature.

Area Mitigation - No wood-burning associated hearth would be produced.

Energy Mitigation - Per operational questionnaire, high efficiency lighting would be installed as a project design feature.

Waste Mitigation - Per AB 341.

Water Mitigation - Per operational questionnaire, low-flow water fixtures would be installed as a project design feature.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

Marea Village - San Diego County APCD Air District, Winter

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

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	77.00
tblConstructionPhase	NumDays	230.00	217.00
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	18.00	77.00
tblConstructionPhase	PhaseEndDate	9/28/2021	2/1/2023
tblConstructionPhase	PhaseEndDate	10/8/2021	5/4/2023
tblConstructionPhase	PhaseEndDate	8/26/2022	1/2/2024
tblConstructionPhase	PhaseEndDate	10/17/2022	4/26/2024
tblConstructionPhase	PhaseEndDate	9/21/2022	5/24/2024
tblConstructionPhase	PhaseStartDate	9/1/2021	1/3/2023
tblConstructionPhase	PhaseStartDate	9/29/2021	1/18/2023
tblConstructionPhase	PhaseStartDate	10/9/2021	3/6/2023
tblConstructionPhase	PhaseStartDate	9/22/2022	10/26/2023
tblConstructionPhase	PhaseStartDate	8/27/2022	2/8/2024
tblGrading	MaterialExported	0.00	48,400.00
tblLandUse	LandUseSquareFeet	3,640.00	3,638.00
tblLandUse	LandUseSquareFeet	86,400.00	78,158.00
tblLandUse	LandUseSquareFeet	28,314.00	27,194.00
tblLandUse	LandUseSquareFeet	3,900.00	3,905.00
tblLandUse	LandUseSquareFeet	49,368.00	18,109.00
tblLandUse	LandUseSquareFeet	2,130.00	2,134.00
tblLandUse	LandUseSquareFeet	94,000.00	72,982.00
tblLandUse	LandUseSquareFeet	8,580.00	8,584.00
tblLandUse	LotAcreage	1.94	0.00
tblLandUse	LotAcreage	0.09	0.00
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	5.88	1.56

Marea Village - San Diego County APCD Air District, Winter

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

tblLandUse	LotAcreage	0.20	0.00
tblOffRoadEquipment	HorsePower	187.00	9.00
tblOffRoadEquipment	HorsePower	221.00	158.00
tblOffRoadEquipment	HorsePower	172.00	89.00
tblOffRoadEquipment	HorsePower	132.00	84.00
tblOffRoadEquipment	HorsePower	231.00	187.00
tblOffRoadEquipment	HorsePower	402.00	130.00
tblOffRoadEquipment	HorsePower	212.00	247.00
tblOffRoadEquipment	HorsePower	100.00	97.00
tblOffRoadEquipment	HorsePower	158.00	97.00
tblOffRoadEquipment	HorsePower	203.00	97.00
tblOffRoadEquipment	HorsePower	203.00	46.00
tblOffRoadEquipment	LoadFactor	0.41	0.56
tblOffRoadEquipment	LoadFactor	0.50	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.20
tblOffRoadEquipment	LoadFactor	0.36	0.74
tblOffRoadEquipment	LoadFactor	0.29	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.42
tblOffRoadEquipment	LoadFactor	0.43	0.40
tblOffRoadEquipment	LoadFactor	0.40	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.45
tblOffRoadEquipment	OffRoadEquipmentType	Cement and Mortar Mixers	Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType	Excavators	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Paving Equipment

Marea Village - San Diego County APCD Air District, Winter

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

tblOffRoadEquipment	OffRoadEquipmentType	Graders	Cranes
tblOffRoadEquipment	OffRoadEquipmentType	Pavers	Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

Marea Village - San Diego County APCD Air District, Winter

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

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	25.00
tblTripsAndVMT	HaulingTripLength	20.00	3.00
tblVehicleTrips	PB_TP	43.00	12.00
tblVehicleTrips	PB_TP	44.00	12.00
tblVehicleTrips	PR_TP	37.00	68.00
tblVehicleTrips	PR_TP	38.00	70.00
tblVehicleTrips	ST_TR	8.14	6.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	20.07
tblVehicleTrips	ST_TR	122.40	160.05
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	90.04	99.81
tblVehicleTrips	ST_TR	42.04	39.96
tblVehicleTrips	SU_TR	6.28	6.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	20.07
tblVehicleTrips	SU_TR	142.64	160.05
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	71.97	99.81
tblVehicleTrips	SU_TR	20.43	39.96
tblVehicleTrips	WD_TR	7.32	6.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	20.07
tblVehicleTrips	WD_TR	112.18	160.05
tblVehicleTrips	WD_TR	8.36	10.00

Marea Village - San Diego County APCD Air District, Winter

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

tblVehicleTrips	WD_TR	83.84	99.81
tblVehicleTrips	WD_TR	44.32	39.96

2.0 Emissions Summary

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	12.3937	62.2719	59.1302	0.1287	3.5516	2.5708	5.8295	0.6893	2.3922	2.8498	0.0000	12,535.21 46	12,535.21 46	3.2403	0.3036	12,674.32 63
2024	12.2592	20.5949	30.0149	0.0529	1.5582	0.9254	2.4836	0.4188	0.8588	1.2777	0.0000	5,229.515 9	5,229.515 9	1.3445	0.1430	5,298.204 2
Maximum	12.3937	62.2719	59.1302	0.1287	3.5516	2.5708	5.8295	0.6893	2.3922	2.8498	0.0000	12,535.21 46	12,535.21 46	3.2403	0.3036	12,674.32 63

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	12.3937	62.2719	59.1302	0.1287	2.5274	2.5708	4.8052	0.5764	2.3922	2.6908	0.0000	12,535.21 45	12,535.21 45	3.2403	0.3036	12,674.32 63
2024	12.2592	20.5949	30.0149	0.0529	1.5582	0.9254	2.4836	0.4188	0.8588	1.2777	0.0000	5,229.515 9	5,229.515 9	1.3445	0.1430	5,298.204 2
Maximum	12.3937	62.2719	59.1302	0.1287	2.5274	2.5708	4.8052	0.5764	2.3922	2.6908	0.0000	12,535.21 45	12,535.21 45	3.2403	0.3036	12,674.32 63

Marea Village - San Diego County APCD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	20.04	0.00	12.32	10.19	0.00	3.85	0.00	0.00	0.00	0.00	0.00	0.00

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	146.9931	2.8990	185.3596	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8555	3,719.3982	2.4227	0.2053	3,841.1560
Energy	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
Mobile	5.3079	5.4929	46.1999	0.0895	9.7687	0.0721	9.8408	2.6022	0.0672	2.6694		9,278.1414	9,278.1414	0.7312	0.4503	9,430.6192
Total	152.3959	9.2391	232.1639	0.4169	9.7687	25.0786	34.8474	2.6022	25.0738	27.6760	2,610.5427	11,423.3909	14,033.9336	3.1737	0.6747	14,314.3279

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3002	1.4930	8.3807	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5614	1,805.5614	0.0479	0.0328	1,816.5469
Energy	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
Mobile	5.3079	5.4929	46.1999	0.0895	9.7687	0.0721	9.8408	2.6022	0.0672	2.6694		9,278.1414	9,278.1414	0.7312	0.4503	9,430.6192
Total	8.7030	7.8331	55.1851	0.1041	9.7687	0.2942	10.0630	2.6022	0.2894	2.8916	0.0000	12,120.0968	12,120.0968	0.7990	0.5022	12,289.7189

Marea Village - San Diego County APCD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	94.29	15.22	76.23	75.03	0.00	98.83	71.12	0.00	98.85	89.55	100.00	-6.10	13.64	74.83	25.57	14.14

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	1/3/2023	2/1/2023	5	22	
2	Grading	Grading	1/18/2023	5/4/2023	5	77	
3	Building Construction	Building Construction	3/6/2023	1/2/2024	5	217	
4	Paving	Paving	2/8/2024	5/24/2024	5	77	
5	Architectural Coating	Architectural Coating	10/26/2023	4/26/2024	5	132	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 115.5****Acres of Paving: 0.38****Residential Indoor: 147,789; Residential Outdoor: 49,263; Non-Residential Indoor: 54,555; Non-Residential Outdoor: 18,185; Striped Parking Area: 5,697 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	212	0.43
Grading	Rollers	1	8.00	80	0.38
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Rough Terrain Forklifts	2	8.00	100	0.40

Marea Village - San Diego County APCD Air District, Winter

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

Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	1	8.00	367	0.48
Grading	Bore/Drill Rigs	2	8.00	158	0.38
Grading	Cranes	1	8.00	187	0.41
Grading	Signal Boards	2	8.00	6	0.82
Grading	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Signal Boards	2	8.00	6	0.82
Grading	Crawler Tractors	1	8.00	247	0.40
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Signal Boards	2	8.00	6	0.82
Paving	Surfacing Equipment	1	8.00	263	0.30
Grading	Excavators	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Other Construction Equipment	3	8.00	89	0.20
Building Construction	Paving Equipment	1	8.00	84	0.74
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Rough Terrain Forklifts	2	8.00	97	0.37
Building Construction	Rubber Tired Loaders	1	8.00	46	0.45
Paving	Graders	1	8.00	9	0.56
Paving	Off-Highway Trucks	4	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Rubber Tired Loaders	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	7	18.00	0.00	50.00	10.80	7.30	25.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	6,050.00	10.80	7.30	3.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	133.00	36.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	15	38.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4983	0.0000	0.4983	0.0755	0.0000	0.0755			0.0000			0.0000
Off-Road	2.7983	26.2443	24.5969	0.0472		1.2360	1.2360		1.1598	1.1598		4,539.0972	4,539.0972	1.1304		4,567.3570
Total	2.7983	26.2443	24.5969	0.0472	0.4983	1.2360	1.7343	0.0755	1.1598	1.2352		4,539.0972	4,539.0972	1.1304		4,567.3570

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5300e-003	0.3757	0.0948	1.6900e-003	0.0497	3.1500e-003	0.0528	0.0136	3.0200e-003	0.0166		186.4436	186.4436	9.4000e-003	0.0297	195.5149
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0534	0.0344	0.4116	1.2300e-003	0.1479	8.0000e-004	0.1487	0.0392	7.3000e-004	0.0400		126.3637	126.3637	3.8100e-003	3.5600e-003	127.5200
Total	0.0589	0.4101	0.5064	2.9200e-003	0.1976	3.9500e-003	0.2015	0.0528	3.7500e-003	0.0566		312.8073	312.8073	0.0132	0.0332	323.0349

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1943	0.0000	0.1943	0.0294	0.0000	0.0294			0.0000			0.0000
Off-Road	2.7983	26.2443	24.5969	0.0472		1.2360	1.2360		1.1598	1.1598	0.0000	4,539.0972	4,539.0972	1.1304		4,567.3570
Total	2.7983	26.2443	24.5969	0.0472	0.1943	1.2360	1.4304	0.0294	1.1598	1.1892	0.0000	4,539.0972	4,539.0972	1.1304		4,567.3570

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5300e-003	0.3757	0.0948	1.6900e-003	0.0497	3.1500e-003	0.0528	0.0136	3.0200e-003	0.0166		186.4436	186.4436	9.4000e-003	0.0297	195.5149
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0534	0.0344	0.4116	1.2300e-003	0.1479	8.0000e-004	0.1487	0.0392	7.3000e-004	0.0400		126.3637	126.3637	3.8100e-003	3.5600e-003	127.5200
Total	0.0589	0.4101	0.5064	2.9200e-003	0.1976	3.9500e-003	0.2015	0.0528	3.7500e-003	0.0566		312.8073	312.8073	0.0132	0.0332	323.0349

3.3 Grading - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6791	0.0000	1.6791	0.1851	0.0000	0.1851			0.0000			0.0000
Off-Road	3.1227	32.6504	31.6740	0.0671		1.3150	1.3150		1.2136	1.2136		6,434.0978	6,434.0978	2.0441		6,485.2007
Total	3.1227	32.6504	31.6740	0.0671	1.6791	1.3150	2.9941	0.1851	1.2136	1.3988		6,434.0978	6,434.0978	2.0441		6,485.2007

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0865	2.8908	1.4383	8.8000e-003	0.2076	0.0140	0.2216	0.0570	0.0134	0.0704		968.4041	968.4041	0.0441	0.1539	1,015.3561
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1186	0.0764	0.9147	2.7400e-003	0.3286	1.7700e-003	0.3304	0.0872	1.6300e-003	0.0888		280.8081	280.8081	8.4700e-003	7.9100e-003	283.3777
Total	0.2051	2.9672	2.3530	0.0115	0.5361	0.0158	0.5519	0.1442	0.0151	0.1592		1,249.2123	1,249.2123	0.0526	0.1618	1,298.7338

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6548	0.0000	0.6548	0.0722	0.0000	0.0722			0.0000			0.0000
Off-Road	3.1227	32.6504	31.6740	0.0671		1.3150	1.3150		1.2136	1.2136	0.0000	6,434.0978	6,434.0978	2.0441		6,485.2007
Total	3.1227	32.6504	31.6740	0.0671	0.6548	1.3150	1.9699	0.0722	1.2136	1.2858	0.0000	6,434.0978	6,434.0978	2.0441		6,485.2007

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0865	2.8908	1.4383	8.8000e-003	0.2076	0.0140	0.2216	0.0570	0.0134	0.0704		968.4041	968.4041	0.0441	0.1539	1,015.3561
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1186	0.0764	0.9147	2.7400e-003	0.3286	1.7700e-003	0.3304	0.0872	1.6300e-003	0.0888		280.8081	280.8081	8.4700e-003	7.9100e-003	283.3777
Total	0.2051	2.9672	2.3530	0.0115	0.5361	0.0158	0.5519	0.1442	0.0151	0.1592		1,249.2123	1,249.2123	0.0526	0.1618	1,298.7338

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594		3,069.8172	3,069.8172	0.9712		3,094.0968
Total	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594		3,069.8172	3,069.8172	0.9712		3,094.0968

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0418	1.6082	0.5729	7.3800e-003	0.2438	9.4500e-003	0.2533	0.0702	9.0400e-003	0.0792		796.9004	796.9004	0.0240	0.1155	831.9167
Worker	0.3944	0.2540	3.0412	9.1200e-003	1.0926	5.8800e-003	1.0984	0.2898	5.4100e-003	0.2952		933.6870	933.6870	0.0282	0.0263	942.2308
Total	0.4362	1.8622	3.6141	0.0165	1.3364	0.0153	1.3517	0.3600	0.0145	0.3744		1,730.5874	1,730.5874	0.0522	0.1418	1,774.1475

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594	0.0000	3,069.8172	3,069.8172	0.9712		3,094.0968
Total	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594	0.0000	3,069.8172	3,069.8172	0.9712		3,094.0968

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0418	1.6082	0.5729	7.3800e-003	0.2438	9.4500e-003	0.2533	0.0702	9.0400e-003	0.0792		796.9004	796.9004	0.0240	0.1155	831.9167
Worker	0.3944	0.2540	3.0412	9.1200e-003	1.0926	5.8800e-003	1.0984	0.2898	5.4100e-003	0.2952		933.6870	933.6870	0.0282	0.0263	942.2308
Total	0.4362	1.8622	3.6141	0.0165	1.3364	0.0153	1.3517	0.3600	0.0145	0.3744		1,730.5874	1,730.5874	0.0522	0.1418	1,774.1475

3.4 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	lb/day										lb/day					
Off-Road	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826		3,069.9241	3,069.9241	0.9712		3,094.2045
Total	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826		3,069.9241	3,069.9241	0.9712		3,094.2045

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0401	1.5974	0.5599	7.2400e-003	0.2438	9.4900e-003	0.2533	0.0702	9.0800e-003	0.0793		783.0385	783.0385	0.0246	0.1135	817.4658
Worker	0.3714	0.2285	2.8476	8.8200e-003	1.0926	5.6000e-003	1.0982	0.2898	5.1600e-003	0.2950		910.3063	910.3063	0.0257	0.0246	918.2733
Total	0.4115	1.8258	3.4074	0.0161	1.3364	0.0151	1.3515	0.3600	0.0142	0.3742		1,693.3447	1,693.3447	0.0502	0.1381	1,735.7391

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826	0.0000	3,069.9241	3,069.9241	0.9712		3,094.2045
Total	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826	0.0000	3,069.9241	3,069.9241	0.9712		3,094.2045

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0401	1.5974	0.5599	7.2400e-003	0.2438	9.4900e-003	0.2533	0.0702	9.0800e-003	0.0793		783.0385	783.0385	0.0246	0.1135	817.4658
Worker	0.3714	0.2285	2.8476	8.8200e-003	1.0926	5.6000e-003	1.0982	0.2898	5.1600e-003	0.2950		910.3063	910.3063	0.0257	0.0246	918.2733
Total	0.4115	1.8258	3.4074	0.0161	1.3364	0.0151	1.3515	0.3600	0.0142	0.3742		1,693.3447	1,693.3447	0.0502	0.1381	1,735.7391

3.5 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1012	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602		4,187.8320	4,187.8320	1.3161		4,220.7353
Paving	0.0129					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.1141	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602		4,187.8320	4,187.8320	1.3161		4,220.7353

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1061	0.0653	0.8136	2.5200e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		260.0875	260.0875	7.3400e-003	7.0200e-003	262.3638
Total	0.1061	0.0653	0.8136	2.5200e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		260.0875	260.0875	7.3400e-003	7.0200e-003	262.3638

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1012	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602	0.0000	4,187.8320	4,187.8320	1.3161		4,220.7353
Paving	0.0129					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.1141	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602	0.0000	4,187.8320	4,187.8320	1.3161		4,220.7353

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1061	0.0653	0.8136	2.5200e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		260.0875	260.0875	7.3400e-003	7.0200e-003	262.3638
Total	0.1061	0.0653	0.8136	2.5200e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		260.0875	260.0875	7.3400e-003	7.0200e-003	262.3638

3.6 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	lb/day										lb/day					
Archit. Coating	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	9.8651	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0801	0.0516	0.6174	1.8500e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		189.5455	189.5455	5.7200e-003	5.3400e-003	191.2800
Total	0.0801	0.0516	0.6174	1.8500e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		189.5455	189.5455	5.7200e-003	5.3400e-003	191.2800

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	9.8651	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0801	0.0516	0.6174	1.8500e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		189.5455	189.5455	5.7200e-003	5.3400e-003	191.2800
Total	0.0801	0.0516	0.6174	1.8500e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		189.5455	189.5455	5.7200e-003	5.3400e-003	191.2800

3.6 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	9.8542	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0754	0.0464	0.5781	1.7900e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		184.7990	184.7990	5.2200e-003	4.9900e-003	186.4164
Total	0.0754	0.0464	0.5781	1.7900e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		184.7990	184.7990	5.2200e-003	4.9900e-003	186.4164

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	9.8542	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0754	0.0464	0.5781	1.7900e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		184.7990	184.7990	5.2200e-003	4.9900e-003	186.4164
Total	0.0754	0.0464	0.5781	1.7900e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		184.7990	184.7990	5.2200e-003	4.9900e-003	186.4164

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Marea Village - San Diego County APCD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.3079	5.4929	46.1999	0.0895	9.7687	0.0721	9.8408	2.6022	0.0672	2.6694		9,278.141 4	9,278.141 4	0.7312	0.4503	9,430.619 2
Unmitigated	5.3079	5.4929	46.1999	0.0895	9.7687	0.0721	9.8408	2.6022	0.0672	2.6694		9,278.141 4	9,278.141 4	0.7312	0.4503	9,430.619 2

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	564.00	564.00	564.00	1,610,391	1,610,391
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	73.05	73.05	73.05	174,583	174,583
High Turnover (Sit Down Restaurant)	624.20	624.20	624.20	1,244,529	1,244,529
Hotel	340.00	340.00	340.00	645,976	645,976
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	212.60	212.60	212.60	437,005	437,005
Strip Mall	342.86	342.86	342.86	528,011	528,011
Total	2,156.70	2,156.70	2,156.70	4,640,495	4,640,495

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

Marea Village - San Diego County APCD Air District, Winter

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

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	68	20	12
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	70	18	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
City Park	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Enclosed Parking with Elevator	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
General Office Building	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
High Turnover (Sit Down Restaurant)	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Hotel	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Parking Lot	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Quality Restaurant	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Strip Mall	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Marea Village - San Diego County APCD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
NaturalGas Unmitigated	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528

Marea Village - San Diego County APCD Air District, Winter

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2805.67	0.0303	0.2586	0.1100	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.0786	330.0786	6.3300e-003	6.0500e-003	332.0401
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
Enclosed Parking with Elevator	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
General Office Building	199.641	2.1500e-003	0.0196	0.0164	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003		23.4872	23.4872	4.5000e-004	4.3000e-004	23.6268
High Turnover (Sit Down Restaurant)	1861.78	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0324	219.0324	4.2000e-003	4.0200e-003	220.3340
Hotel	2872.63	0.0310	0.2816	0.2366	1.6900e-003		0.0214	0.0214		0.0214	0.0214		337.9568	337.9568	6.4800e-003	6.2000e-003	339.9652
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1017.42	0.0110	0.0998	0.0838	6.0000e-004		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003		119.6966	119.6966	2.2900e-003	2.1900e-003	120.4079
Strip Mall	52.2095	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1423	6.1423	1.2000e-004	1.1000e-004	6.1788
Total		0.0950	0.8472	0.6045	5.1900e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528

Marea Village - San Diego County APCD Air District, Winter

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2.80567	0.0303	0.2586	0.1100	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.0786	330.0786	6.3300e-003	6.0500e-003	332.0401
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
Enclosed Parking with Elevator	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
General Office Building	0.199641	2.1500e-003	0.0196	0.0164	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003		23.4872	23.4872	4.5000e-004	4.3000e-004	23.6268
High Turnover (Sit Down Restaurant)	1.86178	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0324	219.0324	4.2000e-003	4.0200e-003	220.3340
Hotel	2.87263	0.0310	0.2816	0.2366	1.6900e-003		0.0214	0.0214		0.0214	0.0214		337.9568	337.9568	6.4800e-003	6.2000e-003	339.9652
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.01742	0.0110	0.0998	0.0838	6.0000e-004		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003		119.6966	119.6966	2.2900e-003	2.1900e-003	120.4079
Strip Mall	0.0522095	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1423	6.1423	1.2000e-004	1.1000e-004	6.1788
Total		0.0950	0.8472	0.6045	5.1900e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

Marea Village - San Diego County APCD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.3002	1.4930	8.3807	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5614	1,805.5614	0.0479	0.0328	1,816.5469
Unmitigated	146.9931	2.8990	185.3596	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8555	3,719.3982	2.4227	0.2053	3,841.1560

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	143.8571	2.8094	177.5760	0.3217		24.8979	24.8979		24.8979	24.8979	2,610.5427	1,094.8235	3,705.3662	2.4091	0.2053	3,826.7847
Landscaping	0.2360	0.0896	7.7836	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0320	14.0320	0.0136		14.3714
Total	146.9931	2.8990	185.3596	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8555	3,719.3982	2.4227	0.2053	3,841.1560

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1642	1.4034	0.5972	8.9600e-003		0.1135	0.1135		0.1135	0.1135	0.0000	1,791.5294	1,791.5294	0.0343	0.0328	1,802.1756
Landscaping	0.2360	0.0896	7.7836	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0320	14.0320	0.0136		14.3714
Total	3.3002	1.4930	8.3807	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5614	1,805.5614	0.0479	0.0328	1,816.5469

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Marea Village - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

**Marea Village Mixed Use Project
Energy Calculations**

Existing Conditions

Land Use	Natural Gas Use		Electricity Use	
	(kBTU/yr)	(Therms)	(kWh/yr)	(MWh/yr)
High Turnover (Sit Down Restaurant)	0	0	0	0
Strip Mall	5,015	50	28,247	28
Totals	5,015	50	28,247	28

Proposed Project

Land Use	Natural Gas Use		Electricity Use	
	(kBTU/yr)	(Therms)	(kWh/yr)	(MWh/yr)
Apartments Low Rise	0	0	375,827	376
City Park	0	0	0	0
Enclosed Parking with Elevator	0	0	418,341	418
General Office Building	72,869	729	46,383	46
High Turnover (Sit Down Restaurant)	679,548	6,795	146,363	146
Hotel	1,048,510	10,485	221,201	221
Parking Lot	0	0	5,586	6
Quality Restaurant	371,359	3,714	79,985	80
Strip Mall	19,057	191	102,227	102
Totals	2,191,343	21,913	1,395,912	1,396

1 kBTU = 0.01 therms

Energy Type	Project Annual Energy Consumption	San Diego County Annual Energy Consumption (2020)	Percentage Increase Countywide
Electricity (MWh)	1,368	19,044,726	0.0072%
Natural Gas (Therms)	21,863	505,216,400	0.0043%

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Marea Village Mixed Use Project Energy Calculations

Existing Conditions

Vehicle Type	Percent of Vehicle Trips ¹	Daily Trips ²	Annual Vehicle Miles Traveled	Average Fuel Economy (miles per gallon) ³	Total Annual Fuel Consumption (gallons) ⁴
Passenger Cars	0.56	519	837,852	22	38,084
Light/Medium Trucks	0.36	336	541,543	17.3	31,303
Heavy Trucks/Other	0.08	76	122,434	6.4	19,130
TOTAL⁶	1.00	931	1,501,828	--	88,517

Notes:

1. Percent of Vehicle Trip distribution based on trip characteristics within the CalEEMod model.
2. Daily Trips taken from ITE manual.
3. Average fuel economy derived from the Department of Transportation.
4. Total Daily Fuel Consumption calculated by dividing the daily VMT by the average fuel economy (i.e., VMT/Average Fuel Economy).
5. Values may be slightly off due to rounding.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Proposed Project

Vehicle Type	Percent of Vehicle Trips ¹	Daily Trips ²	Annual Vehicle Miles Traveled	Average Fuel Economy (miles per gallon) ³	Total Annual Fuel Consumption (gallons) ⁴
Passenger Cars	0.56	1,203	2,588,876	22	117,676
Light/Medium Trucks	0.36	778	1,673,311	17.3	96,723
Heavy Trucks/Other	0.08	176	378,307	6.4	59,110
TOTAL⁶	1.00	2,157	4,640,495	--	273,510

Notes:

1. Percent of Vehicle Trip distribution based on trip characteristics within the CalEEMod model.
2. Daily Trips taken from ITE manual.
3. Average fuel economy derived from the Department of Transportation.
4. Total Daily Fuel Consumption calculated by dividing the daily VMT by the average fuel economy (i.e., VMT/Average Fuel Economy).
5. Values may be slightly off due to rounding.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Net Increase

Vehicle Type	Daily Trips ²	Annual Vehicle Miles Traveled ³	Total Annual Fuel Consumption (gallons) ⁵	2024 Countywide Fuel Consumption (gallons)	Percentage Increase Countywide
TOTAL	1,226	3,138,667	184,992	1,327,707,014	0.0139%

Marea Village Mixed Use Project Energy Calculations

WORKER TRIPS						
Phase	Phase Length (# days)	# Worker Trips	Worker Trip Length	Total VMT	Fuel Consumption Factor (Miles/Gallon/Day)	Total Fuel Consumption
Demolition	22	18	10.8	4277	24.90284233	171.74
Grading	77	40	10.8	33264		1335.75
Building Construction	217	133	10.8	311699		12516.60
Architectural Coating	132	38	10.8	54173		2175.37
Paving	77	27	10.8	22453		901.63
						17101.08
VENDOR TRIPS						
Phase	Phase Length (# days)	# Vendor Trips	Vendor Trip Length	Total VMT	Fuel Consumption Factor (Miles/Gallon/Day)	Total Fuel Consumption
Demolition	22	0	7.3	0	8.343886151	0.00
Grading	77	0	7.3	0		0.00
Building Construction	217	36	7.3	263		31.50
Architectural Coating	132	0	7.3	0		0.00
Paving	77	0	7.3	0		0.00
						31.50
HAULING TRIPS						
Phase	Phase Length (# days)	# Hauling Trips	Hauling Trip Length	Total VMT	Fuel Consumption Factor (Miles/Gallon/Day) ¹	Total Fuel Consumption
Demolition	22	50	25	1250	8.343886151	149.81
Grading	77	6050	3	18150		2175.25
Building Construction	217	0	20	0		0.00
Architectural Coating	132	0	20	0		0.00
Paving	77	0	20	0		0.00
						0.00
TOTAL OFF-SITE MOBILE GALLONS CONSUMED DURING CONSTRUCTION						17,132.58

Marea Village Mixed Use Project Energy Calculations

[illegible]