GLOBAL CLIMATE CHANGE

Ocean Breeze Residential Development
PDS2015-MPA-15-011
County of San Diego, CA

Lead Agency:

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Department of Planning and Land Use
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EXECUTIVE SUMMARY

This analysis and was prepared according to guidelines established within the California Global Warming Solutions Act of 2006 – Assembly Bill 32 (AB32), Senate Bill 97 (SB97), California Environmental Quality Act (CEQA). GHGs analyzed in this study are Carbon Dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O). To simplify GHG calculations, both CH_4 and N_2O are converted to equivalent amounts of CO_2 and are identified as carbon dioxide equivalent (CO_2e). This analysis has been completed in order compare Greenhouse Gas (GHG) emissions from both the proposed 396-unit residential development and an allowable General Plan (GP) buildout development to construct 402 residential units (County of San Diego, 2011).

The Project known as "Ocean Breeze Ranch" envisions providing a total of 396 single-family residential units including 381 single-family detached small lots and 15 estate sized single-family lots and would build local parks and set aside approximately 833 acres for biological preservation on-site along with approximately 10 acres of right-of-way dedication along West Lilac Road and a 30 acre remainder parcel. The project also seeks to obtain a Major Use Permit (MUP) for an existing equestrian facility has been operational since about 1980 and is considered part of the baseline conditions. The existing facility is an estimated 375 acres, the proposed MUP would reduce the size of the operations to approximately 203 acres and would require some improvements to include permitting additional horse shade structures, a horse aquatic therapy pool, relocating employee manufactured homes and as well as an equipment maintenance shop. The equestrian facility would also make road improvements to bring the existing facility up to code with County road and fire code requirements. All improvements are proposed within the existing footprint of the equestrian facility and no expansion of the overall footprint, or increase in intensity of use, is proposed. Since the equestrian facility is an existing use and intensity is not increasing, the proposed modifications would be allowed under CEQA without further analysis.

The Project is located at 5820 West Lilac Road, south of State Highway 76, and approximately 1-mile west of Interstate 15. The Project is located in the northern portion of the unincorporated community of Bonsall in north San Diego County, CA.

All construction phases of the proposed Project are anticipated to start in 2022 and completion is expected in 2029 with full operations in 2030. The proposed Project will utilize Tier 3 or better construction equipment with Diesel Particulate Filters (DPF) during construction.

Project design features (PDFs) have been included in this Project. The applicant has agreed to implement all PDFs and will be included in the Project's Conditions of Approval. The following PDFs applied in this analysis with the purpose of reducing GHG emissions include.

- Project-related construction activities would use Tier 3 or better construction equipment with DPF United States (U.S.) Environmental Protection Agency (EPA)/ California Air

Resources Board (CARB)-certified construction equipment with DPF. The Project developer has confirmed commitment to this feature.

- The Project will utilize architectural coatings compliant with San Diego Air Pollution Control District (SDAPCD) Rule 67 (SDAPCD, 2015).
- Install high-efficiency Light Emitting Diode (LED) street and area lighting to achieve reduction in overall lighting energy.
- The Project will only install Natural Gas fireplaces within all 396 residential units.
- In accordance with the California Integrated Waste Management Act (AB 939), and to be consistent with AB 341's statewide 75% diversion policy, the project will seek to also achieve a 75% diversion goal by providing areas for storage and collection of recyclables and provide literature promoting recycling to achieve additional waste diversion.
- The Project applicant will be required to comply with County's Water Conservation in Landscaping Ordinance and demonstrates a 40% reduction in outdoor use, and will submit a Landscape Document Package to show such compliance. A 20% reduction was assumed within GHG modeling to be conservative
- Install low flow indoor water fixtures in all residential units.
- Plumb and install a single Level 2 electric vehicle (EV) charging station in each of the 396 residential units.
- The Project will install 1,973 KW of PV which is equivalent to 6,577 300-watt panels or an average of 16.6 panels per home.

The proposed Project will emit GHGs directly through operations and construction and indirectly from offsite sources such as water conveyance and utilities. The proposed Project would generate approximately 4,912.37 Metric Tons (MT) of CO_2e each year starting in 2030 from operations alone inclusive of all PDFs above. Additionally, the Project would generate 603.829 MT CO_2e from annual construction emissions bringing the Project generated GHG emissions to 5,516.19 MT CO_2e annually.

The General Plan Update would allow for the construction of 402 single family units consisting of 96 estate units and 306 smaller lots and operationally would generate 6,484.67 MT CO_2e per year starting the same operational year, 2030, as the proposed project. This potential version of the Project is referred to as the General Plan (GP) buildout scenario. The GP buildout would include all PDFs above with the exception of EV chargers in the garages and PV installations. At this time, EV charging stations and PV installation are not regulatory items required for compliance within County and were not included in the GP buildout. Comparing operational emissions from both the proposed Project and the GP buildout for the site, the proposed Project operations would generate 1,562.30 MT CO_2e (6,484.67 MT CO_2e – 4,912.37MT CO_2e) fewer emissions than the GP buildout assumption. Since the proposed project would generate fewer emissions that the GP buildout allows, the Project would generate less than significant GHG impacts.

1.0 INTRODUCTION

1.1 Purpose of this Study

The purpose of this greenhouse gas (GHG) assessment is to provide documentation in support of the Projects conformance with the County of San Diego's (County's) Climate Action Plan (CAP) checklist which is the County's response for compliance with California Global Warming Solutions Act of 2006 – Assembly Bill (AB) 32 and Senate Bill (SB) 97. At the time of preparing this analysis, the County's CAP represents the currently adopted and applicable plan for the purposes of the California Environmental Quality Act (CEQA). AB 32 requires that by 2020 the state's GHG emissions be reduced to 1990 levels and SB 97 a "companion" bill directed amendments to the CEQA statute to specifically establish that GHG emissions and their impacts are appropriate subjects for CEQA analysis.

1.2 Project Location

The Ocean Breeze Ranch Project (Project) is a proposed residential community located in north San Diego County, in the unincorporated community of Bonsall. The property consists of roughly 1,402.52 acres and is located at 5820 West Lilac Road, south of State Highway 76 and the San Luis Rey River, and west of Old Highway 395 and the Interstate 15 freeway. A general Project vicinity map is shown in Figure 1-A of this report.

1.3 Project Description

The Project envisions providing 396 single-family detached lots of which 15 lots will be estate-sized or 5-acres or larger lots. The Project proposes a Tentative Map to develop approximately 312 acres of the site for residential uses which would include approximately 16 acres of local parks which would be designed for use by the development and the public. Additionally, the Project proposes to dedicate and conserve approximately 833 acres for biological preservation on-site along with approximately 10 acres of right-of-way dedication along West Lilac Road and a 30 acre remainder parcel. The proposed Project would include the demolition of a small home and a barn that are roughly 6,000 square feet (SF) combined. The Project site plan is shown in Figure 1-B.

The project would also include a privately-owned equestrian facility on approximately 203 acres. The equestrian facility is an existing use occupying 375 acres. The equestrian facility would be formalized going forward by way of an MUP which would both allow the existing uses as well as permitting additional facilities: horse shade structures, a horse aquatic therapy pool, relocated employee manufactured home, and a relocated equipment maintenance shop. Improvements will be necessary to selected internal existing roads, in order to establish

fire/emergency access routes meeting county fire code requirements. The proposed Project would include the preservation and continued use of the five residential units, two mobile homes, barns, and various accessory buildings existing on-site All improvements are proposed within an area smaller than the existing footprint of the equestrian facility and no expansion of the overall footprint, or increase in intensity of use, is proposed.

Construction of the Project would be expected to begin in 2022 with completion expected in 2029. The first full year of operations is expected in 2030. The project would also require some blasting-related activities; as such, the project's air quality study estimated the criteria air pollutants associated with blasting. Of relevance to this analysis, blasting-related activities would utilize ammonium nitrate with fuel oil (ANFO) based explosives. When ANFO detonates, the blast would produce both CO and NOx which are not considered GHGs (EPA, 1995).

1.4 Project Design Features

Project design features are included to reduce environmental impacts and can be specific to non GHG efficiencies. For purposes of this GHG analysis only GHG specific design measures have been included and have been included per discussions with the project applicant. Therefore, not all Project related design features are discussed within this analysis. This report will define specifically which design features were included within GHG estimation software and it should be expected that whenever a design feature is included within GHG emissions modeling that those particular design features would be required for the Project to implement as a part of the Project's conditions of approval. Project design features directly effecting greenhouse gas emissions and included in modeling include:

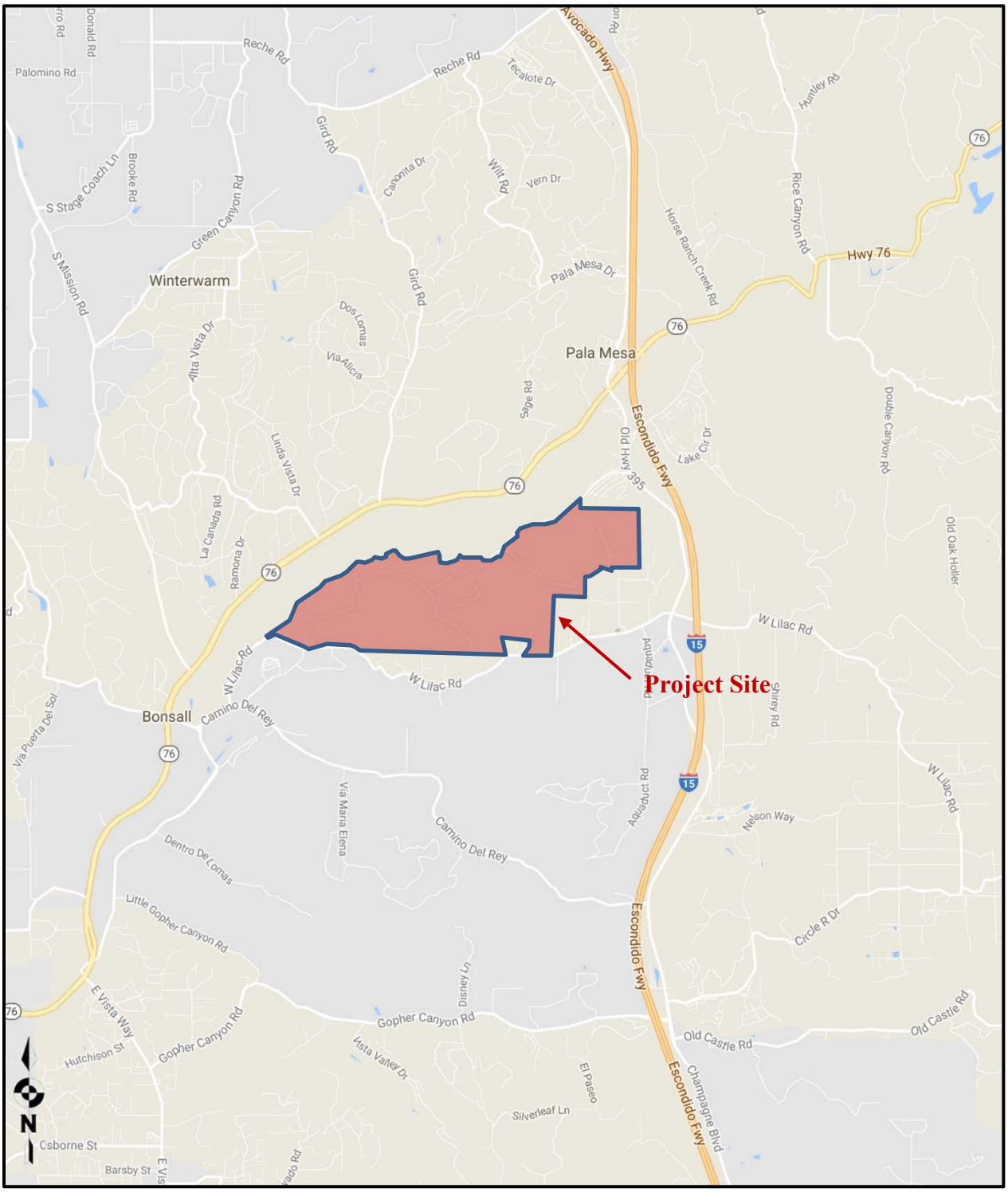
- Project-related construction activities would use Tier 3 or better construction equipment with DPF United States (U.S.) Environmental Protection Agency (EPA)/ California Air Resources Board (CARB)-certified construction equipment with DPF. The Project developer has confirmed commitment to this feature.
- The Project will utilize architectural coatings compliant with San Diego Air Pollution Control District (SDAPCD) Rule 67 (SDAPCD, 2015).
- Install high-efficiency light-emitting diode (LED) street and area lighting to achieve reduction in overall lighting energy.
- The Project will only install Natural Gas fireplaces within all 396 residential units.
- In accordance with the California Integrated Waste Management Act (AB 939), and to be consistent with both AB 341's statewide 75% diversion policy, the project will seek to also achieve a 75% diversion goal. The Project will provide areas for storage and collection of recyclables and provide literature promoting recycling to achieve additional waste diversion, consistent with AB 341.

- The Project applicant will be required to comply with County's Water Conservation in Landscaping Ordinance and demonstrates a 40% reduction in outdoor use, and will submit a Landscape Document Package to show such compliance. A 20% reduction was assumed within GHG modeling to be conservative.
- Install low flow indoor water fixtures in all residential units.
- Plumb and install a single Level 2 EV charging station in each of the 396 residential units.
- The Project will install 1,973 KW of PV which is equivalent to 6,577 300-watt panels or an average of 16.6 panels per home.

The Project will also include design features that could result in additional operational GHG emissions reductions that are not quantified within this report. Since modeling results would not be dependent on installation of these design features, they were not incorporated in this analysis. These design features are discussed in detail below and the implementation of these features would be required as conditions of any approval from the County.

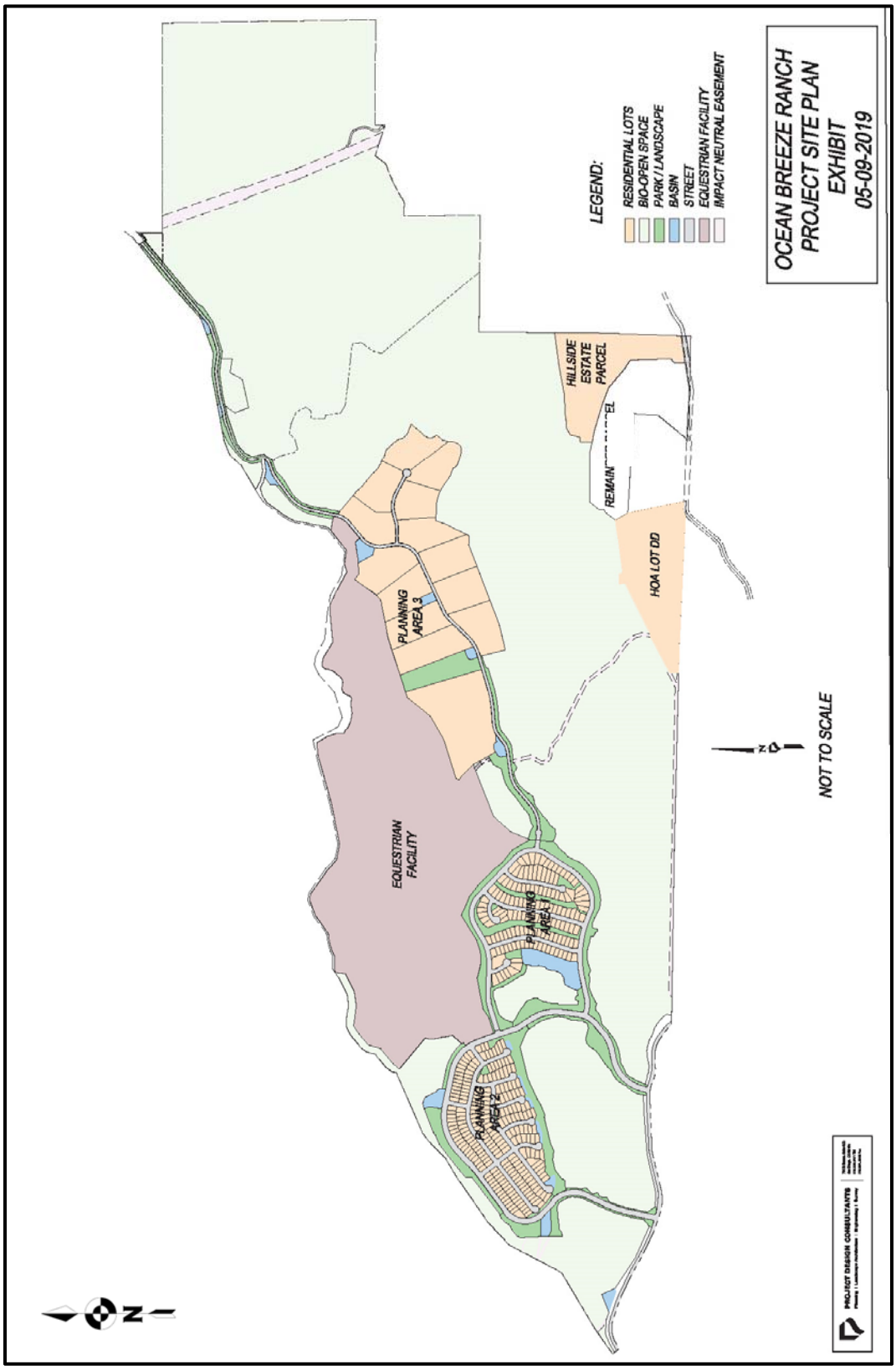
- Landscaped and screened parking areas consistent with the County's Parking Design Manual, including Section 7 (Landscaping) and the "cool parking" mitigation requirements identified by the CARB.
- Provision of short-term bicycle parking racks at several of the park areas within the Project per County requirements.
- Building efficiency features such as High-Efficiency HVAC system, sealed (tight) air ducts that minimize heating and cooling HVAC losses, tankless water heaters and Low E dual pane windows.
- Work with the regional or local water agency to determine if incentives/rebates are available for the purchase and installation of rain barrels.
- Incorporate into Project Covenants, Conditions & Restrictions (CC&Rs) requirements that the HOA coordinate with SANDAG to provide informational materials on rideshare programs such as iCommute San Diego.
- Provide natural gas and electrical outlets in all private rear yards,
- Increase new tree plantings throughout the neighborhood by planting two trees per dwelling unit which is equivalent to a minimum of 792 trees within the Project Site.
- Install weather-based irrigation systems which include rain sensing timers.

Figure 1-A: Project Vicinity Map



Source: (Google, 2018)

Figure 1-B: Proposed Project Site Layout



Source: (Project Design Consultants, 2019)

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Understanding GHGs

GHGs such as water vapor and carbon dioxide are abundant in the earth's atmosphere. These gases are called "Greenhouse Gases" because they absorb and emit thermal infrared radiation which acts like an insulator to the planet. Without these gases, the earth's ambient temperature would either be extremely hot during the day or blistering cold at night. However, because these gases can both absorb and emit heat, the earth's temperature does not sway too far in either direction.

Over the years as human activities require the use of burning fossil fuels stored carbon is released into the air in the form of CO_2 and to a much lesser extent Carbon Monoxide (CO). Additionally, over the years scientist have measured this rise in Carbon Dioxide and the general consensus is that human activities contribute to the heating of the planet. Additionally, other GHGs such as Methane and Nitrous Oxide would contribute to global warming.

GHGs of concern as analyzed in this study are Carbon Dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O). To simplify GHG calculations, both CH_4 and N_2O can be converted to an equivalent amount of CO_2 or CO_2e. CO_2e is calculated by multiplying the calculated levels of CH_4 and N_2O by a Global Warming Potential (GWP). The latest California Emissions Estimator Model (CalEEMod 2016.3.2) developed by Breeze Software uses the Intergovernmental Panel on Climate Change (IPCC) 2007 report as source data for GWP factors for both CH_4 and N_2O (CAPCOA, September 2016), using the 100-year period of 25 and 298, respectively (IPCC, 2007).

2.2 Climate

Climate within the San Diego Air Basin (SDAB) area often varies dramatically over short geographical distances with cooler temperatures on the western coast gradually warming to the east as prevailing winds from the west heat up. Most of southern California is dominated by high-pressure systems for much of the year, which keeps San Diego mostly sunny and warm. Typically, during the winter months, the high-pressure system drops to the south and brings cooler, moister weather from the north. It is common for inversion layers to develop within high-pressure areas, which mostly define pressure patterns over the SDAB. These inversions are caused when a thin layer of the atmosphere increases in temperature with height. An inversion acts like a lid preventing vertical mixing of air through convective overturning.

Meteorological trends within the Bonsall area generally show daytime highs ranging between 67ºF in the winter to approximately 83ºF in the summer with August usually being the hottest month. Daytime Low temperatures range from approximately 44ºF in the winter to approximately 62ºF in the summer. Precipitation is generally about 13 inches per year (WRCC, 2016). Prevailing wind patterns for the area vary during any given month during the year and also vary depending on the time of day or night. The predominant pattern though throughout the year is usually from the west or westerly (WRCC, 2018).

2.3 Existing Setting

During the late 1800's, the ranch was owned by the Gird family and was used for farming and ranching of cattle. These activities survived into the 20th century, and the property was owned by a Hollywood couple as a gentleman farm into the 1940's. In modern times, the site has been in use as a stallion breeding farm for several decades, dating to the purchase of the property by the Vessels Family in 1981. The lower elevations of the property contain an equestrian facility which includes extensive pastures for horses, some of these areas have been cultivated in the past with row crops such as flowers or tomatoes though isn't considered an agricultural resource. Higher elevations and hillside areas were previously utilized for agriculture, with avocado cultivation being the dominant use in areas of steeper topography.

The only existing, operational use on-site is the existing equestrian facility. The existing equestrian use is roughly 375 acres and includes a horse stable, shade structures, employee homes, an equipment maintenance shop, and other ancillary buildings related to the equestrian use.

Land uses surrounding the Project mostly include single family residential to the south and east uses and a middle/high school facility to the southeast. Bonsall High School and Sullivan Middle School (located on the same site) are located about 140 meters, or about 600 feet, southeast of the closest residential lot. The property includes a variety of terrain, from relatively flat alluvial plain near the river along the northern boundary to ridges and hillsides near the property's southern boundaries. Elevations at the northern boundary vary from 175 feet above mean sea level (MSL) at the northwest, to 840 feet at the northeast. Elevations increase progressively to the south, with ridgelines at or near the southern boundary having elevations ranging from 367 feet at the southwest to 725 feet at the southeast.

3.0 CLIMATE CHANGE REGULATORY ENVIRONMENT

3.1 Federal

Massachusetts v. EPA

On April 2, 2007, in *Massachusetts v. EPA*, the Supreme Court directed the EPA Administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. In making these decisions, the EPA Administrator is required to follow the language of Section 202(a) of the federal Clean Air Act. On December 7, 2009, the EPA Administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The Administrator found that elevated concentrations of GHGs— Carbon Dioxide CO_2, CH_4, N_2O, Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The Administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

3.2 State

State Greenhouse Gas Targets

Executive Order S-3-05

Executive Order (EO) S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050.

AB 32 and CARB's Climate Change Scoping Plan

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, the CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and regulations necessary to achieve the GHG emissions reduction mandate of AB 32. Therefore, in furtherance of AB 32, CARB adopted regulations requiring the reporting and verification of GHG emissions from specified sources, such as industrial facilities, fuel suppliers and electricity importers (see Health & Safety Code Section 35830; Cal. Code Regs., tit. 17, §§95100 et seq.). CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons (MMT) CO_2e). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (*Scoping Plan*) in accordance with Health and Safety Code Section 38561. The *Scoping Plan* established an overall framework for the measures that will be implemented to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The 2008 *Scoping Plan* evaluated opportunities for sector-specific reductions, integrated all CARB and Climate Action Team[1] early actions and additional GHG reduction features by both entities, identified additional measures to be pursued as regulations, and outlined the role of a cap-and-trade program. The key elements of the 2008 *Scoping Plan* include the following (CARB, 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
2. Achieving a statewide renewable energy mix of 33 percent
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard

[1] The Climate Action Team is comprised of state agency secretaries and heads of state agencies, boards and departments; these members work to coordinate statewide efforts to implement GHG emissions reduction programs and adaptation programs.

6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

In the 2008 *Scoping Plan*, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent from the otherwise projected 2020 emissions level; i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as "Business-As-Usual" [BAU]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the *Scoping Plan's* Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations (CARB, 2011). Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 percent (down from 28.5 percent) from the BAU conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (12 percent to 20 percent), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16 percent (down from 28.5 percent) from the BAU conditions.

In 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (*First Update*). The stated purpose of the *First Update* was to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050." The *First Update* found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the *First Update*, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050." Those six areas are: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and, (6) natural and working lands. The *First Update* identified key

recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal.

Based on CARB's research efforts presented in the *First Update*, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050." Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and, the rapid market penetration of efficient and clean energy technologies.

As part of the *First Update*, CARB recalculated the state's 1990 emissions level using more recent global warming potentials identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO_2e) and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15 percent (instead of 28.5 percent or 16 percent) from the BAU conditions.

In November 2017, CARB released *California's 2017 Climate Change Scoping Plan* (*Second Update*) for public review and comment (CARB, 2017). This update proposes CARB's strategy for achieving the state's 2030 GHG target as established in SB 32 (discussed below). The strategy includes continuing the Cap-and-Trade Program through 2030[2], inclusive policies and broad support for clean technologies, enhanced industrial efficiency and competitiveness, prioritization of transportation sustainability, continued leadership on clean energy, putting waste resources to beneficial use, supporting resilient agricultural and rural economics and natural and working lands, securing California's water supplies, and cleaning the air and public health. When discussing project-level GHG emissions reduction actions and thresholds, the *Second Update* states "[a]chieving no additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." However, the *Second Update* also recognizes that such an achievement "may not be feasible or appropriate for every project … and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA." CARB's Governing Board adopted the *Second Update* in December 2017.

EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim goal of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its

[2] In July 2017, AB 398 was enacted into law, thereby extending the legislatively-authorized lifetime of the Cap-and-Trade Program to December 31, 2030.

trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050 as set forth in S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's *Scoping Plan* to express the 2030 target in terms of MMT CO_2e. The EO also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016.

SB 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction target; make changes to CARB's membership, and increase legislative oversight of CARB's climate change-based activities; and expand dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members. The legislation further requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and identify specific information for GHG emissions reduction measures when updating the scoping plan, including information regarding the range of projected GHG emissions and air pollution reductions that result from each measure and the cost-effectiveness (including avoided social costs) of each measure (see Health & Safety Code Section 38562.7).

<u>Building Energy</u>

Title 24, Part 6

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new buildings and alterations or additions to existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is required by law to adopt standards every 3 years that are cost effective for homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy efficient technologies and

construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2013 Title 24 standards went into effect on July 1, 2014 and were estimated to reduce energy uses between 3.8% to 36.4%, depending on the energy source and land (Architectural Energy Corporation (AEC), 2013).

The 2016 Title 24 standards, which went into effect on January 1, 2017, are the currently applicable standards. When comparing the 2013 and 2016 standards for electrical consumption, it is expected that low-rise, single-family detached homes and multi-family homes would use 12% and 15% less electricity under the 2016 standards, respectively. Similarly, implementation of the 2016 standards is expected to reduce natural gas consumption by 21% in single-family homes and 31% in multi-family homes. Newly constructed non-residential buildings are estimated to achieve a 5% reduction in electricity consumption under the 2016 standards and no significant change relative to natural gas consumption (California Energy Commission, 2015). The current version of CalEEMod used in this analysis, as a default parameter, the 2016 Title 24 standards to estimate GHG emissions.

The Project would be required, at a minimum, to comply with the latest version of Title 24 standards at the time the Project seeks building permits. This will likely be the 2019 version of Title 24 which will continue to improve upon the 2016 Standards for residential and nonresidential buildings. One of the most notable changes is the requirement for the installation of rooftop solar on all residential buildings (California Energy Commission, 2017). The 2019 Standards will go into effect on January 1, 2020. It should be noted that the State updates these regulations every three years. Thus, throughout project construction, buildings will need comply with the most recently adopted standards.

Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen

2016 standards became effective on January 1, 2017. The mandatory standards require the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance
- Sixty five (65) percent of construction and demolition waste must be diverted from landfills
- Mandatory inspections of energy systems to ensure optimal working efficiency
- Inclusion of EV charging stations or designated spaces capable of supporting future charging stations
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements; stricter water conservation, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 75 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs.

Zero Net Energy Design Goals

As recognized in the *First Update* to the *Scoping Plan*, the California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving zero net energy (ZNE) for new construction in California. As background, the California Public Utilities Commission first set forth its zero net energy goals in the 2008 Energy Efficiency Strategic Plan and the 2011 Big Bold Energy Efficiency Strategies. The key policy timelines include: (1) all new residential construction in California will be zero net energy by 2020, and (2) all new commercial construction in California will be zero net energy by 2030. As most recently defined by the CEC in its 2015 *Integrated Energy Policy Report*, a zero net energy code building is one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building using the CEC's Time Dependent Valuation metric. It should be noted that Title 24 (2019) which will be effective in 2020 requires rooftop solar for all new residential units.

Title 20

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include: refrigerators, refrigerator-freezers and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Mobile Sources

AB 1493

In response to the transportation sector accounting for more than half of California's CO_2 emissions, AB 1493 was enacted in July 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30 percent (CARB, 2017).

EO S-1-07

Issued in January 2007, EO S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing,

transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste.

SB 375

SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations (MPOs) are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan. The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If a SCS is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), a SCS does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for the San Diego Association of Governments (SANDAG) are a 7 percent reduction in emissions per capita by 2020 and a 13 percent reduction by 2035. SANDAG completed and adopted its *2050 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) in October 2011. In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

After SANDAG's 2050 RTP/SCS was adopted, a lawsuit was filed by the Cleveland National Forest Foundation and others. The matter was recently resolved by the California Supreme Court (Case No. S223603), which held that SANDAG did not abuse its discretion when certifying its EIR by declining to explicitly engage in an analysis of the consistency of the

RTP/SCS' projected 2050 GHG emissions with the GHG reduction goals reflected in EO S-3-05.

In 2015, SANDAG adopted the next iteration of its RTP/SCS in accordance with statutorily mandated timelines and no subsequent litigation challenge was filed. More specifically, in October 2015, SANDAG adopted *San Diego Forward: The Regional Plan*. Like the 2050 RTP/SCS, this planning document meets CARB's 2020 and 2035 reduction targets for the region (SANDAG, 2015). In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB, 2017). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75 percent less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34 percent in 2025 (CARB, 2012).

The Zero Emission Vehicle (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric (PHEV) vehicles in the 2018 to 2025 model years (California Air Resources Board, 2017). PHEVs contain both an internal combustion engine and an electric motor, which is powered by batteries. As defined by CARB, ZEVs includes PHEVs, Battery Electric Vehicles (BEV) and Fuel Cell Electric Vehicles (FCEV). The Clean Fuels Outlet regulation will ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of the new advanced technology vehicles as they come to the market. In the context of this report, "EV" is used to refer to all types of electric, and low- or zero-emission vehicles.

As of the publication date of this report, FCEVs are not common in the San Diego region due to limited refueling capabilities. Based on information obtained from the California Fuel Cell Partnership, only one hydrogen fuel station (located in the City of Del Mar) exists in San Diego County. At this time, one station is planned for construction in the City of San Diego sometime

in the future. (California Fuel Cell Partnership, 2017). Therefore, for purposes of this analysis, only BEVs and PHEVs are referenced when ZEVs are discussed. If FCEVs gain traction in San Diego, additional GHG reductions would be realized.

EO B-16-12

EO B-16-12 (March 2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution of ZEVs. This EO also sets a long-term target of reaching 1.5 million zero-emission vehicles on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80 percent less than 1990 levels by 2050. In furtherance of this EO, the Governor convened an Interagency Working Group on Zero-Emission Vehicles that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet.

EO B-48-18

In January 2018, Governor Brown signed Executive Order B-48-18, setting ambitious targets of 200 hydrogen fueling stations and 250,000 electric vehicle chargers to support 1.5 million zero-emission vehicles (ZEVs) on California roads by 2025 and 5 million ZEVs by 2030. The initiative is designed to focus multi-stakeholder efforts on deploying charging and fueling infrastructure as well as making ZEVs increasingly affordable to own and operate (Office of Governor Edmund G. Brown Jr., 2018).

AB 1236

AB 1236 (2015), as enacted in California's Planning and Zoning Law, requires local land use jurisdictions to approve applications for the installation of electric vehicle charging stations, as defined, through the issuance of specified permits unless there is substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill requires local land use jurisdictions with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that creates an expedited and streamlined permitting process for electric vehicle charging stations, as specified. In August 2016, the County Board of Supervisors adopted Ordinance No. 10437 adding a section to its County Code related to the expedited processing of electric vehicle charging stations permits consistent with AB 1236.

SB 350

In 2015, SB 350 – the Clean Energy and Pollution Reduction Act – was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see Public Utilities Code Section 740.12).

Renewable Energy Procurement

SB 1078

SB 1078 (2002) established the Renewables Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1 percent of sales, with an aggregate goal of 20 percent by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20 percent of their power from renewable sources by 2010.

SB X1 2

SB X1 2 (2011) expanded the RPS by establishing that 20 percent of the total electricity sold to retail customers in California per year by December 31, 2013, and 33 percent by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

SB 350

SB 350 (2015) further expanded the RPS by establishing that 50 percent of the total electricity sold to retail customers in California per year by December 31, 2030 be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency.

SB 100

SB 100 (2018) has further accelerated and expanded the RPS, requiring achievement of a 50 percent RPS by December 31, 2026 and a 60 percent RPS by December 31, 2030. SB 100 also established a new statewide policy goal that calls for eligible renewable energy resources and zero-carbon resources to supply 100 percent of electricity retail sales and 100 percent of electricity procured to serve all state agencies by December 31, 2045.

Water

EO B-29-15

In response to drought-related concerns, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Solid Waste

AB 939 and AB 341

In 1989, AB 939, known as the Integrated Waste Management Act (Public Resources Code Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25 percent by 1995 and 50 percent by the year 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority

strategies that CalRecycle believes would assist the state in reaching the 75 percent goal by 2020.

Increasing the amount of commercial solid waste that is recycled, reused, or composted will reduce GHG emissions primarily by 1) reducing the energy requirements associated with the extraction, harvest, and processing of raw materials and 2) using recyclable materials that require less energy than raw materials to manufacture finished products (CalRecycle, 2018). Increased diversion of organic materials (green and food waste) will also reduce GHG emissions (CO_2 and CH_4) resulting from decomposition in landfills by redirecting this material to processes that use the solid waste material to produce vehicle fuels, heat, electricity, or compost.

3.3 Local Regulations

County of San Diego General Plan

The County's General Plan Update (approved in 2011) provides smart growth and land use planning principles designed to reduce GHG emissions. GHG reduction policies are addressed within multiple elements of the General Plan Update. The strategies for reduction of GHG emissions in the General Plan Update are to reduce vehicle miles traveled (VMT), energy consumption, water consumption and solid waste. The General Plan Update also discusses the increased generation and use of renewable energy sources to reduce non-renewable electrical and natural gas energy consumption.

County of San Diego Climate Action Plan (CAP)

The County's CAP is a long-term plan that identifies strategies and measures to meet the County's targets to reduce GHG emissions by 2020 and 2030, consistent with the State's legislative GHG reduction targets, and demonstrates progress towards the State's 2050 GHG reduction goal (County of San Diego, 2017). At the time of preparing this greenhouse gas analysis, the County's CAP represents the currently adopted and applicable plan for CEQA purposes. Though not required to show consistency with the CAP, further analysis was provided within this report to demonstrate the Project's emissions compared to what would be generated by the maximum buildout of the site assumed under the General Plan.

In February 2018, the County's Board of Supervisors adopted a CAP that serves as a long-term programmatic plan that identifies strategies and measures to meet the County's targets to reduce GHG emissions by 2020 and 2030, consistent with the State's legislative GHG reduction targets, and demonstrates progress towards the State's 2050 GHG reduction goal. The Board's adoption of the CAP is the culmination of a multi-year plan development process

that followed from the judicial invalidation (see Sierra Club v. County of San Diego (Case No. D064243)) of the County's prior CAP, which was adopted in 2012. In February 2018, the Board also amended General Plan Goal COS-20 and Policy COS-20.1 – both originally adopted as part of the 2011 General Plan Update – to reflect recent changes in State law. (See the County's Final Supplement to the 2011 General Plan Update Program EIR (SCH No. 2016101055), pages 1-13 through 1-16.) When certifying the Environmental Impact Report (EIR) for the CAP last year, the Board also adopted mitigation measure M-GHG-1, establishing a protocol through which GPA projects may meet a portion of their GHG reduction obligation by purchasing offsets, including offsets that are generated by GHG reduction activities located outside of the County.

In March 2018, several petitioners filed a lawsuit against the County, alleging that the CAP and, in particular, M-GHG-1 were inconsistent with General Plan Goal COS-20 and Policy COS-20.1, which in December 2018, the trial court issued a writ ordering the approval of the CAP and its EIR to be set aside. In January 2019, the County appealed the San Diego Superior Court ruling, which stayed the trial court's ruling.

3.4 Project Specific Guidelines

The following discussion provides a generally applicable overview of the pertinent parameters of the CEQA Guidelines amendments that address GHG emissions.

Appendix G of the CEQA Guidelines

Appendix G of the CEQA Guidelines was revised December 28, 2018. According to Appendix G of the CEQA Guidelines, a project would have a significant environmental impact related to GHGs if it would:

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

For purposes of this analysis, the two Appendix G checklist questions set forth above are utilized as the thresholds of significance when evaluating the environmental effects of the project's GHG emissions. In applying these thresholds, reference is made to CEQA Guidelines Section 15064.4(b)(1)-(3), as described above.

County of San Diego General Plan

A project's adherence to the County's General Plan can be determined through demonstrating consistency with General Plan land use assumption and policies. If a project would generate fewer GHG emissions than the maximum allowable buildout of the site under the General Plan land use designations, the project would have a less than significant GHG impacts. Further consistency with the General Plan can be demonstrated through compliance with applicable General Plan policies. See Table 5.4 for the project's consistency with applicable General Plan strategies, goals, and policies.

County of San Diego Climate Action Plan (CAP)

Per County guidelines, the thresholds of significance for climate change are:

"A proposed project would have a less than significant cumulatively considerable contribution to climate change impacts if it is found to be consistent with the County's Climate Action Plan; and, would normally have a cumulatively considerable contribution to climate change impacts if it is found to be inconsistent with the County's Climate Action Plan." Consistency with the CAP is determined through the CAP Consistency Review Checklist (Checklist) and provides a streamlined CEQA review process for proposed discretionary development projects. The Checklist is the mechanism that is used to demonstrate consistency with the CAP. If a project does not comply with required actions in the Checklist, it would be determined to be inconsistent with the CAP.

If a project is consistent with the projections in the CAP, its associated growth in terms of GHG emissions was accounted for in the CAP's projections and would not increase emissions beyond what is anticipated in the CAP or inhibit the County from reaching its reduction targets. If a land use and/or zoning designation amendment results in a more GHG-intensive project, the project is required to demonstrate consistency with applicable CAP measures and offset the increase in emissions.

Although the CAP and its EIR remain applicable while the County appeals the trial court's decision, the CEQA analysis prepared for the proposed Project did not rely on the CAP to streamline the Project's environmental analysis under CEQA Guidelines Section 15183.5. Rather, the proposed Project's significance determination used the criteria contained in CEQA Guidelines Appendix G, (informed by CEQA Guidelines Section 15064.4) and mitigation strategies (informed by CEQA Guidelines Section 15126.4(c)) that are independent of the

CAP.[3] As such, in the event that the CAP does not withstand judicial scrutiny, the Project uses a project-specific threshold and analysis for determining whether the Project's GHG emissions would significantly impact the environment.

As explained in the CAP, the Checklist is the mechanism that is used to demonstrate consistency with the CAP. If a project does not comply with required actions in the Checklist, it would be determined to be inconsistent with the CAP. Also, per the County's CAP all projects are required to complete a CAP checklist. It should be noted that regardless of the status of legal proceedings associated with the CAP, the Project has completed the CAP Consistency Review Checklist which is provided as ***Attachment A*** to this analysis. If a project is consistent with the projections in the CAP, its associated growth in terms of GHG emissions was accounted for in the CAP's projections and would not increase emissions beyond what is anticipated in the CAP or inhibit the County from reaching its reduction targets. If a project is consistent with the projections in the CAP, its GHG emissions would not conflict with an applicable plan adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, the Project would be in compliance with Appendix G of the CEQA Guidelines and would result in a less than significant impact.

[3] Individual projects may be approved using thresholds developed on a project-by-project basis. While lead agencies can adopt a significance threshold for general use pursuant to CEQA Guidelines§ 15064.7, they can alternately determine a threshold on a project-by project basis, which is specifically allowed pursuant to CEQA Guidelines § 15064.4(a), case law and several other expert sources. Under the CEQA Guidelines, lead agencies have the discretion to determine the appropriate method for evaluating GHG emissions, based to the extent possible on scientific and factual data.

4.0 METHODOLOGY

4.1 Construction CO_2e Emissions Calculation Methodology

The Project construction dates were estimated based on a construction kickoff in 2022 with construction ending in 2029. The proposed Project would include the demolition a small home and a barn that are roughly 6,000 SF combined. To be conservative for modeling purposes 15,000 square feet of demolition was assumed. Additionally, per the project engineer, approximately 1,900,000 CY of balanced cut / fill of which 945,000 Cubic Yards of that same material will be hauled onsite 1,500 feet away within Planning Areas 1 and 2. For purposes of analysis, a haul distance of 0.5 miles was assumed.

CalEEMod Version 2016.3.2 was utilized for all construction calculations. Also, CalEEMod has been manually updated to reflect SDAPCD Rule 67 paint Volatile Organic Compound (VOC) limits and to include Tier 3 construction equipment with DPF as the Project applicant would include this as a PDF. Table 4.1 on the following page shows the expected timeframes for all the project infrastructure, facilities, improvements and structures at the site, as well as the expected number of pieces of equipment have been provided by the applicant. As previously discussed, the project's blasting-related activities would not generate GHG emissions.

This analysis includes a comparison between what is allowed under the General Plan (GP) buildout (402 residential units) and the proposed 396-unit residential development. Since the Project is more or less similar by use (though smaller and less intense), it's reasonable to assume the construction intensity of the proposed Project would be less than the GP buildout. Although it would likely be less, for conservative purposes it is assumed that the GP Buildout would not generate greater construction emissions than the Project.

Table 4.1: Expected Construction Equipment

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Demolition	03/01/2022	03/21/2022	
Excavators			1
Site Preparation	03/22/2022	07/25/2022	
Rubber Tired Dozers			3
Tractors/Loaders/Backhoes			4
Grading	07/26/2022	11/21/2022	
Bore/Drill Rigs			2
Crushing/Proc. Equipment			1
Excavators			3
Graders			3
Rubber Tired Dozers			3
Scrapers			4
Tractors/Loaders/Backhoes			3
Paving	8/29/2023	10/23/2023	
Pavers			2
Paving Equipment			2
Rollers			2
Building Construction	10/24/2023	7/5/2029	
Cranes			1
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Architectural Coating	5/20/2024	07/5/2029	
Air Compressors			1

This equipment list is based upon equipment inventory within CalEEMod. The quantity and types are based upon assumptions from Projects of similar size and scope in the County of San Diego.

4.2 Operational Emissions Calculation Methodology

Operational GHG sources for the Project would include: area sources such as landscaping, architectural coatings during maintenance, and hearth operations; energy sources from natural gas and electrical usage; mobile sources from vehicular traffic including trucks and passenger vehicles; solid waste from trash generation and decomposition at landfills; and emissions generated through the conveyance and treatment of water. PDFs as defined in Section 1.4 have been included within the analysis.

GHG emissions for mobile, energy, water, and solid waste source emissions were estimated based on default inputs with the exception of traffic. Based on the projected traffic volumes by the Project applicant, the Project would generate as much as 3,990 Average Daily Trips (ADT) as identified within the Project traffic study (LSA, 2019).

The GP buildout would consist of 96 Estate homes and 306 smaller single-family lots. Consistent with the traffic study prepared for the proposed project, the GP buildout project is estimated to generate 12 trips per estate home unit and 10 trips per smaller single-family home unit (LSA, 2019). Based on the traffic inputs, the GP buildout would generate 4,212 daily traffic trips. The GP buildout was assumed to have the same operational year as the proposed project (2030) and included all project design features that would be required for the project. Two PDFs included as part of the Project that were excluded in the GP buildout analysis include the following two PDFs:

- Installing Level 2 EV charging stations
- Installing a solar/photovoltaic system on each dwelling unit

At this time, EV charging stations and PV installation are not regulatory items required for compliance within the County and were not included in the GP buildout. For calculations with respect the proposed Project and the GP buildout, electrical energy-intensity factors were updated within CalEEMod to reflect San Diego Gas and Electric's (SDG&E) emissions rate variations from 2009 which is the default rate data used by CalEEMod. In 2009, SDG&E achieved 10.5 percent procurement of renewable energy (California Public Utilities Commission, 2016) and in 2030 will have up to 50% in place per requirements of SB 350. Given this, SDG&E energy-intensity factors for 2030 were calculated and were modeled as such within CalEEMod as shown in Table 4.2 and are shown in ***Attachment B*** to this report.

Table 4.2: SDG&E Energy Intensity Factors

GHG	2009 Factors (lbs/MWh) w/10.5% RPS	2030 Factors – 50% Renewables (lbs/MWh)
Carbon Dioxide (CO_2)	720.49	402.51
Methane (CH_4)	0.029	0.0162
Nitrous Oxide (N_2O)	0.006	0.0034

As a PDF, the Project and GP buildout were assumed to exclusively utilize high-efficiency indoor and outdoor lighting in all buildings. One example of high-efficiency lighting LED lighting. LED indoor lighting is 75-90% more efficient than standard lighting. For example: a 10-watt LED bulb replaces a 60-watt standard bulb, which would be 83% more efficient. A typical 15-watt LED bulb has an equivalent rating of a 100-watt standard bulb. High-efficiency lighting is addressed by both the 2013 Title 24 standards (CEC, 2012) and the 2016 Title 24 standards (CEC, 2015); these standards specifically call out lighting power density requirements for non-residential land uses. However, the lighting power density requirements do not change across the two sets of Title 24 standards. Rather, as illustrated by Table 140.6-

B within the 2013 and 2016 Title 24 standards, the applicable requirement is 0.60 watts per ft^2. Of note, the default parameters of the version of CalEEMod used in this analysis (along with its predecessor versions) do not account for high-efficiency lighting technologies or the 2016 Title 24.

Default parameters of CalEEMod 2016.3.2 (along with its predecessor models) do not account for high-efficiency lighting technologies. For purposes of this analysis, the design feature to utilize 100% high-efficiency lighting would reduce energy usage from combined indoor and outdoor lighting by at least 75% from that estimated within CalEEMod as is discussed in the paragraph above. Calculations on estimated lighting energy reductions are shown in ***Attachment C*** and assume a conservative 65% reduction.

As noted earlier the Project would also install EV Charging Stations within all 396 garages and enough PV to offset all the electrical energy consumed by the Project including the energy needed for EV charging. Specific GHG emissions reductions from these PDFs (EV Charging and PV) are discussed below. CalEEMod for operations excluding EV and PV are shown in ***Attachment D*** to this report.

EV Systems

To begin, the electrification of California's transportation sector is recognized by CARB and other state, regional and local agencies as a critical element of the State's attainment of its 2030 and 2050 reduction targets. Indeed, CARB's *Second Update* to the *Scoping Plan* (as adopted in December 2017) seeks to have 1.5 million ZEVs on California's roadways in 2025 and 5 million ZEVs by 2030 (Office of Governor Edmund G. Brown Jr., 2018). The plan would require billions of dollars in investment, and would deploy ZEVs across all classes of vehicles and would accelerate deployment of alternative fueling infrastructure.

Information Regarding Vehicle Marketplace Conditions and Trends.

In 2015, 17,836,000 new vehicles and 38,276,140 used vehicles were sold within the United States (Davis, October 2016) (Edmonds, 2016), for a total of 56,112,140 vehicle sales. There also were 218.084 million licensed drivers in 2015 (Statista, 2016). Based on this, roughly 25.7% of drivers buy a vehicle each year and, of that total, 8% will buy a new vehicle and 92% will buy a used vehicle.

In 2015, 2,052,750 light-duty vehicles were sold in California (California New Car Dealers Association, 2016). Total light-duty vehicle registration was 24,487,807 (CA DMV, 2016), which makes new cars roughly 8.4% of total registration, this statewide data point generally correlates with the nationwide data points. Also, it should be noted that Californians are

responsible for between 45% and 55% of all electric vehicle sales within the United States. As of 2016, Californians drive 47% of all EVs on the road in the U.S. (Office of Governor Edmund G. Brown Jr., 2018). Between March 2010 and July 2016, more than 223,000 EVs were sold in California (California Energy Commission, 2016).

In 2015, 1.7% of all new vehicle sales in California were for plug-in EVs (California New Car Dealers Association, 2016). In 2040, it's estimated that California's EV market share will be 35% of all new vehicles sold that year (Bloomberg New Energy Finance, 2016). Based on this, an annual average EV sales increase of 11.8% needs to be realized in order to achieve a 35% market share by 2040. Using this interpolated methodology, in 2030, it is expected that at least 11.76% of all new vehicles in California would be EVs.

Additional information regarding the EV penetration forecasts for California utilized in this analysis are provided in Table 4.3. It should be noted that the information in Table 5.4 pertains to new car sales in California and does not account for the larger scaled used car market described herein.

Table 4.3: Expected EV Market Share as a % of Total New Cars Purchased

Year	EV Market Share (%) - California	Total EV Sold per year - California
2015	1.70%[2]	34,897[5]
2020	3.79%	77,728
2025	6.67%	136,983
2030	11.76%	241,411
2035	20.73%	425,449
2040	35.00%[4]	718,463

[1] 2015 Auto Sales: 2,052,750. Source: (California New Car Dealers Association, 2016)
[2] Source: (LA Times, May 2017)
[3] Calculated 11.8% average annual increase expected from 2017 to 2040 to reach 35% new EV market share by 2040.
[4] Source: (Bloomberg New Energy Finance, 2016)
[5] Based on information published by the California Energy Commission, 223,000 EVs had been purchased in California between 2010 and 2016.

As stated above, 92% of all vehicles sold within the US are used vehicles, used EV purchases would also be expected within the proposed community. Used EV markets would reflect the availability of EVs from prior model years, and would likely be dependent on availability and costs. While some of the financial incentives for purchasing a new EV may not be available within the used EV market, it is reasonable to expect that incentives received by new buyers would be reflected in each car's resale price. This information is consistent based on used EV research by Fleetcarma, EV sales are typically very reasonable. "In 2017, the electrified Ford sells for less than $10,000 on the used market. The Focus Electric is not alone. Used models

of the Nissan Leaf, Smart Fortwo Electric Drive and Fiat 500e start around $6,000. These prices speak for themselves, and the odometers inside the cars rarely read higher than 40,000 miles." (Fleetcarma, 2017).

Information Regarding Factors That Influence Purchasing Decisions.

There are a number of key characteristics and factors that impact if and when people purchase an EV. The key factors that influence the decision to purchase an EV include the ability to charge at home or work, battery range, recharging infrastructure, purchase price, rebates and tax credits, operating cost and environmental influences (i.e., "being green"). A 2016 survey conducted by the Union of Concerned Scientists (UCS) found that more than 54% of California drivers are likely to consider an EV in their next vehicle purchase or lease, and more than 65% are interested in EVs (Consumers Union Policy & Action from Consumer Roports, 2016).

EV purchasing behavior suggests that price is the barrier to adoption of EVs, with cost including the initial purchase cost of the vehicle and the subsequent operating costs. Historically, the purchase price of an EV used to be about $8,000 to $10,000 higher than comparable internal combustion vehicles, prior to application of incentives (such as state and federal tax rebates and credits, like the California Clean Vehicle Rebate Project). Since the introduction of more competition in the marketplace attributable to the number of EV manufacturers and models, the comparative costs have declined by $5,000 to $10,000 (Edmonds, 2016). Additionally, since 2007, the cost of EV batteries has declined over the years from $1,000/kWh to $410/kWh and is expected to decrease further (Yirka, 2015).

EV operating costs also tend to be lower than those associated with conventional gas vehicles. For example, electricity costs per-mile typically pale in comparison to even the most efficient comparable gas vehicles. A study conducted by Fleetcarma looked at seven of the leading EVs and compared them to their closest gas-fueled equivalents. The study used current average electric and gas prices and calculated costs per mile for each model and found some offering significant cost-of-ownership savings over time and a full recoup of cost in a normal vehicle lifecycle (McDonald, 2016). In addition to operational cost savings, other benefits are associated with the utilization of EVs, such as access to HOV lanes for single drivers that can serve to reduce commute times and preferred EV parking.

As noted above, the range that an EV can travel on one charge also is a key topic associated with the decision to purchase an EV. With the recent increase in battery charge ranges from EVs and the increasing presence of publicly available charging stations in the near horizon, the issue of "range" is expected to diminish in importance. For example, Tesla launched the new Model 3 for around $35,000 and advertised over 200 miles in range on a single charge.

Tesla confirmed having received nearly 400,000 Model 3 reservations since its unveiling in March 2016 (Fehrenbacher, 2016).

The overall charging network and charging station availability also is of interest to potential EV buyers. Numerous studies have shown that EV charging currently occurs primarily at home, and this will most likely continue with the remaining EV charging occurring at work and retail stores. Charging stations outside the home are also critical to EV conversion.

California is making significant progress in both ZEV infrastructure construction and vehicle deployment. One regionally-specific example is the Charge Ready Program, administered by Southern California Edison, which calls for approximately 1,500 charging stations at 150 workplaces, multi-unit dwellings, fleets and destination centers, and requires time-of-use rates and demand response capabilities for these facilities. Additionally, the Power Your Drive Program, administered by San Diego Gas & Electric, authorizes roughly 3,500 charging stations at 350 workplaces and multi-unit dwellings, as well as a vehicle-grid integration rate to incentivize charging that is responsive to dynamic, location-based electricity rates that will help integrate renewable energy and avoid infrastructure and capacity upgrades.
Project Specific EV analysis

The proposed Project will install 396 Level II charging stations which are 220-volt chargers which can provide between 7.2 and 19.2 kW of power depending on the charging systems amperage rating in each of the 396 garages proposed. It is expected however that not all residents will take advantage of the convince of having these chargers installed, though the inclusion of the PDF is expected to encourage residents to purchase an EV. The average amount of cars a typical residential unit has associated with it is a function of how many drivers each home has. Based on studies conducted by the Federal Highway Administration, there were 639 drivers per 1,000 residents in the State of California (Federal Highway Administration, 2017).

The County of San Diego has published housing and population numbers using SANDAG forecast estimates to show the total modified population is 551,712 persons and that the total housing units is 192,925 units for the 2030 scenario (County of San Diego, 2017). Based on this, 551,712 housing units divided by 192,925 is 2.86 residents per home. Given this, the 396-unit development would likely have 1,133 residents. Therefore, out of the 1,133 residents, it is estimated that 724 residents within the development would be driving at buildout in 2030.

CalEEMod incorporates emission factors for on-road mobile sources from the EMFAC2014 model. Based on the EMFAC2014 projections for the year 2030, California would have 32.25 million vehicles on the road; EMFAC2014 assumes that 1.96 million of those vehicles would

be electric. This equates to roughly 6% of the vehicle fleet in the year 2030 being electric. In January of 2018, EO B-48-18 was signed to "boost the supply of zero-emission vehicles and charging and refueling stations in California." The EO directs state government to meet a series of milestones toward a long-term target of 1.5 million ZEVs, specifically, on California's roadways by 2025 and 5 million by 2030 (Office of Governor Edmund G. Brown Jr., 2018). This would increase the electric vehicle market to 15.4% of the market share, or a 9.4% increase over what EMFAC 2014 estimates and is accounted for in CalEEMod.

To understand EV efficiency it's important to understand how the relationship between energy and mileage is related. For a standard petroleum-based vehicle, miles per gallon (MPG) is used. For EVs efficiency can be defined as an amount of energy per a distance. Typically, kilowatt hours per 100 miles traveled is used. To simplify this, the U.S. Department of Energy has developed a miles per gallon gasoline equivalent unit (MPGe) which is 0.337 kWh/100 miles traveled (Department of Energy, 2000). For many of the cars on the market today, this efficiency is over 100 MPGe.

The project seeks to maximize the usage of ZEVs through project design features that require the installation of on-site charging infrastructure. Specifically, the project would install one (1) Level 2 single-port charging station for each of the 396 residential units. For purposes of this analysis, and the charging infrastructure proposed by the project to support the deployment of EVs, Level 2 charging stations are 220 volt chargers that can provide between 7.2 and 19.2 kW of power depending on the charging systems amperage rating. Based on this, for a 100 MPGe vehicle, each hour of charging will provide a range of 21.36 miles to 56.97 miles from a Level 2 charger, assuming a 100 MPGe rating.

Residential On-Site EV Charging Stations (Specific Plan-Mandated Design Feature)

Based on the project's commitment to provide EV charging infrastructure, which includes 396 charging stations at the residential units, the project will facilitate the utilization of electric vehicles. Therefore, an additional 9.4% conversion to ZEV-driven residential miles was assumed in this analysis, consistent with the fleet projections identified by Executive Order B-48-18 (Office of Governor Edmund G. Brown Jr., 2018). In other words, with implementation of the residential on-site charging network, at least 15.4% (6% + 9.4%) of the total trips generated by the project would be from some sort of EV. Of the anticipated 724 residential drivers, it is estimated that 112 drivers would operate EVs, of which 44 drivers were assumed to be present without adding any project design features per the EMFAC emission factors. Project design features, therefore, would increase the number of EVs operated by the project's homeowners by 68 EVs.

As discussed in Section 3.2 of this report, ZEVs include BEVs, PHEVs and FCEVs, though for purposes of this analysis, due to the limited infrastructure for FCEVs, only PHEVs and BEVs will be considered as project-related ZEVs. Given this, the expected ZEV fleet breakdown for the project is expected to be roughly 60% PHEVs and 40% BEVs (California Energy Commission, 2016). Based on this breakdown, out of the 68 EVs estimated above as attributable to the project design features, the project would add 41 PHEVs (68 x 60%) and 27 BEVs (68 x 40%). These vehicles would take the place of regular internal combustion engine vehicles.

Since PHEVs can both operate as an EV and as a light-duty gasoline powered vehicle, PHEVs will generate some driving GHG emissions while BEVs would not. Specifically, PHEVs generate both direct tailpipe GHGs from the burning of carbon-based fuels and indirect offsite GHGs related to utility power generation. BEVs only generate indirect GHGs at an offsite point source from a utility provider like SDG&E. Since BEVs only run off stored electricity, no tailpipe emissions would be emitted during driving events. Given this, overall GHG emissions from PHEVs (tailpipe and offsite) depend on a number of factors, including battery size, vehicle size and charging schemes.

The U.S. Department of Energy estimates that the average fuel economy for EVs in 2019 is as high as 136 MPGe for the midsize Hyundai Ioniq, having a range of 124 miles. The most popular electric vehicle in terms of number of units sold, the Tesla Model 3 can achieve a range of 310 miles with a fuel efficiency of between 116 and 130 MPGe. Some of the largest all electric Sport Utility Vehicles (SUV) have fuel efficiencies of between 74 to 93 MPGe (U.S. Department of Energy, 2019). Since the range between the most popular EVs in America to the less popular SUV EVs range between 74 and 130, a conservative middle average fleetwide efficiency of 100 MPGe is assumed to be an average for each EV within the proposed project.

In terms of fleet averages (or a mixture of all vehicles) however, an internal combustion powered vehicle emits roughly 381 grams per mile (grpm) CO_2e while a PHEV emits on average 185 grpm CO_2e and a BEV emits on average 110 grpm (Union of Concerned Scientists, 2017). Breaking this down into terms of tailpipe and offsite utility emissions can be approximated by the following assumptions: 1. BEVs do not produce tailpipe emissions, 2. PHEVs have smaller battery charging systems since PHEVs also have an internal combustion engine. Given this, battery storage is assumed to be ½ that of BEVs, 3. Internal combustion powered vehicles would produce 100% tailpipe emissions.

Using this information, an average BEV emits 110 grpm, of which 100% would be from an offsite utility provider. PHEVs produce a fleet average of 185 grpm, of which it's assumed that 55 grpm would be from an offsite utility source to charge the PHEV batteries (½ the average BEV rate of 110 grpm due to smaller batteries) and 130 grpm would be from tailpipe

emissions. In terms of total emissions, PHEV would produce roughly 51.4% (less emissions than a fully internal combustion vehicle or (381-130+55)/381 and BEVs would produce roughly a 71.1% reduction or (381-110)/381.

In terms of tailpipe emission alone, PHEV would produce roughly 130 grpm or 65.9% less tailpipe emissions than a fully internal combustion vehicle and BEVs would result in zero grpm and have a 100% reduction. Given this, tailpipe reductions over fully internal combustion powered vehicles would correspond to GHG reductions by the Project. Given that the Project would have the 41 PHEVs and 27 BEVs above the EMFAC assumed ZEVs, the Project-related tailpipe emission offsets would be realized by offsetting internal combustion powered vehicle emissions per mile driven by 79.5% (65.9%*41+27*100%)/ (41+27).

Based on the Project GHG modeling analysis, the Project will generate 3,990 ADT or 1,456,963 yearly trips which generate 14,826,012 yearly vehicle miles traveled (VMT). Based on this, dividing the yearly VMT by the yearly trips the average single trip distance is 10.18 miles. Since the Project would have 724 drivers, each driver would be expected to make an average of 5.51 trips per day or 56.10 miles per day. Of those 724 drivers, 112 would be EV drivers (44 drivers of which was already accounted for by EMFAC) and 68 of those EV drivers would offset GHG emissions by 79.5% as it relates to only those 68 drivers. Based on this, the 68 drivers traveling 10.18 miles, 5.51 times per day for 365 days per year would likely drive 1,398,093 miles each year. Based on CalEEMod, GHG emission rates for every mile driven is roughly 0.000309 MT CO_2e/per mile driven for internal combustion trips. Out of the 1,398,093 miles per year driven by EVs, tailpipe reductions would be 343.85 MT annually (1,398,093 miles X 0.000309 MT CO_2e/per mile driven X 0.795). This analysis and calculations have been provided in ***Attachment E*** to this report.

Also, as a PDF, the Project would install enough solar to offset all electrical energy requirements related to EV charging from these vehicles. Depending on the amperage rating of the Level II charger, complete battery charging time will be variable though the amount of energy used to power the EV for these trips would be the same. For purposes of analysis, a 19.2 kW Level II charger is assumed. Using the fact that 0.337 kWh/100 miles traveled is one MPGe an EV with an average of 100 MPGe would use 33.7 kWh per 100 miles. Taking 1,398,093 total EV Miles /100 miles x 33.7 kWh yields approximately 471,157 kWh per year required for EV Charging. It should be noted that the onsite EV Charging will be offset with onsite renewable PV energy.

PV Systems

Based on CalEEMod, the Project operations excluding EV charging would be 2,791,850 kWh and 3,263,007 kWH with EV. The project would install at least 6,577 300-watt panels on site,

which would generate at least 1,973 kW based on the National Renewable Energy Laboratory (NREL, 2019) PVWatts Calculator (shown in ***Attachment F*** to this report), Based on this, the Project would be estimated to generate an annual amount of electrical energy of 3,263,218 kWh per year. Since solar is 100% renewable, it will offset non renewable energy sources as opposed to renewable sources SDG&E adds under the RPS program. For this reason, CalEEMod 2016.3.2 defaults (without RPS corrections) were assumed and used for Solar GHG offsets. Based on CalEEMod calculations for solar, the Project solar would offset 1,070.17 MT CO_2e annually. The CalEEMod solar outputs are shown in ***Attachment G*** to this report.

5.0 FINDINGS

For purposes of the CAP analysis, the property within the General Plan Update would allow for the construction of 402 single family units consisting of 96 estate units and 306 smaller lots. There is a is an existing equestrian facility on the site that would fall within the GHG emissions that were accounted for within County projections of the General Plan Update. The Project's proposed land use does not result in a more GHG-intensive project than what was contemplated under the General Plan Update and the CAP and the Project would not increase emissions beyond what is anticipated in the CAP or inhibit the County from reaching its reduction targets. Additionally, the project will include CAP Consistency Measures (Step 2 of the CAP) many of which have been included as PDFs within this analysis (Section 1.4). The project CAP checklist is provided as ***Attachment A*** to this report.

5.1 Project Related Construction Emissions

Utilizing the CalEEMod inputs for the model as shown in Table 4.1 above, we find that grading and construction of the Project will produce approximately 18,114.869 MT of CO_2e from construction. Based on South Coast Air Quality Management District (SQAQMD) methodology, it is recommended to average the construction emissions over the project life which is assumed to be 30 years (SCAQMD, 2008). Given this, the annual construction emission for the proposed Project is 603.829 MT of CO_2e per year and is shown in Table 5.1. It should be noted that construction emissions assume the use of Tier 3 diesel construction equipment fitted with DPF.

Table 5.1: Proposed Project Construction CO_2e Emissions Summary MT/Year

Year	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
2022	0.000	1,270.744	1,270.744	0.335	0.000	1,279.107
2023	0.000	1,921.841	1,921.841	0.418	0.000	1,932.283
2024	0.000	2,761.559	2,761.559	0.148	0.000	2,765.270
2025	0.000	2,785.668	2,785.668	0.147	0.000	2,789.331
2026	0.000	2,724.972	2,724.972	0.143	0.000	2,728.554
2027	0.000	2,671.283	2,671.283	0.141	0.000	2,674.795
2028	0.000	2,614.362	2,614.362	0.138	0.000	2,617.800
2029	0.000	1,325.985	1,325.985	0.070	0.000	1,327.729
Total						**18,114.869**
Yearly Average Construction Emissions (Metric Tons/year over 30 years)						**603.829**
Expected Construction emissions are based upon CalEEMod modeling for equipment listed in Table 4.1 above.						

5.2 Operational Emissions Proposed Project

Once construction is completed the proposed Project would generate GHG emissions from daily operations which would include sources such as area, energy, mobile, solid waste and water uses, which are calculated within CalEEMod. The proposed Project would construct 396 residential units and would be expected to fully operational in 2030. The proposed Project would implement many PDFs to include:

1. Install high-efficiency LED street and area lighting to achieve reduction in overall lighting energy.
2. The Project will only install Natural Gas fireplaces within all 396 residential units.
3. In accordance with the California Integrated Waste Management Act (AB 939), and to be consistent with both AB 341's statewide 75% diversion policy, the project will seek to also achieve a 75% diversion goal. The Project will provide areas for storage and collection of recyclables and provide literature promoting recycling to achieve additional waste diversion, consistent with AB 341.
4. The Project applicant will be required to comply with County's Water Conservation in Landscaping Ordinance and demonstrates a 40% reduction in outdoor use, and will submit a Landscape Document Package to show such compliance. A 20% reduction was assumed within GHG modeling to be conservative
5. Install low flow indoor water fixtures in all residential units.
6. Plumb and install a single Level 2 EV charging station in each of the 396 residential units.
7. The Project will install 1,973 KW of PV which is equivalent to 6,577 300-watt panels or an average of 16.6 panels per home.

Based on the CalEEMod analysis alone, the proposed Project buildout would generate 6,242.07 MT CO_2e annually which is shown in Table 5.2 below. These emissions include PDFs 1-5 shown above. Since PDF 6 and PDF 7 required detailed post process calculations (not within CalEEMod), specific descriptions are shown below.

PDF 6 above would enable Project drivers to utilize EV and reduce GHG emissions by 343.85 MT by reducing the number of carbon burning vehicles by 68 project added EVs on the roadways. These EV would require EV charging which would for the most part be charged at the EV drivers house. Charging is not estimated within CalEEMod. Therefore, it's necessary to estimate GHG emissions from breaking down operational GHG emissions per a unit kWh. Based on calculations in this report, EV charging would require 471,157 kWh per year.

Using the CalEEMod outputs, the project was found to require 2,791,850 kWh of electrical energy without EV and would generate 511.363 MT CO_2e annually. This ultimately breaks down to electrical operations generating 0.000183 MT CO_2e per kWh. Since the onsite EV

charging would require 471,157 kWh, the energy required would generate 86.298 MT CO_2e and is also shown in Table 5.2.

PDF 7 would be to install 1,973 kWh of PV which would generate 3,263,218 kWh annually or an average of 8,240 kWh per home. PV is considered 100% renewable and once installed would offset GHG emissions generated by non-renewable energy generated by SDG&E. Based on calculations in Section 4.2 above, the GHGs offset by SDG&E would be 1,070.17 MT CO_2e annually. The additional reductions from PDF 6 and 7 are also shown in Table 5.2. After inclusion of all PDFs, the Project would generate 4,914.35 MT CO_2e annually.

Table 5.2: Proposed Project Operational GHG emissions (MT/Year)

Source	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e (MT/Yr)
Area	0.000	316.713	316.713	0.011	0.006	318.681
Electrical Usage without EV	0.000	0.000	509.724	0.020	0.004	511.363
Natural Gas	0.000	494.214	494.214	0.009	0.009	497.151
Mobile	0.000	4,579.591	4,579.591	0.216	0.000	4,584.977
Waste	70.932	0.000	70.932	4.192	0.000	175.730
Water	8.186	118.667	126.853	0.845	0.021	154.168
Total includes reductions from PDFs 1-5						6,242.070
PDF 6 EV Charging						86.298
PDF 6 EV Vehicle Usage – Offsets Carbon Based Fuel Cars						-343.85
PDF 7 - 1,973 kWh of PV						-1,070.17
Project Total GHG Emissions						**4,914.35**
Data is presented in decimal format and may have rounding errors.						

General Plan Land Use Emissions

The GP buildout would allow for the construction of 402 residential units which would consist of 96 estate lots and 302 smaller single-family lots. For purposes of analysis, the GP buildout has been analyzed using the same buildout year as the proposed Project and also was assumed to include PDFs 1-5, which would be required based on state and local regulations. At this time, EV charging stations and PV installation are not regulatory items required for compliance within the County and were not included in the GP buildout emission estimates.

Based on these assumptions, the GP buildout project analysis would generate 6,484.67 MT CO_2e annually which is shown in Table 5.3 below. The CalEEMod results for the approved General Plan Land Use are provided as ***Attachment H***. Also, it should be noted: the GP

buildout scenario analyzed would likely have higher construction emissions since the area and building footprint would be larger. The primary purpose for this comparison is to demonstrate that the project operations would have been assumed in the GP by showing that the proposed Project operations would generate fewer GHG emissions than the GP buildout operations. Since this comparison is focused on operations primarily and since it's assumed that the GP buildout would have the same construction emissions as the proposed project, construction emissions are not included.

Based on these findings, the GP buildout would generate 6,484.67 MT of CO_2e annually and the proposed Project would generate 4,914.35 MT of CO_2e annually or 1,570.32 MT CO_2e fewer GHG emissions annually than would be produced under a general plan buildout use. Given this, since the Project generates fewer emissions that an allowed General Plan use for the site, the Project's GHG emissions are assumed to have been anticipated by the CAP and would therefore result in a less than significant cumulatively considerable increase in GHG emissions.

Table 5.3: General Plan Land Use Emissions Summary MT/Year

Source	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e (MT/Yr)
Area	0.000	321.511	321.511	0.011	0.006	323.509
Electrical	0.000	0.000	517.45	0.02	0.00	519.11
Natural Gas	0.000	501.702	501.702	0.010	0.009	504.683
Mobile	0.000	4,828.849	4,828.849	0.227	0.000	4,834.529
Waste	71.783	0.000	71.783	4.242	0.000	177.839
Water	8.310	89.062	97.371	0.857	0.021	124.999
Total Operations (MT/Year)						**6,484.670**
Data is presented in decimal format and may have rounding errors.						

5.3 Plan Consistency Evaluation

The Project was analyzed for consistency with the County of San Diego's General Plan which contains various goals, policies, and objectives related to the reduction of GHG emissions and global climate change. Based on our analysis, the Project would be consistent as shown in Table 5.4. The Project would not conflict with any local or state plans, policies, or regulations and would be consistent with the County of San Diego's CAP requirements. Since the Project would generate fewer GHG emissions than the maximum allowable under the General Plan, the Project would have less than significant GHG impacts.

Table 5.4: County General Plan Policies

Policy	Project Consistency
COS14.3 Sustainable Development. Require design of residential subdivisions and nonresidential development through "green" and sustainable land development practices to conserve energy, water, open space, and natural resources.	*Consistent*. The Project would install low flow indoor fixtures.
COS14.7 Alternative Energy Sources for Development Projects. Encourage development projects that use energy recovery, photovoltaic, and wind energy.	*Consistent*. The Project would install 1,973 kW of solar.
COS14.10 Low Emission Construction Vehicles and Equipment. Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.	*Consistent*. The Project was found to require Tiered construction equipment to comply with County criterial pollutant thresholds or health risk standards at any nearby sensitive uses. The Project would utilize at least Tier 3 construction equipment to be consistent with COS14.10 Low Emission Construction Vehicles.
COS15.1 Design and Construction of New Buildings. Require that new buildings be designed and constructed in accordance with "green building" programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants.	*Consistent*. The Project proposes sustainability and efficiency features consistent with Title 24, Part 6 of the California Code of Regulations (2016) requirements.
COS15.4 Title 24 Energy Standards. Require development to minimize energy impacts from new buildings in accordance with or exceeding Title 24 energy standards.	*Consistent*. The Project proposes implementing energy efficiency features that would meet 2016 Title 24 standards.
COS17.1 Reduction of Solid Waste Materials. Reduce GHG emissions and future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste that is generated. Divert solid waste from landfills in compliance with State law.	*Consistent*. Areas for storage and collection of recyclables and yard waste would be provided.
COS17.2 Construction and Demolition Waste. Require recycling, reduction and reuse of construction and demolition debris.	*Consistent*. The Project would prepare a Construction Debris Management Plan that complies with Section 68.508-68.518 of the County Municipal Code and would divert at least 90 percent of inerts and 70 percent of construction waste from landfills through reuse and recycling.

5.4 CEQA Compliance

SB 97 directed amendments to the California Environmental Quality Act (CEQA) statute to specifically establish that GHG emissions and their impacts are appropriate subjects for CEQA analysis. Under SB 97 the project should be able to answer the following questions for CEQA compliance.

1. Will the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The proposed project will emit GHGs directly through the burning of carbon-based fuels such as gasoline and natural gas as well as indirectly through usage of electricity, water, and from wastewater treatment as well as the anaerobic bacterial breakdown of organic solid waste. The proposed project would generate approximately 4,914.35 MT of CO_2e annually based on the findings of this report. The proposed project would generate fewer emissions than what would be assumed under the GP buildout of the site (6,484.67 MT of CO_2e annually), and therefore is assumed to have been anticipated within the GP assumptions. Further, the County's CAP was developed based on GP assumptions. Projects determined to be consistent with the County's CAP are also considered to be consistent with the GP. The project would generate fewer emissions than what was anticipated under the GP buildout, and would be consistent with the County's CAP; therefore, the project would generate GHG emissions that would have a less than significant impact on the environment. The GP EIR was developed to reduce impacts from developments, therefore consistency assumes a project would fall within the impacts and mitigations identified in the GP. Based on this, since the project produces fewer emissions than the GP buildout, a less than significant impact is expected.

2. Will the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

An allowable GP buildout at the project site would consist of 402 units. A GP buildout project would generate at least 6,484.67 MT CO_2e. The proposed Project would generate 4,914.35 MT of CO_2e annually which is less than the GP buildout. Given this, the project would not conflict with the County's GP.

Furthermore, the project is required to complete the CAP Checklist and include all CAP Checklist items within the project design (as shown in ***Attachment A***). Since the County's CAP was developed based on GP assumptions, projects determined to be consistent with the County's CAP are also considered to be consistent with the GP. In conclusion, because the proposed Project will generate fewer emissions than the GP buildout and since the proposed Project would be consistent with the CAP, the project would generate a less than significant impact.

6.0 REFERENCES

Architectural Energy Corporation (AEC). (2013, July). Retrieved 2015, from http://www.energy.ca.gov/2013publications/CEC-400-2013-008/CEC-400-2013-008.pdf

Bloomberg New Energy Finance. (2016). *Here's How Electric Cars Will Cause the Next Oil Crisis.* Retrieved 2017, from https://www.bloomberg.com/features/2016-ev-oil-crisis/

CA DMV. (2016). *CALIFORNIA DMV STATISTICS.* Retrieved from https://www.dmv.ca.gov/portal/wcm/connect/fafd3447-8e14-4ff6-bb98-e85f3aa9a207/ca_dmv_stats.pdf?MOD=AJPERES

California Air Resources Board. (2017). *Advanced Clean Cars Summary.* Retrieved 2017, from www.arb.ca.gov: https://www.arb.ca.gov/msprog/clean_cars/acc%20summary-final.pdf

California Energy Commission. (2015, June 3). Retrieved from http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/15-day_language/impact_analysis/2016_Impact_Analysis_2015-06-03.pdf

California Energy Commission. (2016). *California Energy Commission – Tracking Progress.* Retrieved 2017, from http://www.energy.ca.gov/renewables/tracking_progress/documents/electric_vehicle.pdf

California Energy Commission. (2017). *Docket Log 17-BSTD-01 - Rooftop Solar PV Stystem Report (11-16-2017).* Retrieved from https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=17-BSTD-01

California Fuel Cell Partnership. (2017). *www.cafcp.org.* Retrieved from https://cafcp.org/stationmap

California New Car Dealers Association. (2016). *California Auto Outlook - Comprehensive information on the California vehicle market.* Retrieved from http://www.cncda.org/CMS/Pubs/Cal%20Covering%204Q%2015.pdf

California Public Utilities Commission. (2016). *Biennial RPS Program Update - In Compliance with Public Utilities Code Section 913.6.* Retrieved from http://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Reports_and_White_Papers/FINAL12302015Section913_6Report.pdf

CalRecycle. (2018). *Climate Change*. Retrieved from https://www.calrecycle.ca.gov: https://www.calrecycle.ca.gov/Climate/

CAPCOA. (September 2016). *2016.3.1 - California Emissions Estimator Model-Software Documentation - Appendix D.* Retrieved from http://caleemod.com/

CARB. (2008). Retrieved from https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf

CARB. (2011). *Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document.* Retrieved from https://www.arb.ca.gov/cc/scopingplan/document/final_supplement_to_sp_fed.pdf

CARB. (2012). *www.arb.ca.gov*. Retrieved from California Air Resources Board Approves Advanced Clean Car Rules: https://www.arb.ca.gov/newsrel/newsrelease.php?id=282

CARB. (2017). Retrieved from Clean Car Standards - Pavley, Assembly Bill 1493: https://www.arb.ca.gov/cc/ccms/ccms.htm

CARB. (2017). *Draft (The 2017 Climate Change Scoping Plan).* Retrieved from https://www.arb.ca.gov/cc/scopingplan/revised2017spu.pdf

CARB. (2017). *The Advanced Clean Cars Program*. Retrieved from https://www.arb.ca.gov/msprog/acc/acc_conceptdraft.htm

CEC. (2012). *T24 Standards (2013).* Retrieved from http://www.energy.ca.gov/2012publications/CEC-400-2012-004/CEC-400-2012-004-CMF-REV2.pdf
CEC. (2015). *T24 Standards (2016).* Retrieved from http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf
Consumers Union Policy & Action from Consumer Roports. (2016). *Electric Vehicle Survey Methodology and Assumptions.* Retrieved from http://www.ucsusa.org/sites/default/files/attach/2016/05/Electric-Vehicle-Survey-Methodology.pdf
County of San Diego. (2011). *County of San Diego General Plan - Land Use Element.* Retrieved from https://www.sandiegocounty.gov/pds/gpupdate/docs/LUE.pdf
County of San Diego. (2017). Draft County of San Diego Guidlines for Determining Significance - Climate Change.
Davis, S. C. (October 2016). *TRANSPORTATION ENERGY DATA BOOK: EDITION 35.* U.S. DEPARTMENT OF ENERGY. Retrieved from http://cta.ornl.gov/data/download35.shtml
Edmonds. (2016). *2015 Used Vehicle Market Report.* Retrieved from http://static.ed.edmunds-media.com/unversioned/img/industry-center/analysis/2015-used-market-report.pdf
Fehrenbacher, K. (2016, April 15). *www.fortune.com*. Retrieved 2017, from Tesla's Model 3 Reservations Rise to Almost 400,000: http://fortune.com/2016/04/15/tesla-model-3-reservations-400000/
Fleetcarma. (2017, February 23). *A Simple Guide to the Used Electric Car Market.* (E. Schaal, Producer) Retrieved from fleetcarma.com: http://www.fleetcarma.com/used-electric-cars-market/
Google. (2018). Retrieved from maps.google.com
IPCC. (2007). *IPCC Fourth Assessment Report: Climate Change 2007 : Working Group I: The Physical Science Basis.* Retrieved from https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html
LA Times. (May 2017). *Electric vehicle sales rise in California.* Retrieved from http://www.latimes.com/business/autos/la-fi-hy-electric-vehicles-20170517-story.html
LSA. (2019). *Traffic Impact Study - Ocean Breeze Ranch.*
McDonald, Z. (2016, June 16). *www.fleetcarma.com*. Retrieved 2017, from How Long Does it Take to Recoup the Extra Cost of an Electric Car?: http://www.fleetcarma.com/miles-recoup-cost-electric-car/
Office of Governor Edmund G. Brown Jr. (2016). *2016 ZEV ACTION PLAN - An updated roadmap toward 1.5 million zero-emission vehicles.* Governor's Interagency Working Group on Zero-Emission Vehicles. Retrieved 2017, from https://www.gov.ca.gov/docs/2016_ZEV_Action_Plan.pdf
Project Design Consultants. (2019). *Ocean Breeze Ranch Development Plan.*
SANDAG. (2015). *SAN DIEGO FORWARD: THE REGIONAL PLAN.* Retrieved from http://www.sdhda.net/pdf/publicationid_1811_16978.pdf
SCAQMD. (2008). Interim CEQA GHG Significance Threshold for Stationary. Retrieved from http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2

SDAPCD. (2015). *RULE 67.0.1. ARCHITECTURAL COATINGS.* Retrieved from https://www.arb.ca.gov/drdb/sd/curhtml/r67.0.1.pdf

Statista. (2016). *Highway Statistics series of reports.* Retrieved from Number of licensed drivers in the United States from 1990 to 2015 (in 1,000s)

U.S. Department of Energy. (2019). *Fuel Economy Guide 2019.* Retrieved from https://www.fueleconomy.gov/feg/pdfs/guides/FEG2019.pdf

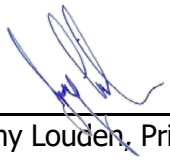
WRCC. (2016). *VISTA 2 NNE, CALIFORNIA (049378)*. Retrieved from https://wrcc.dri.edu/summary/Climsmsca.html: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca9378

WRCC. (2018). Retrieved from https://wrcc.dri.edu/Climate/comp_table_show.php?stype=wind_dir_avg

Yirka, B. (2015, April 6). *www.techxplore.com*. Retrieved 2017, from https://techxplore.com/news/2015-04-falling-prices-battery-surge-electric.html

7.0 CERTIFICATIONS

The contents of this report represent an accurate depiction of the projected CO_2e emissions from the Project development based upon the best available information at the time of preparation. The report was prepared by Jeremy Louden; a County approved CEQA Consultant for Air Quality and GHG.



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Date June 23, 2019

ATTACHMENT A

County of San Diego CAP Checklist

Appendix A: Final Climate Action Plan Consistency Review Checklist

Introduction

The County of San Diego (County) Climate Action Plan (CAP), adopted by the Board of Supervisors on February 14, 2018, outlines actions that the County will undertake to meet its greenhouse gas (GHG) emissions reduction targets. Implementation of the CAP will require that new development projects incorporate more sustainable design standards and implement applicable reduction measures consistent with the CAP. To help plan and design projects consistent with the CAP, and to assist County staff in implementing the CAP and determining the consistency of proposed projects with the CAP during development review, the County has prepared a CAP Consistency Review Checklist (Checklist). This Checklist, in conjunction with the CAP, provides a streamlined review process for proposed discretionary projects that require environmental review pursuant to the California Environmental Quality Act (CEQA). Please refer to the County's Guidelines for Determining Significance for Climate Change (Guidelines) for more information on GHG emissions, climate change impact requirements, thresholds of significance, and compliance with CEQA Guidelines Section 15183.5.

The purpose of this Checklist is to implement GHG reduction measures from the CAP that apply to new development projects. The CAP presents the County's comprehensive strategy to reduce GHG emissions to meet its reduction targets. These reductions will be achieved through a combination of County initiatives and reduction actions for both existing and new development. Reduction actions that apply to existing and new development will be implemented through a combination of mandatory requirements and incentives. This Checklist specifically applies to proposed discretionary projects that require environmental review pursuant to CEQA. Therefore, the Checklist represents one implementation tool in the County's overall strategy to implement the CAP. Implementation of measures that do not apply to new development projects will occur through the implementation mechanisms identified in Chapter 5 of the CAP. Implementation of applicable reduction measures in new development projects will help the County achieve incremental reductions towards its targets, with additional reductions occurring through County initiatives and measures related to existing development that are implemented outside of the Checklist process.

The Checklist follows a two-step process to determine if projects are consistent with the CAP and whether they may have a significant cumulative impact under the County's adopted GHG thresholds of significance. The Checklist first assesses a project's consistency with the growth projections and land use assumptions that formed the basis of CAP emissions projections. If a project is consistent with the projections and land use assumptions in the CAP, its associated growth in terms of GHG emissions would have been accounted for in the CAP's projections and project implementation of the CAP reduction measures will contribute towards reducing the County's emissions and meeting the County's reduction targets. Projects that include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project

when compared to existing designation, would also be within the projections assumed in the CAP. Projects responding in the affirmative to Step 1 questions can move forward to Step 2 of the Checklist. If a land use and/or zoning designation amendment results in a more GHG-intensive project, the project is required to demonstrate consistency with applicable CAP measures and offset the increase in emissions as described in the Guidelines. Step 2 of the Checklist contains the CAP GHG reduction measures that projects are required to implement to ensure compliance with the CAP. Implementation of these measures would ensure that new development is consistent with relevant CAP strategies and measures and will contribute towards achieving the identified GHG reduction targets. Projects that are consistent with the CAP, as determined using this Checklist, may rely on the CAP for the cumulative impacts analysis of GHG emissions under CEQA.

A project's incremental contribution to cumulative GHG emissions may be determined to not be cumulatively considerable if it is determined to be consistent with the CAP. As specified in the CEQA Guidelines, the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the project's incremental effects are "cumulatively considerable" (CCR, Title 14, Division 6, Chapter 3, Section 15064[h][4]). Projects requiring discretionary review that cannot demonstrate consistency with the CAP using this Checklist may have a cumulatively considerable contribution to a significant cumulative impact and would be required to prepare a separate, more detailed project-level GHG analysis as part of the CEQA document prepared for the project.

Checklist Applicability

This Checklist only applies to development projects that require discretionary review and are subject to environmental review (i.e., not statutorily or categorically exempt projects) pursuant to CEQA. Projects that are limited to ministerial review and approval (e.g., only building permits) would not be subject to the Checklist. The CAP contains other measures that, when implemented, would apply broadly to all ministerial and discretionary projects. These measures are included for discretionary projects in this Checklist, but could also apply more broadly once the County takes action to codify specific requirements or standards.

Checklist Procedures

General procedures for Checklist compliance and review are described below. Specific guidance is also provided under each of the questions under Steps 1 and 2 of the Checklist in subsequent pages.

1. The County's Department of Planning & Development Services (PDS) reviews development applications and makes determinations regarding environmental review requirements under CEQA. Procedures for CEQA can be found on the County's Process Guidance & Regulations/Statutes Homepage. The Director of PDS will determine whether environmental review is required, and if so, whether completion of the CAP Checklist is required for a proposed project or whether a separate project-level GHG analysis is required.

2. The specific applicable requirements outlined in the Checklist shall be required as a condition of project approval.

3. The project must provide substantial evidence that demonstrates how the proposed project will implement each applicable Checklist requirement described herein to the satisfaction of the Director of PDS.

4. If a question in the Checklist is deemed not applicable (N/A) to a project, substantial evidence shall be provided to the satisfaction of the Director of PDS demonstrating why the Checklist item is not applicable. Feasibility of reduction measures for new projects was assessed in development of the

CAP and measures determined to be feasible were incorporated into the Checklist. Therefore, it is expected that projects would have the ability to comply with all applicable Checklist measures.

5. Development projects requiring discretionary review that cannot demonstrate consistency with the CAP using this Checklist shall prepare a separate, project-level GHG analysis as part of the CEQA document prepared for the project and may be required to prepare an Environmental Impact Report (EIR). Guidance for project-specific GHG Technical Reports is outlined in the Report Format and Content Requirements for Climate Change document, provided under separate cover. The Report Format and Content Requirements document provides guidance on the outline and content of GHG analyses for discretionary projects processed by PDS that cannot show compliance with the CAP Checklist.

Checklist Updates

The Guidelines and Checklist may be administratively updated by the County from time to time to comply with amendments to State laws or court directives, or to remove measures that may become mandatory through future updates to State or local codes. Administrative revisions to the Guidelines and Checklist will be limited to changes that do not trigger a subsequent EIR or a supplement to the SEIR for the CAP pursuant to CEQA Guidelines Section 15162. Administrative revisions, as described above, will not require approval by the Board of Supervisors (Board). All other changes to the Guidelines and Checklist require Board approval.

Comprehensive updates to the Guidelines and Checklist will be coordinated with each CAP update (i.e., every five years beginning in 2025) and would require Board approval. Future updates of the CAP, Guidelines, and Checklist shall comply with CEQA.

Application Information

Contact Information

Project No. and Name: Ocean Breeze Ranch (PDS2016-TM-5615)

Property Address and APN: 5820 W. Lilac Rd., Bonsall, CA 92003

Applicant Name and Co.: Ocean Breeze Ranch, LLC attn. Jim Conrad

Contact Phone: (949) 497-0200 Contact Email: jconradarc@gmail.com

Was a consultant retained to complete this checklist? ■ Yes ☐ No

If Yes, complete the following:

Consultant Name: Jeremy Louden Contact Phone: (760) 473-1253

Company Name: LDN Consulting Contact Email: jlouden@ldnconsulting.com

Project Information

1. What is the size of the project site (acres [gross and net])? 1,402 acres gross

2. Identify all applicable proposed land uses (indicate square footage [gross and net]):

   ■ Residential (indicate # of single-family dwelling units): 396 dwelling units

   ☐ Residential (indicate # of multi-family dwelling units):

   ☐ Commercial (indicate total square footage [gross and net]):

   ☐ Industrial (indicate total square footage [gross and net]):

   ☐ Agricultural (indicate total acreage [gross and net]):

   ☐ Other (describe):

3. Provide a description of the project proposed. This description should match the project description used for the CEQA document. The description may be attached to the Checklist if there are space constraints.

Please refer to Section 1 of the Global Climate Change report (Ldn Consulting, 2019).

CAP Consistency Checklist Questions

Step 1: Land Use Consistency

For projects that are subject to CAP consistency review, the first step in determining consistency is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the County to determine a project's consistency with the land use assumptions used in the CAP.

Step 1: Land Use Consistency		
Checklist Item (Check the appropriate box and provide explanation and supporting documentation for your answer)	Yes	No
1. Is the proposed project consistent with the existing General Plan regional category, land use designations, and zoning designations? If **"Yes,"** provide substantiation below and then proceed to Step 2 (CAP Measures Consistency) of the Checklist. If **"No,"** proceed to question 2 below.	☒	☐
Project Detail: Please substantiate how the project satisfies question 1. The project is consistent with the existing General Plan Land Use Designations of Village Residential (VR-4.3, 62 acres); Semi-Rural (SR-4, 217 acres); Semi-Rural (SR-10, 313 acres); Rural Lands (RL-20, 556 acres); Rural Lands (RL-40, 223 acres); and Open Space-Recreational (OS-REC, 9 acres). No General Plan amendment is needed to accommodate the project. The project is consistent with the zoning designations of A70, S80, and RV, and with all applicable Special Area Regulations, and Animal Regulations. No amendments to zoning designations, Special Area Regulations, or Animal Regulations are needed to accommodate the project. The Project will be equal or less intensive as the existing General Plan Land Use Designation.		
2. Does the project include a land use element and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations? If **"Yes,"** the project must provide estimated project GHG emissions under both existing and proposed designation(s) for comparison to substantiate the response and proceed to Step 2 (CAP Measures Consistency) of the Checklist. If **"No,"** (i.e., the project proposes an increase in density or intensity above that which is allowed under existing General Plan designations and consequently would not result in an equivalent or less GHG-intensive project when compared to the existing designations), the project must prepare a separate, more detailed project-level GHG analysis. As outlined in the County's Guidelines for Determining Significance for Climate Change and Report Format and Content Requirements for Climate Change, this analysis must demonstrate how the project would offset the increase in GHG emissions over the existing designations or baseline conditions. The project must also incorporate each of the CAP measures identified in Step 2 to mitigate cumulative GHG emissions impacts. Proceed and complete a separate project-specific GHG analysis and Step 2 of the Checklist. Refer to Section 4 of the County's Guidelines for procedures on analyzing General Plan Amendments.	☐	☐
Project Detail: Please substantiate how the project satisfies question 2. _____ _____ _____ _____ _____ _____		

Step 2: CAP Measures Consistency

The second step of the CAP consistency review is to review and evaluate a project's consistency with the applicable measures of the CAP. Each checklist item is associated with a specific GHG reduction measure(s) in the County CAP.

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Step 2A: Project Operations (All projects with an operational component must fill out this portion of the Checklist)				
Reducing Vehicle Miles Traveled				
1a. Reducing Vehicle Miles Traveled <u>Non-Residential:</u> For non-residential projects with anticipated tenant-occupants of 25 or more, will the project achieve a 15% reduction in emissions from commute vehicle miles traveled (VMT), and commit to monitoring and reporting results to demonstrate on-going compliance? VMT reduction may be achieved through a combination of Transportation Demand Management (TDM) and parking strategies, as long as the 15% reduction can be substantiated. VMT reduction actions though TDM may include, but are not limited to: ☐ Telecommuting ☐ Car Sharing ☐ Shuttle Service ☐ Carpools ☐ Vanpools ☐ Bicycle Parking Facilities ☐ Transit Subsidies Shared and reduced parking strategies may include, but are not limited to:[1] ☐ Shared parking facilities ☐ Carpool/vanpool-only parking spaces ☐ Shuttle facilities ☐ Electric Vehicle-only parking spaces The project may incorporate the measures listed above, and propose additional trip reduction measures, as long as a 15% reduction in emissions from commute VMT can be demonstrated through substantial evidence. Check "N/A" if the project is a residential project or if the project would not accommodate more than 25 tenant-occupants.	T-2.2 and T-2.4	☐	☐	☒

1b. Project Detail:
Please substantiate how the project satisfies question 1a.
This measure for non-residential projects is not-applicable as the Project principally proposes to establish a residential community.

[1] Reduction actions and strategies under 1a may be used to achieve a 10% reduction in emissions from commute VMT under 2a

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Shared and Reduced Parking				
2a. Shared and Reduced Parking Non-Residential: For non-residential projects with anticipated tenant-occupants of 24 or less, will the project implement shared and reduced parking strategies that achieves a 10% reduction in emissions from commute VMT? Shared and reduced parking strategies may include, but are not limited to: ☐ Shared parking facilities ☐ Carpool/vanpool-only parking spaces ☐ Shuttle facilities ☐ Electric Vehicle-only parking spaces Check "N/A" if the project is a residential project or if the project would accommodate 25 or more tenant-occupants.	T-2.4	☐	☐	☒

2b. Project Detail:
Please substantiate how the project satisfies question 2a.
This measure for non-residential projects is not-applicable as the Project proposes a residential community.

Water Heating Systems				
3a. Electric or Alternatively-Fueled Water Heating Systems Residential: For projects that include residential construction, will the project, as a condition of approval, install the following types of electric or alternatively-fueled water heating system(s)? Please check which types of system(s) will be installed: ☐ Solar thermal water heater ■ Tankless electric water heater ☐ Storage electric water heaters ☐ Electric heat pump water heater ■ Tankless gas water heater ☐ Other Check "N/A" if the project does not contain any residential buildings.	E-1.2	☒	☐	☐

3b. Project Detail:
Please substantiate how the project satisfies question 3a.
The Project's residences will be equipped with tankless electric or gas water heaters as a condition of approval for the project. Confirmation of such installation shall be verified at building plan check and compliance with this measure shall be made a condition of the Project's approvals.

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Water-Efficient Appliances and Plumbing Fixtures				
4a. Water Efficient Appliances and Plumbing Fixtures Residential: For new residential projects, will the project comply with all of the following water efficiency and conservation BMPs[2]? ■ Kitchen Faucets: The maximum flow rate of kitchen faucets shall not exceed 1.5 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.5 gallons per minute at 60 psi[3]. ■ Energy Efficient Appliances: Install at least one qualified ENERGY STAR dishwasher or clothes washer per unit. Check "N/A" if the project is a non-residential project.	W-1.1	[x]	[ ]	[ ]

4b. Project Detail:
Please substantiate how the project satisfies question 4a.

As a conditional of approval, the Project's residences will be equipped with water efficient appliances and plumbing fixtures. More specifically, EnergyStar or equivalent appliances are required, as well as low-flow bathroom faucets, kitchen faucets, toilets and showers per the applicable version of the CALGreen Code (Cal. Code Regs., Title 24, Part 11). Confirmation of such installation shall be verified at building plan check and compliance with this measure shall be made a condition of the Project's approvals.

Rain Barrel Installations				
5a. Rain Barrel Installations Residential: For new residential projects, will the project make use of incentives to install one rain barrel per every 500 square feet of available roof area? Check "N/A" if the project is a non-residential project; if State, regional or local incentives/rebates to purchase rain barrels are not available; or if funding for programs/rebates has been exhausted.	W-2.1	[x]	[ ]	[ ]

5b. Project Detail:
Please substantiate how the project satisfies question 5a.

The project will work with the regional or local water agency to determine if incentives/rebates are available for the purchase and installation of rain barrels.

[2] CALGreen Tier 1 residential voluntary measure A4.303 of the California Green Building Standards Code.
[3] Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Reduce Outdoor Water Use				
6a. Reduce Outdoor Water Use Residential: Will the project submit a Landscape Document Package that is compliant with the County's Water Conservation in Landscaping Ordinance[4] and demonstrates a 40% reduction in current Maximum Applied Water Allowance (MAWA) for outdoor use? Non-Residential: Will the project submit a Landscape Document Package that is compliant with the County's Water Conservation in Landscaping Ordinance and demonstrates a 40% reduction in current MAWA for outdoor use? Check "N/A" if the project does not propose any landscaping, or if the aggregate landscaped area is between 500 – 2,499 square feet and elects to comply with the Prescriptive Compliance Option within the Water Conservation in Landscaping Ordinance.	W-1.2	☒	☐	☐
6b. Project Detail: Please substantiate how the project satisfies question 6a. The Project shall submit a Landscape Document Package that complies with the referenced County Ordinance and demonstrates a 40 percent reduction in outdoor use. The Landscape Document Package shall be submitted to the County for review and approval prior to issuance of any building permits and compliance with this measure shall be made a condition of the Project's approval.				
Agricultural and Farming Operations[5]				
7a. Agricultural and Farming Equipment Will the project use the San Diego County Air Pollution Control District's (SDAPCD's) farm equipment incentive program to convert gas- and diesel-powered farm equipment to electric equipment? Check "N/A" if the project does not contain any agricultural or farming operations; if the SDAPCD incentive program is no longer available; or if funding for the incentive program has been exhausted.	A-1.1	☐	☐	☒
7b. Project Detail: Please substantiate how the project satisfies question 7a. The Project does not propose any agricultural or farming operations.				

[4] http://www.sandiegocounty.gov/content/dam/sdc/cob/ordinances/ord10427.pdf.

[5] Existing agricultural operations would not be subject to questions 7 and 8 of the Checklist, unless a proposed expansion is subject to discretionary review and requires environmental review pursuant to CEQA.

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
8a. Electric Irrigation Pumps Will the project use SDAPCD's farm equipment incentive program to convert diesel- or gas-powered irrigation pumps to electric irrigation pumps? Check "N/A" if the project does not contain any agricultural or farming operations; if the SDAPCD incentive program is no longer available; or if funding for the incentive program has been exhausted.	A-1.2	☐	☐	☒

8b. Project Detail:
Please substantiate how the project satisfies question 8a.
The Project does not propose any agricultural or farming operations.

Tree Planting				
9a. Tree Planting <u>Residential:</u> For residential projects, will the project plant, at a minimum, two trees per every new residential dwelling unit proposed? Check "N/A" if the project is a non-residential project.	A-2.1	☒	☐	☐

9b. Project Detail:
Please substantiate how the project satisfies question 9a.
Confirmation of the tree plantings required by this measure shall be verified in conjunction with County review of the master landscape plan design and compliance with this measure shall be made a condition of the Project's approvals. The Project, at a minimum, will plant 792 trees or a minimum of two trees per unit.

ATTACHMENT B

SDG&E GHG Energy Emission Factors with RPS

SDG&E GHG Energy Emission Factors with RPS

Year	RPS Achieved	Co2 Intensity	CH4 Intensity	N2O Intensity	
2009	**10.50%**	**720.49**	**0.0290**	**0.0060**	
2015	**20.0%**	**644.01**	**0.0259**	**0.0054**	
2020	**33.0%**	**539.36**	**0.0217**	**0.0045**	**33% Required by Law**
2021	**34.7%**	**525.68**	**0.0212**	**0.0044**	
2022	**36.4%**	**511.99**	**0.0206**	**0.0043**	
2023	**38.1%**	**498.31**	**0.0201**	**0.0041**	
2024	**39.8%**	**484.62**	**0.0195**	**0.0040**	
2025	**41.5%**	**470.93**	**0.0190**	**0.0039**	
2026	**43.2%**	**457.25**	**0.0184**	**0.0038**	
2027	**44.9%**	**443.56**	**0.0179**	**0.0037**	
2028	**46.6%**	**429.88**	**0.0173**	**0.0036**	
2029	**48.3%**	**416.19**	**0.0168**	**0.0035**	
2030	**50.0%**	**402.51**	**0.0162**	**0.0034**	50% Required by Law

ATTACHMENT C

High Efficiency LED Lighting

High Efficiency Lighting

The lighting intensity in CalEEMod is the same for historical buildings and new developments for residential uses. The lighting intensity for non-residential uses is 20% better in CalEEMod following a requirement that half of the outdoor lighting is High Efficiency (HE) lighting as can be seen in the Default Data Tables within the CalEEMod User Manual Appendix D. The number has not been adjusted or changed in Versions 2011, 2013 or 2016 that would account for better lighting technologies. HE lighting is not required per code with the exception of 50% of the outdoor lighting, as stated above, unless additional lighting is needed to meet an allowable lighting requirement. Based on conversations with Architects and Energy Consultants, it was concluded that no interior high efficiency (HE) lighting would be needed to meet Code compliance. Therefore, the use of high efficiency lighting (LED is one example) would be above and beyond code. The amount of energy needed in the interior of the building is typically higher than the amount of energy needed outdoors. Indoor HE lighting is 75-90% more efficient than standard lighting.

Example: a 10 watt LED bulb replaces a 60 watt standard bulb, which would be 83% more efficient. A 15 watt LED bulb has an equivalent rating of a 100 watt standard bulb. Outdoor HE lighting is 65-80% more efficient than standard lighting. For example: a 70 watt LED bulb replaces a 250 watt standard bulb, which would be 72% more efficient. If the developer installs 100% HE fixtures and bulbs, this would reduce the energy usage from lighting more than 70% as can be seen in the tables below. To be conservative, the lighting intensity in CalEEMod was adjusted 65% with the installation of 100% HE bulbs to account for additional outdoor lighting needs.

100% HE for smaller buildings (i.e., residential and small commercial uses)

	Standard Lights	HE Lights	Standard Wattage	HE Wattage	Energy Use (Standard)	Energy Use (HE)	Total Energy
CalEEMod Lighting	60[1]	10	100	15	6,000	150	6,150
100% HE Lighting	0	70	--	15	----	1,050	1,050
						Savings	5,000
						% Reduction	81%

[1] All indoor lighting is standard bulbs and half of the outdoor lighting is standard bulbs.

100% HE for larger buildings (i.e., commercial and industrial uses)

	Indoor Lights	Indoor Wattage	Energy Use (Indoor)	Outdoor Lights (50% HE)	Outdoor Wattage (Standard/HE)	Energy Use (Outdoor)	Total Energy
Historical Lighting	100	60	6,000	30	250/70	7,500	13,500
Standard Lighting	100	60	6,000	15/15[1]	250/70	3,750/1,050	10,800[2]
100% HE Lighting	100	10	1,000	30	0/70	0/2,100	3,100
						Savings	7,700
						% Reduction	71%

[1] All indoor lighting is standard bulbs and half of the outdoor lighting is standard bulbs.

[2] Assumed 20% reduction within CalEEMod lighting intensity.

ATTACHMENT D

CALEEMOD 2016.3.2 (Proposed Project)

Ocean Breeze Ranch 2030 Operations

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	32.00	Acre	32.00	1,393,920.00	0
City Park	16.00	Acre	16.00	696,960.00	0
Single Family Housing	396.00	Dwelling Unit	264.00	712,800.00	1133

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2030
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	402.51	**CH4 Intensity (lb/MWhr)**	0.016	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - rps for fully operational year 2030 50% RPS

Land Use - Proposed project... Project Engineer estimated 32 acres of paving

Construction Phase - Project Consruction Durations

Off-road Equipment - construction equipment

Off-road Equipment - construction equipment

Off-road Equipment - construction equipment

Off-road Equipment - Construction Equipment

Off-road Equipment - Construction Equipment

Off-road Equipment - construction equipment

Off-road Equipment - construction equipment

Trips and VMT - Project soil export and import hauling length would be from moving material onsite.

Demolition -

Grading - 945000 cf onsite earthwork haulage... 1,500' only though 0.5 mile was assumed. 312 ac with multiple passes

Architectural Coating - rule 67 paint

Vehicle Trips - per TS 396 units to generate 3,990 trips 10.08 trips per average unit. Parks would be primarily for project usage and would not generate trips per TS

Woodstoves - PDF - All fireplaces are Natural Gas

Area Coating - rule 67 paint

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Tier 3 with DPF

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

Ocean Breeze Ranch 2030 Operations - San Diego County, Annual

Table Name	Column Name	Default Value	New Value
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_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	400.00	15.00
tblConstructionPhase	NumDays	240.00	90.00

tblConstructionPhase	NumDays	620.00	285.00
tblConstructionPhase	NumDays	440.00	40.00
tblConstructionPhase	NumDays	6,200.00	1,488.00
tblConstructionPhase	NumDays	440.00	1,339.00
tblFireplaces	NumberGas	217.80	396.00
tblFireplaces	NumberNoFireplace	39.60	0.00
tblFireplaces	NumberWood	138.60	0.00
tblGrading	AcresOfGrading	1,567.50	1,550.00
tblGrading	AcresOfGrading	0.00	1,550.00
tblGrading	MaterialExported	0.00	347,500.00
tblGrading	MaterialExported	0.00	125,000.00
tblGrading	MaterialImported	0.00	347,500.00
tblGrading	MaterialImported	0.00	125,000.00
tblLandUse	LotAcreage	128.57	264.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	6.00	3.00
tblOffRoadEquipment	UsageHours	7.00	3.00
tblOffRoadEquipment	UsageHours	8.00	5.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	3.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.016
tblProjectCharacteristics	CO2IntensityFactor	720.49	402.51
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.50
tblTripsAndVMT	HaulingTripLength	20.00	0.50
tblVehicleTrips	HO_TTP	39.60	40.00
tblVehicleTrips	HS_TTP	18.80	18.00
tblVehicleTrips	HW_TTP	41.60	42.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	10.08
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	10.08
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	9.52	10.08
tblWoodstoves	NumberCatalytic	19.80	0.00
tblWoodstoves	NumberNoncatalytic	19.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.7009	9.7818	4.9794	0.0140	3.6287	0.2919	3.9206	1.2198	0.2689	1.4887	0.0000	1,270.7450	1,270.7450	0.3345	0.0000	1,279.1085
2023	0.9214	10.0822	6.9486	0.0212	2.8561	0.3024	3.1585	1.0636	0.2789	1.3425	0.0000	1,921.8426	1,921.8426	0.4177	0.0000	1,932.2841
2024	1.3939	4.9626	6.5526	0.0296	2.1765	0.0559	2.2325	0.5852	0.0526	0.6379	0.0000	2,761.5593	2,761.5593	0.1484	0.0000	2,765.2702
2025	1.7428	4.8530	6.5323	0.0299	2.2949	0.0519	2.3468	0.6167	0.0489	0.6655	0.0000	2,785.6679	2,785.6679	0.1465	0.0000	2,789.3311
2026	1.7149	4.7740	6.2552	0.0292	2.2949	0.0514	2.3463	0.6167	0.0484	0.6650	0.0000	2,724.9723	2,724.9723	0.1433	0.0000	2,728.5544
2027	1.6871	4.7006	6.0100	0.0286	2.2949	0.0506	2.3455	0.6167	0.0477	0.6643	0.0000	2,671.2832	2,671.2832	0.1405	0.0000	2,674.7949
2028	1.6516	4.6200	5.7793	0.0280	2.2861	0.0495	2.3356	0.6143	0.0466	0.6609	0.0000	2,614.3625	2,614.3625	0.1375	0.0000	2,617.8000
2029	0.8349	2.3492	2.8762	0.0142	1.1782	0.0251	1.2033	0.3166	0.0236	0.3402	0.0000	1,325.9846	1,325.9846	0.0698	0.0000	1,327.7291
Maximum	**1.7428**	**10.0822**	**6.9486**	**0.0299**	**3.6287**	**0.3024**	**3.9206**	**1.2198**	**0.2789**	**1.4887**	**0.0000**	**2,785.6679**	**2,785.6679**	**0.4177**	**0.0000**	**2,789.3311**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3125	7.8058	6.2468	0.0140	3.6287	0.0331	3.6618	1.2198	0.0330	1.2528	0.0000	1,270.7439	1,270.7439	0.3345	0.0000	1,279.1074
2023	0.5375	9.0054	8.9095	0.0212	2.8561	0.0440	2.9000	1.0636	0.0437	1.1073	0.0000	1,921.8412	1,921.8412	0.4177	0.0000	1,932.2827
2024	1.3399	5.0186	6.6521	0.0296	2.1765	0.0250	2.2015	0.5852	0.0239	0.6091	0.0000	2,761.5591	2,761.5591	0.1484	0.0000	2,765.2700
2025	1.6930	4.9751	6.6369	0.0299	2.2949	0.0257	2.3207	0.6167	0.0246	0.6412	0.0000	2,785.6677	2,785.6677	0.1465	0.0000	2,789.3310
2026	1.6651	4.8961	6.3598	0.0292	2.2949	0.0252	2.3201	0.6167	0.0241	0.6407	0.0000	2,724.9721	2,724.9721	0.1433	0.0000	2,728.5542
2027	1.6374	4.8227	6.1147	0.0286	2.2949	0.0245	2.3194	0.6167	0.0234	0.6400	0.0000	2,671.2830	2,671.2830	0.1405	0.0000	2,674.7947
2028	1.6020	4.7417	5.8836	0.0280	2.2861	0.0234	2.3095	0.6143	0.0224	0.6367	0.0000	2,614.3623	2,614.3623	0.1375	0.0000	2,617.7998
2029	0.8094	2.4119	2.9299	0.0142	1.1782	0.0116	1.1899	0.3166	0.0111	0.3277	0.0000	1,325.9845	1,325.9845	0.0698	0.0000	1,327.7290
Maximum	**1.6930**	**9.0054**	**8.9095**	**0.0299**	**3.6287**	**0.0440**	**3.6618**	**1.2198**	**0.0437**	**1.2528**	**0.0000**	**2,785.6677**	**2,785.6677**	**0.4177**	**0.0000**	**2,789.3310**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**9.87**	**5.30**	**-8.27**	**0.00**	**0.00**	**75.82**	**3.35**	**0.00**	**74.73**	**9.43**	**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)
4	**1-1-2022**	**3-31-2022**	0.2628	0.2076
5	**4-1-2022**	**6-30-2022**	2.2640	1.7356

6	**7-1-2022**	**9-30-2022**	3.7147	2.8829
7	**10-1-2022**	**12-31-2022**	4.2179	3.2750
8	**1-1-2023**	**3-31-2023**	3.6153	3.0658
9	**4-1-2023**	**6-30-2023**	3.6763	3.1206
10	**7-1-2023**	**9-30-2023**	2.5418	2.1889
11	**10-1-2023**	**12-31-2023**	1.2116	1.2052
12	**1-1-2024**	**3-31-2024**	1.4071	1.4075
13	**4-1-2024**	**6-30-2024**	1.5124	1.5128
14	**7-1-2024**	**9-30-2024**	1.6884	1.6890
15	**10-1-2024**	**12-31-2024**	1.7255	1.7261
16	**1-1-2025**	**3-31-2025**	1.6408	1.6586
17	**4-1-2025**	**6-30-2025**	1.6240	1.6420
18	**7-1-2025**	**9-30-2025**	1.6419	1.6601
19	**10-1-2025**	**12-31-2025**	1.6773	1.6955
20	**1-1-2026**	**3-31-2026**	1.6139	1.6317
21	**4-1-2026**	**6-30-2026**	1.5982	1.6163
22	**7-1-2026**	**9-30-2026**	1.6158	1.6340
23	**10-1-2026**	**12-31-2026**	1.6498	1.6680
24	**1-1-2027**	**3-31-2027**	1.5883	1.6062
25	**4-1-2027**	**6-30-2027**	1.5738	1.5919
26	**7-1-2027**	**9-30-2027**	1.5911	1.6093
27	**10-1-2027**	**12-31-2027**	1.6236	1.6419
28	**1-1-2028**	**3-31-2028**	1.5823	1.6003
29	**4-1-2028**	**6-30-2028**	1.5517	1.5697
30	**7-1-2028**	**9-30-2028**	1.5687	1.5869
31	**10-1-2028**	**12-31-2028**	1.5997	1.6179
32	**1-1-2029**	**3-31-2029**	1.5409	1.5587

33	**4-1-2029**	**6-30-2029**	1.5290	1.5470
34	**7-1-2029**	**9-30-2029**	0.0840	0.0850
		Highest	4.2179	3.2750

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	3.4652	0.3031	3.0476	1.8700e-003		0.0381	0.0381		0.0381	0.0381	0.0000	316.7132	316.7132	0.0106	5.7200e-003	318.6812
Energy	0.0499	0.4267	0.1816	2.7200e-003		0.0345	0.0345		0.0345	0.0345	0.0000	1,079.5452	1,079.5452	0.0327	0.0134	1,084.3638
Mobile	0.8817	3.8432	11.5741	0.0493	5.5842	0.0315	5.6158	1.4948	0.0293	1.5241	0.0000	4,579.5905	4,579.5905	0.2155	0.0000	4,584.9771
Waste						0.0000	0.0000		0.0000	0.0000	94.5755	0.0000	94.5755	5.5893	0.0000	234.3069
Water						0.0000	0.0000		0.0000	0.0000	8.1855	133.0000	141.1855	0.8460	0.0208	168.5469
Total	**4.3968**	**4.5730**	**14.8033**	**0.0539**	**5.5842**	**0.1041**	**5.6883**	**1.4948**	**0.1019**	**1.5966**	**102.7610**	**6,108.8489**	**6,211.6099**	**6.6940**	**0.0400**	**6,390.8757**

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	3.4652	0.3031	3.0476	1.8700e-003		0.0381	0.0381		0.0381	0.0381	0.0000	316.7132	316.7132	0.0106	5.7200e-003	318.6812
Energy	0.0499	0.4267	0.1816	2.7200e-003		0.0345	0.0345		0.0345	0.0345	0.0000	1,003.9379	1,003.9379	0.0297	0.0129	1,008.5134
Mobile	0.8817	3.8432	11.5741	0.0493	5.5842	0.0315	5.6158	1.4948	0.0293	1.5241	0.0000	4,579.5905	4,579.5905	0.2155	0.0000	4,584.9771
Waste						0.0000	0.0000		0.0000	0.0000	70.9316	0.0000	70.9316	4.1919	0.0000	175.7301
Water						0.0000	0.0000		0.0000	0.0000	8.1855	118.6674	126.8529	0.8454	0.0207	154.1682
Total	**4.3968**	**4.5730**	**14.8033**	**0.0539**	**5.5842**	**0.1041**	**5.6883**	**1.4948**	**0.1019**	**1.5966**	**79.1171**	**6,018.9090**	**6,098.0261**	**5.2931**	**0.0393**	**6,242.0700**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**23.01**	**1.47**	**1.83**	**20.93**	**1.65**	**2.33**

3.0 Construction Detail

Construction Phase

Ocean Breeze Ranch 2030 Operations - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	3/21/2022	5	15	
2	Site Preparation	Site Preparation	3/22/2022	7/25/2022	5	90	
3	Grading	Grading	7/26/2022	8/28/2023	5	285	
4	Paving	Paving	8/29/2023	10/23/2023	5	40	
5	Building Construction	Building Construction	10/24/2023	7/5/2029	5	1488	
6	Architectural Coating	Architectural Coating	5/20/2024	7/5/2029	5	1339	

Acres of Grading (Site Preparation Phase): 1550

Acres of Grading (Grading Phase): 1550

Acres of Paving: 32

Residential Indoor: 1,443,420; Residential Outdoor: 481,140; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 83,635 (Architectural Coating – sqft)

OffRoad Equipment

Ocean Breeze Ranch 2030 Operations - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	1	5.00	158	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Bore/Drill Rigs	2	3.00	221	0.50
Grading	Crushing/Proc. Equipment	1	3.00	85	0.78
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	3	8.00	187	0.41
Grading	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	3.00	231	0.29
Building Construction	Forklifts	3	4.00	89	0.20
Building Construction	Generator Sets	1	4.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	3.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Architectural Coating	Air Compressors	1	3.00	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	1	3.00	0.00	68.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	31,250.00	16.80	6.60	0.50	LD_Mix	HDT_Mix	HHDT
Grading	19	48.00	0.00	86,875.00	16.80	6.60	0.50	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,021.00	385.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	204.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.4700e-003	0.0000	7.4700e-003	1.1300e-003	0.0000	1.1300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.3300e-003	0.0153	2.0000e-005		4.0000e-004	4.0000e-004		3.7000e-004	3.7000e-004	0.0000	2.1263	2.1263	6.9000e-004	0.0000	2.1435
Total	**9.5000e-004**	**8.3300e-003**	**0.0153**	**2.0000e-005**	**7.4700e-003**	**4.0000e-004**	**7.8700e-003**	**1.1300e-003**	**3.7000e-004**	**1.5000e-003**	**0.0000**	**2.1263**	**2.1263**	**6.9000e-004**	**0.0000**	**2.1435**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	8.1200e-003	2.1700e-003	3.0000e-005	5.8000e-004	2.0000e-005	6.0000e-004	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	2.5555	2.5555	2.3000e-004	0.0000	2.5613
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	1.0000e-004	8.0000e-005	7.6000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2338	0.2338	1.0000e-005	0.0000	0.2339
Total	**3.4000e-004**	**8.2000e-003**	**2.9300e-003**	**3.0000e-005**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**	**2.3000e-004**	**2.0000e-005**	**2.6000e-004**	**0.0000**	**2.7893**	**2.7893**	**2.4000e-004**	**0.0000**	**2.7953**

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					7.4700e-003	0.0000	7.4700e-003	1.1300e-003	0.0000	1.1300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0000e-004	0.0115	0.0184	2.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	2.1263	2.1263	6.9000e-004	0.0000	2.1435
Total	**6.0000e-004**	**0.0115**	**0.0184**	**2.0000e-005**	**7.4700e-003**	**8.0000e-005**	**7.5500e-003**	**1.1300e-003**	**8.0000e-005**	**1.2100e-003**	**0.0000**	**2.1263**	**2.1263**	**6.9000e-004**	**0.0000**	**2.1435**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	8.1200e-003	2.1700e-003	3.0000e-005	5.8000e-004	2.0000e-005	6.0000e-004	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	2.5555	2.5555	2.3000e-004	0.0000	2.5613
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	1.0000e-004	8.0000e-005	7.6000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2338	0.2338	1.0000e-005	0.0000	0.2339
Total	**3.4000e-004**	**8.2000e-003**	**2.9300e-003**	**3.0000e-005**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**	**2.3000e-004**	**2.0000e-005**	**2.6000e-004**	**0.0000**	**2.7893**	**2.7893**	**2.4000e-004**	**0.0000**	**2.7953**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6524	0.0000	1.6524	0.5383	0.0000	0.5383	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1427	1.4888	0.8864	1.7100e-003		0.0726	0.0726		0.0668	0.0668	0.0000	150.4773	150.4773	0.0487	0.0000	151.6939
Total	**0.1427**	**1.4888**	**0.8864**	**1.7100e-003**	**1.6524**	**0.0726**	**1.7250**	**0.5383**	**0.0668**	**0.6051**	**0.0000**	**150.4773**	**150.4773**	**0.0487**	**0.0000**	**151.6939**

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0270	1.4520	0.2252	1.7800e-003	7.0100e-003	9.4000e-004	7.9500e-003	1.9500e-003	9.0000e-004	2.8500e-003	0.0000	177.0850	177.0850	0.0282	0.0000	177.7888
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	3.7600e-003	2.7300e-003	0.0273	9.0000e-005	0.0101	7.0000e-005	0.0102	2.6800e-003	6.0000e-005	2.7500e-003	0.0000	8.4164	8.4164	2.2000e-004	0.0000	8.4219
Total	**0.0307**	**1.4547**	**0.2525**	**1.8700e-003**	**0.0171**	**1.0100e-003**	**0.0181**	**4.6300e-003**	**9.6000e-004**	**5.6000e-003**	**0.0000**	**185.5014**	**185.5014**	**0.0284**	**0.0000**	**186.2107**

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					1.6524	0.0000	1.6524	0.5383	0.0000	0.5383	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.8580	1.0332	1.7100e-003		6.3900e-003	6.3900e-003		6.3900e-003	6.3900e-003	0.0000	150.4771	150.4771	0.0487	0.0000	151.6938
Total	**0.0419**	**0.8580**	**1.0332**	**1.7100e-003**	**1.6524**	**6.3900e-003**	**1.6588**	**0.5383**	**6.3900e-003**	**0.5447**	**0.0000**	**150.4771**	**150.4771**	**0.0487**	**0.0000**	**151.6938**

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0270	1.4520	0.2252	1.7800e-003	7.0100e-003	9.4000e-004	7.9500e-003	1.9500e-003	9.0000e-004	2.8500e-003	0.0000	177.0850	177.0850	0.0282	0.0000	177.7888
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	3.7600e-003	2.7300e-003	0.0273	9.0000e-005	0.0101	7.0000e-005	0.0102	2.6800e-003	6.0000e-005	2.7500e-003	0.0000	8.4164	8.4164	2.2000e-004	0.0000	8.4219
Total	**0.0307**	**1.4547**	**0.2525**	**1.8700e-003**	**0.0171**	**1.0100e-003**	**0.0181**	**4.6300e-003**	**9.6000e-004**	**5.6000e-003**	**0.0000**	**185.5014**	**185.5014**	**0.0284**	**0.0000**	**186.2107**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.9005	0.0000	1.9005	0.6622	0.0000	0.6622	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4835	5.1981	3.4798	8.0200e-003		0.2166	0.2166		0.1996	0.1996	0.0000	704.5036	704.5036	0.2245	0.0000	710.1167
Total	**0.4835**	**5.1981**	**3.4798**	**8.0200e-003**	**1.9005**	**0.2166**	**2.1171**	**0.6622**	**0.1996**	**0.8618**	**0.0000**	**704.5036**	**704.5036**	**0.2245**	**0.0000**	**710.1167**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0300	1.6146	0.2504	1.9800e-003	0.0162	1.0500e-003	0.0172	4.2300e-003	1.0000e-003	5.2300e-003	0.0000	196.9185	196.9185	0.0313	0.0000	197.7011
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	9.2100e-003	0.0922	3.1000e-004	0.0341	2.3000e-004	0.0343	9.0600e-003	2.1000e-004	9.2700e-003	0.0000	28.4286	28.4286	7.5000e-004	0.0000	28.4474
Total	**0.0427**	**1.6238**	**0.3426**	**2.2900e-003**	**0.0503**	**1.2800e-003**	**0.0516**	**0.0133**	**1.2100e-003**	**0.0145**	**0.0000**	**225.3471**	**225.3471**	**0.0321**	**0.0000**	**226.1485**

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					1.9005	0.0000	1.9005	0.6622	0.0000	0.6622	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1962	3.8496	4.5973	8.0200e-003		0.0243	0.0243		0.0243	0.0243	0.0000	704.5028	704.5028	0.2245	0.0000	710.1158
Total	**0.1962**	**3.8496**	**4.5973**	**8.0200e-003**	**1.9005**	**0.0243**	**1.9248**	**0.6622**	**0.0243**	**0.6865**	**0.0000**	**704.5028**	**704.5028**	**0.2245**	**0.0000**	**710.1158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0300	1.6146	0.2504	1.9800e-003	0.0162	1.0500e-003	0.0172	4.2300e-003	1.0000e-003	5.2300e-003	0.0000	196.9185	196.9185	0.0313	0.0000	197.7011
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	9.2100e-003	0.0922	3.1000e-004	0.0341	2.3000e-004	0.0343	9.0600e-003	2.1000e-004	9.2700e-003	0.0000	28.4286	28.4286	7.5000e-004	0.0000	28.4474
Total	**0.0427**	**1.6238**	**0.3426**	**2.2900e-003**	**0.0503**	**1.2800e-003**	**0.0516**	**0.0133**	**1.2100e-003**	**0.0145**	**0.0000**	**225.3471**	**225.3471**	**0.0321**	**0.0000**	**226.1485**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.4154	0.0000	2.4154	0.9452	0.0000	0.9452	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6585	6.8721	5.0068	0.0120		0.2801	0.2801		0.2581	0.2581	0.0000	1,056.8043	1,056.8043	0.3367	0.0000	1,065.2217
Total	**0.6585**	**6.8721**	**5.0068**	**0.0120**	**2.4154**	**0.2801**	**2.6955**	**0.9452**	**0.2581**	**1.2033**	**0.0000**	**1,056.8043**	**1,056.8043**	**0.3367**	**0.0000**	**1,065.2217**

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0328	2.0560	0.3318	2.8600e-003	0.0173	9.1000e-004	0.0182	4.6300e-003	8.7000e-004	5.5000e-003	0.0000	284.8299	284.8299	0.0392	0.0000	285.8101
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0181	0.0126	0.1283	4.5000e-004	0.0512	3.3000e-004	0.0515	0.0136	3.1000e-004	0.0139	0.0000	41.0128	41.0128	1.0300e-003	0.0000	41.0386
Total	**0.0509**	**2.0686**	**0.4602**	**3.3100e-003**	**0.0684**	**1.2400e-003**	**0.0697**	**0.0182**	**1.1800e-003**	**0.0194**	**0.0000**	**325.8428**	**325.8428**	**0.0402**	**0.0000**	**326.8487**

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					2.4154	0.0000	2.4154	0.9452	0.0000	0.9452	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2943	5.7745	6.8959	0.0120		0.0365	0.0365		0.0365	0.0365	0.0000	1,056.8030	1,056.8030	0.3367	0.0000	1,065.2204
Total	**0.2943**	**5.7745**	**6.8959**	**0.0120**	**2.4154**	**0.0365**	**2.4519**	**0.9452**	**0.0365**	**0.9817**	**0.0000**	**1,056.8030**	**1,056.8030**	**0.3367**	**0.0000**	**1,065.2204**

3.4 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	0.0328	2.0560	0.3318	2.8600e-003	0.0173	9.1000e-004	0.0182	4.6300e-003	8.7000e-004	5.5000e-003	0.0000	284.8299	284.8299	0.0392	0.0000	285.8101
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0181	0.0126	0.1283	4.5000e-004	0.0512	3.3000e-004	0.0515	0.0136	3.1000e-004	0.0139	0.0000	41.0128	41.0128	1.0300e-003	0.0000	41.0386
Total	**0.0509**	**2.0686**	**0.4602**	**3.3100e-003**	**0.0684**	**1.2400e-003**	**0.0697**	**0.0182**	**1.1800e-003**	**0.0194**	**0.0000**	**325.8428**	**325.8428**	**0.0402**	**0.0000**	**326.8487**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0207	0.2038	0.2917	4.6000e-004		0.0102	0.0102		9.3900e-003	9.3900e-003	0.0000	40.0537	40.0537	0.0130	0.0000	40.3776
Paving	0.0419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0626**	**0.2038**	**0.2917**	**4.6000e-004**		**0.0102**	**0.0102**		**9.3900e-003**	**9.3900e-003**	**0.0000**	**40.0537**	**40.0537**	**0.0130**	**0.0000**	**40.3776**

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3200e-003	9.2000e-004	9.3800e-003	3.0000e-005	3.7400e-003	2.0000e-005	3.7700e-003	9.9000e-004	2.0000e-005	1.0200e-003	0.0000	2.9980	2.9980	8.0000e-005	0.0000	2.9999
Total	**1.3200e-003**	**9.2000e-004**	**9.3800e-003**	**3.0000e-005**	**3.7400e-003**	**2.0000e-005**	**3.7700e-003**	**9.9000e-004**	**2.0000e-005**	**1.0200e-003**	**0.0000**	**2.9980**	**2.9980**	**8.0000e-005**	**0.0000**	**2.9999**

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	0.0112	0.2259	0.3459	4.6000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	40.0537	40.0537	0.0130	0.0000	40.3775
Paving	0.0419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0531**	**0.2259**	**0.3459**	**4.6000e-004**		**1.8300e-003**	**1.8300e-003**		**1.8300e-003**	**1.8300e-003**	**0.0000**	**40.0537**	**40.0537**	**0.0130**	**0.0000**	**40.3775**

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3200e-003	9.2000e-004	9.3800e-003	3.0000e-005	3.7400e-003	2.0000e-005	3.7700e-003	9.9000e-004	2.0000e-005	1.0200e-003	0.0000	2.9980	2.9980	8.0000e-005	0.0000	2.9999
Total	**1.3200e-003**	**9.2000e-004**	**9.3800e-003**	**3.0000e-005**	**3.7400e-003**	**2.0000e-005**	**3.7700e-003**	**9.9000e-004**	**2.0000e-005**	**1.0200e-003**	**0.0000**	**2.9980**	**2.9980**	**8.0000e-005**	**0.0000**	**2.9999**

3.6 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	0.0180	0.1633	0.1859	3.1000e-004		7.9800e-003	7.9800e-003		7.5200e-003	7.5200e-003	0.0000	26.3630	26.3630	6.1000e-003	0.0000	26.5155
Total	**0.0180**	**0.1633**	**0.1859**	**3.1000e-004**		**7.9800e-003**	**7.9800e-003**		**7.5200e-003**	**7.5200e-003**	**0.0000**	**26.3630**	**26.3630**	**6.1000e-003**	**0.0000**	**26.5155**

3.6 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0198	0.6964	0.2124	2.2400e-003	0.0566	7.9000e-004	0.0574	0.0164	7.6000e-004	0.0171	0.0000	219.8015	219.8015	0.0153	0.0000	220.1845
Worker	0.1103	0.0770	0.7822	2.7600e-003	0.3119	2.0300e-003	0.3139	0.0829	1.8700e-003	0.0847	0.0000	249.9793	249.9793	6.2800e-003	0.0000	250.1363
Total	**0.1301**	**0.7734**	**0.9946**	**5.0000e-003**	**0.3685**	**2.8200e-003**	**0.3714**	**0.0992**	**2.6300e-003**	**0.1019**	**0.0000**	**469.7808**	**469.7808**	**0.0216**	**0.0000**	**470.3208**

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	7.6900e-003	0.1621	0.2035	3.1000e-004		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	26.3630	26.3630	6.1000e-003	0.0000	26.5154
Total	**7.6900e-003**	**0.1621**	**0.2035**	**3.1000e-004**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**26.3630**	**26.3630**	**6.1000e-003**	**0.0000**	**26.5154**

3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0198	0.6964	0.2124	2.2400e-003	0.0566	7.9000e-004	0.0574	0.0164	7.6000e-004	0.0171	0.0000	219.8015	219.8015	0.0153	0.0000	220.1845
Worker	0.1103	0.0770	0.7822	2.7600e-003	0.3119	2.0300e-003	0.3139	0.0829	1.8700e-003	0.0847	0.0000	249.9793	249.9793	6.2800e-003	0.0000	250.1363
Total	**0.1301**	**0.7734**	**0.9946**	**5.0000e-003**	**0.3685**	**2.8200e-003**	**0.3714**	**0.0992**	**2.6300e-003**	**0.1019**	**0.0000**	**469.7808**	**469.7808**	**0.0216**	**0.0000**	**470.3208**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0901	0.8163	0.9895	1.6400e-003		0.0374	0.0374		0.0352	0.0352	0.0000	140.9864	140.9864	0.0324	0.0000	141.7962
Total	**0.0901**	**0.8163**	**0.9895**	**1.6400e-003**		**0.0374**	**0.0374**		**0.0352**	**0.0352**	**0.0000**	**140.9864**	**140.9864**	**0.0324**	**0.0000**	**141.7962**

3.6 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1022	3.6726	1.0980	0.0119	0.3028	4.1200e-003	0.3069	0.0874	3.9400e-003	0.0914	0.0000	1,167.6374	1,167.6374	0.0808	0.0000	1,169.6568
Worker	0.5618	0.3776	3.9090	0.0142	1.6677	0.0107	1.6784	0.4431	9.8300e-003	0.4529	0.0000	1,283.9694	1,283.9694	0.0309	0.0000	1,284.7411
Total	**0.6640**	**4.0502**	**5.0069**	**0.0261**	**1.9705**	**0.0148**	**1.9853**	**0.5305**	**0.0138**	**0.5443**	**0.0000**	**2,451.6068**	**2,451.6068**	**0.1117**	**0.0000**	**2,454.3979**

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	0.0411	0.8668	1.0881	1.6400e-003		8.3000e-003	8.3000e-003		8.3000e-003	8.3000e-003	0.0000	140.9862	140.9862	0.0324	0.0000	141.7961
Total	**0.0411**	**0.8668**	**1.0881**	**1.6400e-003**		**8.3000e-003**	**8.3000e-003**		**8.3000e-003**	**8.3000e-003**	**0.0000**	**140.9862**	**140.9862**	**0.0324**	**0.0000**	**141.7961**

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1022	3.6726	1.0980	0.0119	0.3028	4.1200e-003	0.3069	0.0874	3.9400e-003	0.0914	0.0000	1,167.6374	1,167.6374	0.0808	0.0000	1,169.6568
Worker	0.5618	0.3776	3.9090	0.0142	1.6677	0.0107	1.6784	0.4431	9.8300e-003	0.4529	0.0000	1,283.9694	1,283.9694	0.0309	0.0000	1,284.7411
Total	**0.6640**	**4.0502**	**5.0069**	**0.0261**	**1.9705**	**0.0148**	**1.9853**	**0.5305**	**0.0138**	**0.5443**	**0.0000**	**2,451.6068**	**2,451.6068**	**0.1117**	**0.0000**	**2,454.3979**

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0834	0.7551	0.9808	1.6400e-003		0.0320	0.0320		0.0302	0.0302	0.0000	140.4876	140.4876	0.0321	0.0000	141.2893
Total	**0.0834**	**0.7551**	**0.9808**	**1.6400e-003**		**0.0320**	**0.0320**		**0.0302**	**0.0302**	**0.0000**	**140.4876**	**140.4876**	**0.0321**	**0.0000**	**141.2893**

3.6 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0987	3.6067	1.0706	0.0118	0.3016	3.9800e-003	0.3056	0.0871	3.8000e-003	0.0909	0.0000	1,155.9638	1,155.9638	0.0795	0.0000	1,157.9509
Worker	0.5354	0.3471	3.6363	0.0136	1.6614	0.0105	1.6718	0.4414	9.6300e-003	0.4510	0.0000	1,227.3308	1,227.3308	0.0284	0.0000	1,228.0407
Total	**0.6341**	**3.9538**	**4.7069**	**0.0253**	**1.9630**	**0.0144**	**1.9774**	**0.5285**	**0.0134**	**0.5419**	**0.0000**	**2,383.2946**	**2,383.2946**	**0.1079**	**0.0000**	**2,385.9916**

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	0.0410	0.8635	1.0839	1.6400e-003		8.2700e-003	8.2700e-003		8.2700e-003	8.2700e-003	0.0000	140.4875	140.4875	0.0321	0.0000	141.2891
Total	**0.0410**	**0.8635**	**1.0839**	**1.6400e-003**		**8.2700e-003**	**8.2700e-003**		**8.2700e-003**	**8.2700e-003**	**0.0000**	**140.4875**	**140.4875**	**0.0321**	**0.0000**	**141.2891**

3.6 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0987	3.6067	1.0706	0.0118	0.3016	3.9800e-003	0.3056	0.0871	3.8000e-003	0.0909	0.0000	1,155.9638	1,155.9638	0.0795	0.0000	1,157.9509
Worker	0.5354	0.3471	3.6363	0.0136	1.6614	0.0105	1.6718	0.4414	9.6300e-003	0.4510	0.0000	1,227.3308	1,227.3308	0.0284	0.0000	1,228.0407
Total	**0.6341**	**3.9538**	**4.7069**	**0.0253**	**1.9630**	**0.0144**	**1.9774**	**0.5285**	**0.0134**	**0.5419**	**0.0000**	**2,383.2946**	**2,383.2946**	**0.1079**	**0.0000**	**2,385.9916**

3.6 Building Construction - 2026

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	0.0834	0.7551	0.9808	1.6400e-003		0.0320	0.0320		0.0302	0.0302	0.0000	140.4876	140.4876	0.0321	0.0000	141.2893
Total	**0.0834**	**0.7551**	**0.9808**	**1.6400e-003**		**0.0320**	**0.0320**		**0.0302**	**0.0302**	**0.0000**	**140.4876**	**140.4876**	**0.0321**	**0.0000**	**141.2893**

3.6 Building Construction - 2026

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	0.0961	3.5565	1.0544	0.0117	0.3016	3.8600e-003	0.3055	0.0871	3.6900e-003	0.0908	0.0000	1,149.2071	1,149.2071	0.0786	0.0000	1,151.1710
Worker	0.5143	0.3231	3.4189	0.0131	1.6614	0.0101	1.6715	0.4414	9.3200e-003	0.4507	0.0000	1,182.3743	1,182.3743	0.0265	0.0000	1,183.0360
Total	**0.6104**	**3.8796**	**4.4732**	**0.0247**	**1.9630**	**0.0140**	**1.9770**	**0.5285**	**0.0130**	**0.5415**	**0.0000**	**2,331.5814**	**2,331.5814**	**0.1050**	**0.0000**	**2,334.2070**

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	0.0410	0.8635	1.0839	1.6400e-003		8.2700e-003	8.2700e-003		8.2700e-003	8.2700e-003	0.0000	140.4875	140.4875	0.0321	0.0000	141.2891
Total	**0.0410**	**0.8635**	**1.0839**	**1.6400e-003**		**8.2700e-003**	**8.2700e-003**		**8.2700e-003**	**8.2700e-003**	**0.0000**	**140.4875**	**140.4875**	**0.0321**	**0.0000**	**141.2891**

3.6 Building Construction - 2026

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	0.0961	3.5565	1.0544	0.0117	0.3016	3.8600e-003	0.3055	0.0871	3.6900e-003	0.0908	0.0000	1,149.2071	1,149.2071	0.0786	0.0000	1,151.1710
Worker	0.5143	0.3231	3.4189	0.0131	1.6614	0.0101	1.6715	0.4414	9.3200e-003	0.4507	0.0000	1,182.3743	1,182.3743	0.0265	0.0000	1,183.0360
Total	**0.6104**	**3.8796**	**4.4732**	**0.0247**	**1.9630**	**0.0140**	**1.9770**	**0.5285**	**0.0130**	**0.5415**	**0.0000**	**2,331.5814**	**2,331.5814**	**0.1050**	**0.0000**	**2,334.2070**

3.6 Building Construction - 2027

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	0.0834	0.7551	0.9808	1.6400e-003		0.0320	0.0320		0.0302	0.0302	0.0000	140.4876	140.4876	0.0321	0.0000	141.2893
Total	**0.0834**	**0.7551**	**0.9808**	**1.6400e-003**		**0.0320**	**0.0320**		**0.0302**	**0.0302**	**0.0000**	**140.4876**	**140.4876**	**0.0321**	**0.0000**	**141.2893**

3.6 Building Construction - 2027

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	0.0940	3.5086	1.0406	0.0116	0.3016	3.7600e-003	0.3054	0.0871	3.5900e-003	0.0907	0.0000	1,143.0366	1,143.0366	0.0778	0.0000	1,144.9804
Worker	0.4929	0.3018	3.2260	0.0126	1.6614	9.5800e-003	1.6709	0.4414	8.8100e-003	0.4502	0.0000	1,142.7690	1,142.7690	0.0248	0.0000	1,143.3887
Total	**0.5869**	**3.8104**	**4.2666**	**0.0242**	**1.9630**	**0.0133**	**1.9763**	**0.5285**	**0.0124**	**0.5409**	**0.0000**	**2,285.8056**	**2,285.8056**	**0.1025**	**0.0000**	**2,288.3691**

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	0.0410	0.8635	1.0839	1.6400e-003		8.2700e-003	8.2700e-003		8.2700e-003	8.2700e-003	0.0000	140.4875	140.4875	0.0321	0.0000	141.2891
Total	**0.0410**	**0.8635**	**1.0839**	**1.6400e-003**		**8.2700e-003**	**8.2700e-003**		**8.2700e-003**	**8.2700e-003**	**0.0000**	**140.4875**	**140.4875**	**0.0321**	**0.0000**	**141.2891**

3.6 Building Construction - 2027

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	0.0940	3.5086	1.0406	0.0116	0.3016	3.7600e-003	0.3054	0.0871	3.5900e-003	0.0907	0.0000	1,143.0366	1,143.0366	0.0778	0.0000	1,144.9804
Worker	0.4929	0.3018	3.2260	0.0126	1.6614	9.5800e-003	1.6709	0.4414	8.8100e-003	0.4502	0.0000	1,142.7690	1,142.7690	0.0248	0.0000	1,143.3887
Total	**0.5869**	**3.8104**	**4.2666**	**0.0242**	**1.9630**	**0.0133**	**1.9763**	**0.5285**	**0.0124**	**0.5409**	**0.0000**	**2,285.8056**	**2,285.8056**	**0.1025**	**0.0000**	**2,288.3691**

3.6 Building Construction - 2028

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	0.0831	0.7523	0.9771	1.6300e-003		0.0319	0.0319		0.0300	0.0300	0.0000	139.9494	139.9494	0.0319	0.0000	140.7480
Total	**0.0831**	**0.7523**	**0.9771**	**1.6300e-003**		**0.0319**	**0.0319**		**0.0300**	**0.0300**	**0.0000**	**139.9494**	**139.9494**	**0.0319**	**0.0000**	**140.7480**

3.6 Building Construction - 2028

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	0.0919	3.4551	1.0294	0.0115	0.3005	3.6600e-003	0.3041	0.0868	3.5000e-003	0.0903	0.0000	1,133.4954	1,133.4954	0.0767	0.0000	1,135.4134
Worker	0.4682	0.2819	3.0465	0.0122	1.6550	8.8300e-003	1.6638	0.4397	8.1200e-003	0.4478	0.0000	1,103.7815	1,103.7815	0.0233	0.0000	1,104.3635
Total	**0.5601**	**3.7370**	**4.0760**	**0.0237**	**1.9555**	**0.0125**	**1.9679**	**0.5264**	**0.0116**	**0.5381**	**0.0000**	**2,237.2769**	**2,237.2769**	**0.1000**	**0.0000**	**2,239.7769**

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	0.0408	0.8602	1.0798	1.6300e-003		8.2400e-003	8.2400e-003		8.2400e-003	8.2400e-003	0.0000	139.9492	139.9492	0.0319	0.0000	140.7478
Total	**0.0408**	**0.8602**	**1.0798**	**1.6300e-003**		**8.2400e-003**	**8.2400e-003**		**8.2400e-003**	**8.2400e-003**	**0.0000**	**139.9492**	**139.9492**	**0.0319**	**0.0000**	**140.7478**

3.6 Building Construction - 2028

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	0.0919	3.4551	1.0294	0.0115	0.3005	3.6600e-003	0.3041	0.0868	3.5000e-003	0.0903	0.0000	1,133.4954	1,133.4954	0.0767	0.0000	1,135.4134
Worker	0.4682	0.2819	3.0465	0.0122	1.6550	8.8300e-003	1.6638	0.4397	8.1200e-003	0.4478	0.0000	1,103.7815	1,103.7815	0.0233	0.0000	1,104.3635
Total	**0.5601**	**3.7370**	**4.0760**	**0.0237**	**1.9555**	**0.0125**	**1.9679**	**0.5264**	**0.0116**	**0.5381**	**0.0000**	**2,237.2769**	**2,237.2769**	**0.1000**	**0.0000**	**2,239.7769**

3.6 Building Construction - 2029

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	0.0428	0.3877	0.5036	8.4000e-004		0.0164	0.0164		0.0155	0.0155	0.0000	72.1278	72.1278	0.0165	0.0000	72.5393
Total	**0.0428**	**0.3877**	**0.5036**	**8.4000e-004**		**0.0164**	**0.0164**		**0.0155**	**0.0155**	**0.0000**	**72.1278**	**72.1278**	**0.0165**	**0.0000**	**72.5393**

3.6 Building Construction - 2029

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	0.0465	1.7595	0.5265	5.8900e-003	0.1549	1.8400e-003	0.1567	0.0447	1.7600e-003	0.0465	0.0000	581.5779	581.5779	0.0393	0.0000	582.5594
Worker	0.2284	0.1364	1.4882	6.1100e-003	0.8530	4.2200e-003	0.8572	0.2266	3.8800e-003	0.2305	0.0000	553.1950	553.1950	0.0113	0.0000	553.4781
Total	**0.2750**	**1.8959**	**2.0147**	**0.0120**	**1.0078**	**6.0600e-003**	**1.0139**	**0.2713**	**5.6400e-003**	**0.2770**	**0.0000**	**1,134.7729**	**1,134.7729**	**0.0506**	**0.0000**	**1,136.0375**

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	0.0210	0.4433	0.5565	8.4000e-004		4.2500e-003	4.2500e-003		4.2500e-003	4.2500e-003	0.0000	72.1277	72.1277	0.0165	0.0000	72.5392
Total	**0.0210**	**0.4433**	**0.5565**	**8.4000e-004**		**4.2500e-003**	**4.2500e-003**		**4.2500e-003**	**4.2500e-003**	**0.0000**	**72.1277**	**72.1277**	**0.0165**	**0.0000**	**72.5392**

3.6 Building Construction - 2029

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	0.0465	1.7595	0.5265	5.8900e-003	0.1549	1.8400e-003	0.1567	0.0447	1.7600e-003	0.0465	0.0000	581.5779	581.5779	0.0393	0.0000	582.5594
Worker	0.2284	0.1364	1.4882	6.1100e-003	0.8530	4.2200e-003	0.8572	0.2266	3.8800e-003	0.2305	0.0000	553.1950	553.1950	0.0113	0.0000	553.4781
Total	**0.2750**	**1.8959**	**2.0147**	**0.0120**	**1.0078**	**6.0600e-003**	**1.0139**	**0.2713**	**5.6400e-003**	**0.2770**	**0.0000**	**1,134.7729**	**1,134.7729**	**0.0506**	**0.0000**	**1,136.0375**

3.7 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	0.5631					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3200e-003	0.0494	0.0733	1.2000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	10.3407	10.3407	5.8000e-004	0.0000	10.3552
Total	**0.5704**	**0.0494**	**0.0733**	**1.2000e-004**		**2.4700e-003**	**2.4700e-003**		**2.4700e-003**	**2.4700e-003**	**0.0000**	**10.3407**	**10.3407**	**5.8000e-004**	**0.0000**	**10.3552**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0694	0.0467	0.4829	1.7500e-003	0.2060	1.3200e-003	0.2074	0.0547	1.2100e-003	0.0560	0.0000	158.6254	158.6254	3.8100e-003	0.0000	158.7208
Total	**0.0694**	**0.0467**	**0.4829**	**1.7500e-003**	**0.2060**	**1.3200e-003**	**0.2074**	**0.0547**	**1.2100e-003**	**0.0560**	**0.0000**	**158.6254**	**158.6254**	**3.8100e-003**	**0.0000**	**158.7208**

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	0.5631					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4100e-003	0.0550	0.0742	1.2000e-004		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	10.3407	10.3407	5.8000e-004	0.0000	10.3552
Total	**0.5655**	**0.0550**	**0.0742**	**1.2000e-004**		**5.8000e-004**	**5.8000e-004**		**5.8000e-004**	**5.8000e-004**	**0.0000**	**10.3407**	**10.3407**	**5.8000e-004**	**0.0000**	**10.3552**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0694	0.0467	0.4829	1.7500e-003	0.2060	1.3200e-003	0.2074	0.0547	1.2100e-003	0.0560	0.0000	158.6254	158.6254	3.8100e-003	0.0000	158.7208
Total	**0.0694**	**0.0467**	**0.4829**	**1.7500e-003**	**0.2060**	**1.3200e-003**	**0.2074**	**0.0547**	**1.2100e-003**	**0.0560**	**0.0000**	**158.6254**	**158.6254**	**3.8100e-003**	**0.0000**	**158.7208**

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9072					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0747	0.1181	1.9000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9183**	**0.0747**	**0.1181**	**1.9000e-004**		**3.3600e-003**	**3.3600e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1070	0.0694	0.7266	2.7100e-003	0.3319	2.0900e-003	0.3340	0.0882	1.9200e-003	0.0901	0.0000	245.2258	245.2258	5.6700e-003	0.0000	245.3676
Total	**0.1070**	**0.0694**	**0.7266**	**2.7100e-003**	**0.3319**	**2.0900e-003**	**0.3340**	**0.0882**	**1.9200e-003**	**0.0901**	**0.0000**	**245.2258**	**245.2258**	**5.6700e-003**	**0.0000**	**245.3676**

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	0.9072					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0885	0.1196	1.9000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9110**	**0.0885**	**0.1196**	**1.9000e-004**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1070	0.0694	0.7266	2.7100e-003	0.3319	2.0900e-003	0.3340	0.0882	1.9200e-003	0.0901	0.0000	245.2258	245.2258	5.6700e-003	0.0000	245.3676
Total	**0.1070**	**0.0694**	**0.7266**	**2.7100e-003**	**0.3319**	**2.0900e-003**	**0.3340**	**0.0882**	**1.9200e-003**	**0.0901**	**0.0000**	**245.2258**	**245.2258**	**5.6700e-003**	**0.0000**	**245.3676**

3.7 Architectural Coating - 2026

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	0.9072					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0747	0.1181	1.9000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9183**	**0.0747**	**0.1181**	**1.9000e-004**		**3.3600e-003**	**3.3600e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1028	0.0646	0.6831	2.6100e-003	0.3319	2.0200e-003	0.3340	0.0882	1.8600e-003	0.0901	0.0000	236.2433	236.2433	5.2900e-003	0.0000	236.3755
Total	**0.1028**	**0.0646**	**0.6831**	**2.6100e-003**	**0.3319**	**2.0200e-003**	**0.3340**	**0.0882**	**1.8600e-003**	**0.0901**	**0.0000**	**236.2433**	**236.2433**	**5.2900e-003**	**0.0000**	**236.3755**

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	0.9072					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0885	0.1196	1.9000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9110**	**0.0885**	**0.1196**	**1.9000e-004**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1028	0.0646	0.6831	2.6100e-003	0.3319	2.0200e-003	0.3340	0.0882	1.8600e-003	0.0901	0.0000	236.2433	236.2433	5.2900e-003	0.0000	236.3755
Total	**0.1028**	**0.0646**	**0.6831**	**2.6100e-003**	**0.3319**	**2.0200e-003**	**0.3340**	**0.0882**	**1.8600e-003**	**0.0901**	**0.0000**	**236.2433**	**236.2433**	**5.2900e-003**	**0.0000**	**236.3755**

3.7 Architectural Coating - 2027

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	0.9072					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0747	0.1181	1.9000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9183**	**0.0747**	**0.1181**	**1.9000e-004**		**3.3600e-003**	**3.3600e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0985	0.0603	0.6446	2.5200e-003	0.3319	1.9100e-003	0.3339	0.0882	1.7600e-003	0.0900	0.0000	228.3300	228.3300	4.9500e-003	0.0000	228.4538
Total	**0.0985**	**0.0603**	**0.6446**	**2.5200e-003**	**0.3319**	**1.9100e-003**	**0.3339**	**0.0882**	**1.7600e-003**	**0.0900**	**0.0000**	**228.3300**	**228.3300**	**4.9500e-003**	**0.0000**	**228.4538**

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	0.9072					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0885	0.1196	1.9000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9110**	**0.0885**	**0.1196**	**1.9000e-004**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0985	0.0603	0.6446	2.5200e-003	0.3319	1.9100e-003	0.3339	0.0882	1.7600e-003	0.0900	0.0000	228.3300	228.3300	4.9500e-003	0.0000	228.4538
Total	**0.0985**	**0.0603**	**0.6446**	**2.5200e-003**	**0.3319**	**1.9100e-003**	**0.3339**	**0.0882**	**1.7600e-003**	**0.0900**	**0.0000**	**228.3300**	**228.3300**	**4.9500e-003**	**0.0000**	**228.4538**

3.7 Architectural Coating - 2028

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	0.9037					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.0745	0.1176	1.9000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	16.5962	16.5962	9.1000e-004	0.0000	16.6188
Total	**0.9148**	**0.0745**	**0.1176**	**1.9000e-004**		**3.3500e-003**	**3.3500e-003**		**3.3500e-003**	**3.3500e-003**	**0.0000**	**16.5962**	**16.5962**	**9.1000e-004**	**0.0000**	**16.6188**

3.7 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0936	0.0563	0.6087	2.4400e-003	0.3307	1.7600e-003	0.3324	0.0879	1.6200e-003	0.0895	0.0000	220.5401	220.5401	4.6500e-003	0.0000	220.6564
Total	**0.0936**	**0.0563**	**0.6087**	**2.4400e-003**	**0.3307**	**1.7600e-003**	**0.3324**	**0.0879**	**1.6200e-003**	**0.0895**	**0.0000**	**220.5401**	**220.5401**	**4.6500e-003**	**0.0000**	**220.6564**

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	0.9037					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8600e-003	0.0882	0.1191	1.9000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	16.5961	16.5961	9.1000e-004	0.0000	16.6188
Total	**0.9076**	**0.0882**	**0.1191**	**1.9000e-004**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**16.5961**	**16.5961**	**9.1000e-004**	**0.0000**	**16.6188**

3.7 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0936	0.0563	0.6087	2.4400e-003	0.3307	1.7600e-003	0.3324	0.0879	1.6200e-003	0.0895	0.0000	220.5401	220.5401	4.6500e-003	0.0000	220.6564
Total	**0.0936**	**0.0563**	**0.6087**	**2.4400e-003**	**0.3307**	**1.7600e-003**	**0.3324**	**0.0879**	**1.6200e-003**	**0.0895**	**0.0000**	**220.5401**	**220.5401**	**4.6500e-003**	**0.0000**	**220.6564**

3.7 Architectural Coating - 2029

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	0.4658					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7200e-003	0.0384	0.0606	1.0000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	8.5534	8.5534	4.7000e-004	0.0000	8.5651
Total	**0.4715**	**0.0384**	**0.0606**	**1.0000e-004**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**	**0.0000**	**8.5534**	**8.5534**	**4.7000e-004**	**0.0000**	**8.5651**

3.7 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0456	0.0273	0.2974	1.2200e-003	0.1704	8.4000e-004	0.1713	0.0453	7.8000e-004	0.0461	0.0000	110.5306	110.5306	2.2600e-003	0.0000	110.5872
Total	**0.0456**	**0.0273**	**0.2974**	**1.2200e-003**	**0.1704**	**8.4000e-004**	**0.1713**	**0.0453**	**7.8000e-004**	**0.0461**	**0.0000**	**110.5306**	**110.5306**	**2.2600e-003**	**0.0000**	**110.5872**

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	0.4658					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9900e-003	0.0455	0.0614	1.0000e-004		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	8.5534	8.5534	4.7000e-004	0.0000	8.5651
Total	**0.4677**	**0.0455**	**0.0614**	**1.0000e-004**		**4.8000e-004**	**4.8000e-004**		**4.8000e-004**	**4.8000e-004**	**0.0000**	**8.5534**	**8.5534**	**4.7000e-004**	**0.0000**	**8.5651**

3.7 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0456	0.0273	0.2974	1.2200e-003	0.1704	8.4000e-004	0.1713	0.0453	7.8000e-004	0.0461	0.0000	110.5306	110.5306	2.2600e-003	0.0000	110.5872
Total	**0.0456**	**0.0273**	**0.2974**	**1.2200e-003**	**0.1704**	**8.4000e-004**	**0.1713**	**0.0453**	**7.8000e-004**	**0.0461**	**0.0000**	**110.5306**	**110.5306**	**2.2600e-003**	**0.0000**	**110.5872**

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	0.8817	3.8432	11.5741	0.0493	5.5842	0.0315	5.6158	1.4948	0.0293	1.5241	0.0000	4,579.5905	4,579.5905	0.2155	0.0000	4,584.9771
Unmitigated	0.8817	3.8432	11.5741	0.0493	5.5842	0.0315	5.6158	1.4948	0.0293	1.5241	0.0000	4,579.5905	4,579.5905	0.2155	0.0000	4,584.9771

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	3,991.68	3,991.68	3991.68	14,826,012	14,826,012
Total	3,991.68	3,991.68	3,991.68	14,826,012	14,826,012

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	18.00	40.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.616428	0.037185	0.177402	0.097684	0.012090	0.005279	0.017663	0.025476	0.001931	0.001677	0.005617	0.000785	0.000782
Other Asphalt Surfaces	0.616428	0.037185	0.177402	0.097684	0.012090	0.005279	0.017663	0.025476	0.001931	0.001677	0.005617	0.000785	0.000782
Single Family Housing	0.616428	0.037185	0.177402	0.097684	0.012090	0.005279	0.017663	0.025476	0.001931	0.001677	0.005617	0.000785	0.000782

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive 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	509.7239	509.7239	0.0203	3.8000e-003	511.3625
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	585.3312	585.3312	0.0233	4.3600e-003	587.2129
NaturalGas Mitigated	0.0499	0.4267	0.1816	2.7200e-003		0.0345	0.0345		0.0345	0.0345	0.0000	494.2140	494.2140	9.4700e-003	9.0600e-003	497.1509
NaturalGas Unmitigated	0.0499	0.4267	0.1816	2.7200e-003		0.0345	0.0345		0.0345	0.0345	0.0000	494.2140	494.2140	9.4700e-003	9.0600e-003	497.1509

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	9.26122e+006	0.0499	0.4267	0.1816	2.7200e-003		0.0345	0.0345		0.0345	0.0345	0.0000	494.2140	494.2140	9.4700e-003	9.0600e-003	497.1509
Total		**0.0499**	**0.4267**	**0.1816**	**2.7200e-003**		**0.0345**	**0.0345**		**0.0345**	**0.0345**	**0.0000**	**494.2140**	**494.2140**	**9.4700e-003**	**9.0600e-003**	**497.1509**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	9.26122e+006	0.0499	0.4267	0.1816	2.7200e-003		0.0345	0.0345		0.0345	0.0345	0.0000	494.2140	494.2140	9.4700e-003	9.0600e-003	497.1509
Total		**0.0499**	**0.4267**	**0.1816**	**2.7200e-003**		**0.0345**	**0.0345**		**0.0345**	**0.0345**	**0.0000**	**494.2140**	**494.2140**	**9.4700e-003**	**9.0600e-003**	**497.1509**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.20597e+006	585.3312	0.0233	4.3600e-003	587.2129
Total		**585.3312**	**0.0233**	**4.3600e-003**	**587.2129**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.79185e+006	509.7239	0.0203	3.8000e-003	511.3625
Total		**509.7239**	**0.0203**	**3.8000e-003**	**511.3625**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.4652	0.3031	3.0476	1.8700e-003		0.0381	0.0381		0.0381	0.0381	0.0000	316.7132	316.7132	0.0106	5.7200e-003	318.6812
Unmitigated	3.4652	0.3031	3.0476	1.8700e-003		0.0381	0.0381		0.0381	0.0381	0.0000	316.7132	316.7132	0.0106	5.7200e-003	318.6812

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	0.4654					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8805					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0315	0.2693	0.1146	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.9093	311.9093	5.9800e-003	5.7200e-003	313.7629
Landscaping	0.0878	0.0338	2.9330	1.6000e-004		0.0163	0.0163		0.0163	0.0163	0.0000	4.8039	4.8039	4.5800e-003	0.0000	4.9183
Total	**3.4652**	**0.3031**	**3.0476**	**1.8800e-003**		**0.0381**	**0.0381**		**0.0381**	**0.0381**	**0.0000**	**316.7132**	**316.7132**	**0.0106**	**5.7200e-003**	**318.6812**

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	0.4654					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8805					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0315	0.2693	0.1146	1.7200e-003		0.0218	0.0218		0.0218	0.0218	0.0000	311.9093	311.9093	5.9800e-003	5.7200e-003	313.7629
Landscaping	0.0878	0.0338	2.9330	1.6000e-004		0.0163	0.0163		0.0163	0.0163	0.0000	4.8039	4.8039	4.5800e-003	0.0000	4.9183
Total	**3.4652**	**0.3031**	**3.0476**	**1.8800e-003**		**0.0381**	**0.0381**		**0.0381**	**0.0381**	**0.0000**	**316.7132**	**316.7132**	**0.0106**	**5.7200e-003**	**318.6812**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	126.8529	0.8454	0.0207	154.1682
Unmitigated	141.1855	0.8460	0.0208	168.5469

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 19.0637	38.6691	1.5400e-003	2.9000e-004	38.7934
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	25.801 / 16.2658	102.5164	0.8445	0.0206	129.7535
Total		**141.1855**	**0.8460**	**0.0208**	**168.5469**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 15.251	30.9353	1.2300e-003	2.3000e-004	31.0347
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	25.801 / 13.0127	95.9176	0.8442	0.0205	123.1335
Total		**126.8529**	**0.8454**	**0.0207**	**154.1683**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	70.9316	4.1919	0.0000	175.7301
Unmitigated	94.5755	5.5893	0.0000	234.3069

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.38	0.2801	0.0166	0.0000	0.6940
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	464.53	94.2954	5.5727	0.0000	233.6128
Total		**94.5755**	**5.5893**	**0.0000**	**234.3068**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.035	0.2101	0.0124	0.0000	0.5205
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	348.397	70.7215	4.1795	0.0000	175.2096
Total		**70.9316**	**4.1919**	**0.0000**	**175.7301**

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

ATTACHMENT E

Electric Vehicle Calculations

Electric Vehicle Emissions Reductions

	C	D	E	F	G	H	I	J	K	L
2	Total Residential Population (Project Only)		1,133	Population	**Notes:**					
3	Average Drivers per 1,000 residence		639							
4	Total Project Related Cars		724	Drivers	E2*E3/1000					
5	6% of Cars would be ZEV Per EMFAC		44	Cars	E4*0.0608					
6	9.4% Additional project related ZEV		68	Cars	0.0943*E4					
7	Total ZEV Cars		112	Cars	E5+E6					
8										
9	ZEV can be Plugin Hybrid Electric Vehicle (PHEV), Battery Electric Vehicle (BEV) and Fuel Cell Electric Vehicle (FCEV). Though FCEV not practical due to lack Hydrogen fueling station infrastructure									
10										
11	Breakdown of added EV above EMFAC		68	Cars						
12		Percentage								
13	PHEV	60%	41	Cars						
14	BEV	40%	27	Cars						
15										
16										
17	Tailpipe Emissions based on analysis using Union of Concerned Scientist				**Notes:**					
18		Emissions								
19	Internal Combustion Engine	310	grams/mile		100% tailpipe emissions					
20	PHEV	185	grams/mile		Mixture of charging emissions and tailpipe emissions					
21	BEV	110	grams/mile		All emissions come from charging vehicle					
22										
23	Derived Tailpipe Emissions						**Notes:**			
24										
25	Internal Combustion Engine			100%		Tailpipe	Since no batteries are within the cars no charging energy is needed			
26				0%		Charging				
27										
28	BEV			0%		Tailpipe	Batteries are charged and car is propelled by electricity generated from onsite solar charging station (Our project would have solar chargers as the source)			
29				100%		Charging				
30										
31	PHEV			Total - Offsite		Tailpipe	PEV have smaller batteries and rely on a secondary power system to extend range. Since batteries are smaller, it's assumed that power systems are 50% that of BEV			
32				50% of BEV		Charging				
33										
34										
35							**Notes**			
36	Internal Combustion Engine			381	grams/mile	Tailpipe				
37				0	grams/mile	Charging				
38										
39	BEV			0	grams/mile	Tailpipe				
40				110	grams/mile	Charging				
41	Total Emissions (Percent Lower than Internal Combustion Engines)			71.1%			(F36-F40)/F36			
42	Tailpipe Only (Percent Lower than Internal Combustion Engines)			100.0%			(F36-F39)/F36			
43										
44	PHEV			130.0	grams/mile	Tailpipe	D20-F45			
45				55.0	grams/mile	Charging	0.5*D21			
46	Total Emissions (Percent Lower than Internal Combustion Engines)			51.4%			(F36-(F44+F45))/F36			
47	Tailpipe Only (Percent Lower than Internal Combustion Engines)			65.9%			(F36-F44)/F36			
48										
49	Project Related Vehicles									
50	Total Vehicles	724	Cars							
51	Project added PHEV	41	Cars							
52	Project added BEV	27	Cars							
53	Project ZEV Reductions per mile Driven	79.53%					(F47*D51+D52*F42)/(SUM(D51:D52))			
54										
55										
56				**Notes:**						
57	Total Trips	3,991.68	trips/day	**CalEEmod input limitations**						
58	Average Trip length per VMT	10.18	miles							
59	Trips per Day per driver	5.513	trips	D57/D50						
60	Miles per day per driver	56.10	miles	D59*D58						
61	PHEV Miles Driven Per day	2,298.23	miles	D51*D60						
62	BEV Miles Driver Per day	1,532.16	miles	D52*D60						
63	Total Miles Driven per day ZEV	3,830.39	miles	SUM(D61:D62)						
64	Total Miles Driven per year ZEV	1,398,092.93	miles	D63*365						
65	CalEEMod Emissions per Mile Driven	0.000309252	MT/CO2e							
66										
67	Total Emission Reduction	343.85	MT/CO2e	D53*D64*D65						

ATTACHMENT F

PV Watts Solar Calculations

NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at https://sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

The energy output range is based on analysis of 30 years of historical weather data for nearby , and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESULTS

3,263,218 kWh/Year*

System output may range from 3,136,605 to 3,283,777 kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)	Value ($)
January	4.74	221,636	36,237
February	5.10	213,762	34,950
March	6.16	283,314	46,322
April	6.62	292,771	47,868
May	6.99	304,372	49,765
June	7.58	323,732	52,930
July	7.53	327,318	53,516
August	7.54	322,045	52,654
September	6.79	288,475	47,166
October	5.77	256,374	41,917
November	4.99	220,236	36,009
December	4.43	209,185	34,202
Annual	6.19	3,263,220	$ 533,536

Location and Station Identification

Requested Location	valley center ca
Weather Data Source	Lat, Lon: 33.21, -117.02 1.3 mi
Latitude	33.21° N
Longitude	117.02° W

PV System Specifications *(Residential)*

DC System Size	1973 kW
Module Type	Standard
Array Type	Fixed (roof mount)
Array Tilt	20°
Array Azimuth	180°
System Losses	14.08%
Inverter Efficiency	96%
DC to AC Size Ratio	1.2

Economics

Average Retail Electricity Rate	0.164 $/kWh

Performance Metrics

Capacity Factor	18.9%

ATTACHMENT G

CALEEMOD 2016.3.2 (Solar GHG Estimates)

OBR Solar

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	1.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2030
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project would install 1,973 kw solar

Land Use - Rooftop Solar

Construction Phase -

Off-road Equipment -

Off-road Equipment - zero hours

Trips and VMT - zero

Grading -

Architectural Coating -

Vehicle Trips -

Woodstoves - asdf

Area Coating -

Landscape Equipment - zero

Energy Use -

Water And Wastewater -

Energy Mitigation - Based on PVWatts, 1973 kw of solar would generate 3,263,218 kWh per year.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblLandUse	LotAcreage	0.00	1.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	3.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-1,066.4483	-1,066.4483	-0.0429	-0.0089	-1,070.1679
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**-1,066.4482**	**-1,066.4482**	**-0.0429**	**-0.0089**	**-1,070.1679**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5,332,241,250.00**	**5,332,241,250.00**	**0.00**	**0.00**	**5,350,839,600.00**

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	12/30/2016	12/31/2016	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	1	0.00	174	0.41

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	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

3.2 Site Preparation - 2016

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.616428	0.037185	0.177402	0.097684	0.012090	0.005279	0.017663	0.025476	0.001931	0.001677	0.005617	0.000785	0.000782

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive 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	-1,066.4483	-1,066.4483	-0.0429	-0.0089	-1,070.1679
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	-3.26322e+006	-1,066.4483	-0.0429	-0.0089	-1,070.1679
Total		**-1,066.4483**	**-0.0429**	**-0.0089**	**-1,070.1679**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					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	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					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	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT H

CALEEMOD 2016.3.2 (General Plan Buildout)

Ocean Breeze Ranch GP Buildout

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	32.00	Acre	32.00	1,393,920.00	0
Single Family Housing	402.00	Dwelling Unit	280.00	723,600.00	1150

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2030
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	402.51	**CH4 Intensity (lb/MWhr)**	0.016	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - rps for fully operational year 2030 50% RPS

Land Use - Proposed project... Project Engineer estimated 32 acres of paving

Construction Phase - Project Consruction Durations

Off-road Equipment - construction equipment

Off-road Equipment - construction equipment

Off-road Equipment - construction equipment

Off-road Equipment - construction equipment

Off-road Equipment - construction equipment

Off-road Equipment - construction equipment

Off-road Equipment - construction equipment

Trips and VMT - Project soil export and import hauling length would be from moving material onsite.

Demolition -

Grading - 945000 cf onsite earthwork haulage... 1,500' only though 0.5 mile was assumed. 312 ac with multiple passes

Architectural Coating - rule 67 paint

Vehicle Trips - Vehicle Trips - per TS GP will consist of 96 Estate at 12 per and 306 SF at 10 per totlat 4212/402 = 10.477. Used 10.47 for modeling purposes for worst case vice rounding up to 10.48.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - PDF - All fireplaces are Natural Gas

Area Coating - rule 67 paint

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Tier 3 with DPF

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
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tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100

tblAreaCoating	Area_EF_Residential_Interior	250	100
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tblConstructionPhase	NumDays	620.00	285.00
tblConstructionPhase	NumDays	440.00	40.00
tblConstructionPhase	NumDays	6,200.00	1,488.00
tblConstructionPhase	NumDays	440.00	1,339.00
tblFireplaces	NumberGas	221.10	402.00
tblFireplaces	NumberNoFireplace	40.20	0.00

tblFireplaces	NumberWood	140.70	0.00
tblGrading	AcresOfGrading	1,567.50	1,550.00
tblGrading	AcresOfGrading	0.00	1,550.00
tblGrading	MaterialExported	0.00	347,500.00
tblGrading	MaterialExported	0.00	125,000.00
tblGrading	MaterialImported	0.00	347,500.00
tblGrading	MaterialImported	0.00	125,000.00
tblLandUse	LotAcreage	130.52	280.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
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tblOffRoadEquipment	UsageHours	7.00	3.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.016
tblProjectCharacteristics	CO2IntensityFactor	720.49	402.51
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.50
tblTripsAndVMT	HaulingTripLength	20.00	0.50

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tblTripsAndVMT	WorkerTripNumber	146.00	204.00
tblVehicleTrips	HO_TTP	39.60	40.00
tblVehicleTrips	HS_TTP	18.80	18.00
tblVehicleTrips	HW_TTP	41.60	42.00
tblVehicleTrips	ST_TR	9.91	10.47
tblVehicleTrips	SU_TR	8.62	10.47
tblVehicleTrips	WD_TR	9.52	10.47
tblWoodstoves	NumberCatalytic	20.10	0.00
tblWoodstoves	NumberNoncatalytic	20.10	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.7009	9.7818	4.9794	0.0140	3.6287	0.2919	3.9206	1.2198	0.2689	1.4887	0.0000	1,270.7450	1,270.7450	0.3345	0.0000	1,279.1085
2023	0.9214	10.0822	6.9486	0.0212	2.8561	0.3024	3.1585	1.0636	0.2789	1.3425	0.0000	1,921.8426	1,921.8426	0.4177	0.0000	1,932.2841
2024	1.4021	4.9626	6.5526	0.0296	2.1765	0.0559	2.2325	0.5852	0.0526	0.6379	0.0000	2,761.5593	2,761.5593	0.1484	0.0000	2,765.2702
2025	1.7560	4.8530	6.5323	0.0299	2.2949	0.0519	2.3468	0.6167	0.0489	0.6655	0.0000	2,785.6679	2,785.6679	0.1465	0.0000	2,789.3311
2026	1.7281	4.7740	6.2552	0.0292	2.2949	0.0514	2.3463	0.6167	0.0484	0.6650	0.0000	2,724.9723	2,724.9723	0.1433	0.0000	2,728.5544
2027	1.7003	4.7006	6.0100	0.0286	2.2949	0.0506	2.3455	0.6167	0.0477	0.6643	0.0000	2,671.2832	2,671.2832	0.1405	0.0000	2,674.7949
2028	1.6647	4.6200	5.7793	0.0280	2.2861	0.0495	2.3356	0.6143	0.0466	0.6609	0.0000	2,614.3625	2,614.3625	0.1375	0.0000	2,617.8000
2029	0.8417	2.3492	2.8762	0.0142	1.1782	0.0251	1.2033	0.3166	0.0236	0.3402	0.0000	1,325.9846	1,325.9846	0.0698	0.0000	1,327.7291
Maximum	**1.7560**	**10.0822**	**6.9486**	**0.0299**	**3.6287**	**0.3024**	**3.9206**	**1.2198**	**0.2789**	**1.4887**	**0.0000**	**2,785.6679**	**2,785.6679**	**0.4177**	**0.0000**	**2,789.3311**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3125	7.8058	6.2468	0.0140	3.6287	0.0331	3.6618	1.2198	0.0330	1.2528	0.0000	1,270.7439	1,270.7439	0.3345	0.0000	1,279.1074
2023	0.5375	9.0054	8.9095	0.0212	2.8561	0.0440	2.9000	1.0636	0.0437	1.1073	0.0000	1,921.8412	1,921.8412	0.4177	0.0000	1,932.2827
2024	1.3481	5.0186	6.6521	0.0296	2.1765	0.0250	2.2015	0.5852	0.0239	0.6091	0.0000	2,761.5591	2,761.5591	0.1484	0.0000	2,765.2700
2025	1.7062	4.9751	6.6369	0.0299	2.2949	0.0257	2.3207	0.6167	0.0246	0.6412	0.0000	2,785.6677	2,785.6677	0.1465	0.0000	2,789.3310
2026	1.6783	4.8961	6.3598	0.0292	2.2949	0.0252	2.3201	0.6167	0.0241	0.6407	0.0000	2,724.9721	2,724.9721	0.1433	0.0000	2,728.5542
2027	1.6506	4.8227	6.1147	0.0286	2.2949	0.0245	2.3194	0.6167	0.0234	0.6400	0.0000	2,671.2830	2,671.2830	0.1405	0.0000	2,674.7947
2028	1.6151	4.7417	5.8836	0.0280	2.2861	0.0234	2.3095	0.6143	0.0224	0.6367	0.0000	2,614.3623	2,614.3623	0.1375	0.0000	2,617.7998
2029	0.8161	2.4119	2.9299	0.0142	1.1782	0.0116	1.1899	0.3166	0.0111	0.3277	0.0000	1,325.9845	1,325.9845	0.0698	0.0000	1,327.7290
Maximum	**1.7062**	**9.0054**	**8.9095**	**0.0299**	**3.6287**	**0.0440**	**3.6618**	**1.2198**	**0.0437**	**1.2528**	**0.0000**	**2,785.6677**	**2,785.6677**	**0.4177**	**0.0000**	**2,789.3310**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**9.81**	**5.30**	**-8.27**	**0.00**	**0.00**	**75.82**	**3.35**	**0.00**	**74.73**	**9.43**	**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)
4	**1-1-2022**	**3-31-2022**	0.2628	0.2076
5	**4-1-2022**	**6-30-2022**	2.2640	1.7356

6	**7-1-2022**	**9-30-2022**	3.7147	2.8829
7	**10-1-2022**	**12-31-2022**	4.2179	3.2750
8	**1-1-2023**	**3-31-2023**	3.6153	3.0658
9	**4-1-2023**	**6-30-2023**	3.6763	3.1206
10	**7-1-2023**	**9-30-2023**	2.5418	2.1889
11	**10-1-2023**	**12-31-2023**	1.2116	1.2052
12	**1-1-2024**	**3-31-2024**	1.4071	1.4075
13	**4-1-2024**	**6-30-2024**	1.5139	1.5144
14	**7-1-2024**	**9-30-2024**	1.6917	1.6923
15	**10-1-2024**	**12-31-2024**	1.7288	1.7294
16	**1-1-2025**	**3-31-2025**	1.6440	1.6619
17	**4-1-2025**	**6-30-2025**	1.6273	1.6453
18	**7-1-2025**	**9-30-2025**	1.6452	1.6634
19	**10-1-2025**	**12-31-2025**	1.6806	1.6988
20	**1-1-2026**	**3-31-2026**	1.6172	1.6350
21	**4-1-2026**	**6-30-2026**	1.6015	1.6195
22	**7-1-2026**	**9-30-2026**	1.6191	1.6373
23	**10-1-2026**	**12-31-2026**	1.6531	1.6713
24	**1-1-2027**	**3-31-2027**	1.5916	1.6094
25	**4-1-2027**	**6-30-2027**	1.5771	1.5951
26	**7-1-2027**	**9-30-2027**	1.5944	1.6127
27	**10-1-2027**	**12-31-2027**	1.6270	1.6452
28	**1-1-2028**	**3-31-2028**	1.5856	1.6036
29	**4-1-2028**	**6-30-2028**	1.5549	1.5730
30	**7-1-2028**	**9-30-2028**	1.5720	1.5902
31	**10-1-2028**	**12-31-2028**	1.6030	1.6212
32	**1-1-2029**	**3-31-2029**	1.5441	1.5619

33	**4-1-2029**	**6-30-2029**	1.5323	1.5503
34	**7-1-2029**	**9-30-2029**	0.0842	0.0852
		Highest	4.2179	3.2750

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	3.5094	0.3077	3.0936	1.9000e-003		0.0387	0.0387		0.0387	0.0387	0.0000	321.5116	321.5116	0.0107	5.8000e-003	323.5094
Energy	0.0507	0.4332	0.1843	2.7700e-003		0.0350	0.0350		0.0350	0.0350	0.0000	1,095.9019	1,095.9019	0.0332	0.0136	1,100.7935
Mobile	0.9297	4.0523	12.2040	0.0520	5.8882	0.0332	5.9214	1.5761	0.0309	1.6070	0.0000	4,828.8494	4,828.8494	0.2272	0.0000	4,834.5292
Waste						0.0000	0.0000		0.0000	0.0000	95.7102	0.0000	95.7102	5.6563	0.0000	237.1181
Water						0.0000	0.0000		0.0000	0.0000	8.3095	95.7602	104.0697	0.8573	0.0209	131.7195
Total	**4.4897**	**4.7933**	**15.4820**	**0.0566**	**5.8882**	**0.1069**	**5.9951**	**1.5761**	**0.1046**	**1.6807**	**104.0197**	**6,342.0231**	**6,446.0429**	**6.7847**	**0.0403**	**6,627.6696**

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	3.5094	0.3077	3.0936	1.9000e-003		0.0387	0.0387		0.0387	0.0387	0.0000	321.5116	321.5116	0.0107	5.8000e-003	323.5094
Energy	0.0507	0.4332	0.1843	2.7700e-003		0.0350	0.0350		0.0350	0.0350	0.0000	1,019.1490	1,019.1490	0.0302	0.0131	1,023.7939
Mobile	0.9297	4.0523	12.2040	0.0520	5.8882	0.0332	5.9214	1.5761	0.0309	1.6070	0.0000	4,828.8494	4,828.8494	0.2272	0.0000	4,834.5292
Waste						0.0000	0.0000		0.0000	0.0000	71.7827	0.0000	71.7827	4.2422	0.0000	177.8386
Water						0.0000	0.0000		0.0000	0.0000	8.3095	89.0615	97.3709	0.8570	0.0208	124.9992
Total	**4.4897**	**4.7933**	**15.4820**	**0.0566**	**5.8882**	**0.1069**	**5.9951**	**1.5761**	**0.1046**	**1.6807**	**80.0922**	**6,258.5715**	**6,338.6637**	**5.3673**	**0.0397**	**6,484.6702**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**23.00**	**1.32**	**1.67**	**20.89**	**1.56**	**2.16**

3.0 Construction Detail

Construction Phase

Ocean Breeze Ranch GP Buildout - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	3/21/2022	5	15	
2	Site Preparation	Site Preparation	3/22/2022	7/25/2022	5	90	
3	Grading	Grading	7/26/2022	8/28/2023	5	285	
4	Paving	Paving	8/29/2023	10/23/2023	5	40	
5	Building Construction	Building Construction	10/24/2023	7/5/2029	5	1488	
6	Architectural Coating	Architectural Coating	5/20/2024	7/5/2029	5	1339	

Acres of Grading (Site Preparation Phase): 1550

Acres of Grading (Grading Phase): 1550

Acres of Paving: 32

Residential Indoor: 1,465,290; Residential Outdoor: 488,430; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 83,635 (Architectural Coating – sqft)

OffRoad Equipment

Ocean Breeze Ranch GP Buildout - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	1	5.00	158	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Bore/Drill Rigs	2	3.00	221	0.50
Grading	Crushing/Proc. Equipment	1	3.00	85	0.78
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	3	8.00	187	0.41
Grading	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	3.00	231	0.29
Building Construction	Forklifts	3	4.00	89	0.20
Building Construction	Generator Sets	1	4.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	3.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Architectural Coating	Air Compressors	1	3.00	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	1	3.00	0.00	68.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	31,250.00	16.80	6.60	0.50	LD_Mix	HDT_Mix	HHDT
Grading	19	48.00	0.00	86,875.00	16.80	6.60	0.50	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,021.00	385.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	204.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.4700e-003	0.0000	7.4700e-003	1.1300e-003	0.0000	1.1300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.3300e-003	0.0153	2.0000e-005		4.0000e-004	4.0000e-004		3.7000e-004	3.7000e-004	0.0000	2.1263	2.1263	6.9000e-004	0.0000	2.1435
Total	**9.5000e-004**	**8.3300e-003**	**0.0153**	**2.0000e-005**	**7.4700e-003**	**4.0000e-004**	**7.8700e-003**	**1.1300e-003**	**3.7000e-004**	**1.5000e-003**	**0.0000**	**2.1263**	**2.1263**	**6.9000e-004**	**0.0000**	**2.1435**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	8.1200e-003	2.1700e-003	3.0000e-005	5.8000e-004	2.0000e-005	6.0000e-004	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	2.5555	2.5555	2.3000e-004	0.0000	2.5613
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	1.0000e-004	8.0000e-005	7.6000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2338	0.2338	1.0000e-005	0.0000	0.2339
Total	**3.4000e-004**	**8.2000e-003**	**2.9300e-003**	**3.0000e-005**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**	**2.3000e-004**	**2.0000e-005**	**2.6000e-004**	**0.0000**	**2.7893**	**2.7893**	**2.4000e-004**	**0.0000**	**2.7953**

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					7.4700e-003	0.0000	7.4700e-003	1.1300e-003	0.0000	1.1300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0000e-004	0.0115	0.0184	2.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	2.1263	2.1263	6.9000e-004	0.0000	2.1435
Total	**6.0000e-004**	**0.0115**	**0.0184**	**2.0000e-005**	**7.4700e-003**	**8.0000e-005**	**7.5500e-003**	**1.1300e-003**	**8.0000e-005**	**1.2100e-003**	**0.0000**	**2.1263**	**2.1263**	**6.9000e-004**	**0.0000**	**2.1435**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	8.1200e-003	2.1700e-003	3.0000e-005	5.8000e-004	2.0000e-005	6.0000e-004	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	2.5555	2.5555	2.3000e-004	0.0000	2.5613
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	1.0000e-004	8.0000e-005	7.6000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2338	0.2338	1.0000e-005	0.0000	0.2339
Total	**3.4000e-004**	**8.2000e-003**	**2.9300e-003**	**3.0000e-005**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**	**2.3000e-004**	**2.0000e-005**	**2.6000e-004**	**0.0000**	**2.7893**	**2.7893**	**2.4000e-004**	**0.0000**	**2.7953**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6524	0.0000	1.6524	0.5383	0.0000	0.5383	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1427	1.4888	0.8864	1.7100e-003		0.0726	0.0726		0.0668	0.0668	0.0000	150.4773	150.4773	0.0487	0.0000	151.6939
Total	**0.1427**	**1.4888**	**0.8864**	**1.7100e-003**	**1.6524**	**0.0726**	**1.7250**	**0.5383**	**0.0668**	**0.6051**	**0.0000**	**150.4773**	**150.4773**	**0.0487**	**0.0000**	**151.6939**

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0270	1.4520	0.2252	1.7800e-003	7.0100e-003	9.4000e-004	7.9500e-003	1.9500e-003	9.0000e-004	2.8500e-003	0.0000	177.0850	177.0850	0.0282	0.0000	177.7888
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	3.7600e-003	2.7300e-003	0.0273	9.0000e-005	0.0101	7.0000e-005	0.0102	2.6800e-003	6.0000e-005	2.7500e-003	0.0000	8.4164	8.4164	2.2000e-004	0.0000	8.4219
Total	**0.0307**	**1.4547**	**0.2525**	**1.8700e-003**	**0.0171**	**1.0100e-003**	**0.0181**	**4.6300e-003**	**9.6000e-004**	**5.6000e-003**	**0.0000**	**185.5014**	**185.5014**	**0.0284**	**0.0000**	**186.2107**

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					1.6524	0.0000	1.6524	0.5383	0.0000	0.5383	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.8580	1.0332	1.7100e-003		6.3900e-003	6.3900e-003		6.3900e-003	6.3900e-003	0.0000	150.4771	150.4771	0.0487	0.0000	151.6938
Total	**0.0419**	**0.8580**	**1.0332**	**1.7100e-003**	**1.6524**	**6.3900e-003**	**1.6588**	**0.5383**	**6.3900e-003**	**0.5447**	**0.0000**	**150.4771**	**150.4771**	**0.0487**	**0.0000**	**151.6938**

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0270	1.4520	0.2252	1.7800e-003	7.0100e-003	9.4000e-004	7.9500e-003	1.9500e-003	9.0000e-004	2.8500e-003	0.0000	177.0850	177.0850	0.0282	0.0000	177.7888
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	3.7600e-003	2.7300e-003	0.0273	9.0000e-005	0.0101	7.0000e-005	0.0102	2.6800e-003	6.0000e-005	2.7500e-003	0.0000	8.4164	8.4164	2.2000e-004	0.0000	8.4219
Total	**0.0307**	**1.4547**	**0.2525**	**1.8700e-003**	**0.0171**	**1.0100e-003**	**0.0181**	**4.6300e-003**	**9.6000e-004**	**5.6000e-003**	**0.0000**	**185.5014**	**185.5014**	**0.0284**	**0.0000**	**186.2107**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.9005	0.0000	1.9005	0.6622	0.0000	0.6622	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4835	5.1981	3.4798	8.0200e-003		0.2166	0.2166		0.1996	0.1996	0.0000	704.5036	704.5036	0.2245	0.0000	710.1167
Total	**0.4835**	**5.1981**	**3.4798**	**8.0200e-003**	**1.9005**	**0.2166**	**2.1171**	**0.6622**	**0.1996**	**0.8618**	**0.0000**	**704.5036**	**704.5036**	**0.2245**	**0.0000**	**710.1167**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0300	1.6146	0.2504	1.9800e-003	0.0162	1.0500e-003	0.0172	4.2300e-003	1.0000e-003	5.2300e-003	0.0000	196.9185	196.9185	0.0313	0.0000	197.7011
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	9.2100e-003	0.0922	3.1000e-004	0.0341	2.3000e-004	0.0343	9.0600e-003	2.1000e-004	9.2700e-003	0.0000	28.4286	28.4286	7.5000e-004	0.0000	28.4474
Total	**0.0427**	**1.6238**	**0.3426**	**2.2900e-003**	**0.0503**	**1.2800e-003**	**0.0516**	**0.0133**	**1.2100e-003**	**0.0145**	**0.0000**	**225.3471**	**225.3471**	**0.0321**	**0.0000**	**226.1485**

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					1.9005	0.0000	1.9005	0.6622	0.0000	0.6622	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1962	3.8496	4.5973	8.0200e-003		0.0243	0.0243		0.0243	0.0243	0.0000	704.5028	704.5028	0.2245	0.0000	710.1158
Total	**0.1962**	**3.8496**	**4.5973**	**8.0200e-003**	**1.9005**	**0.0243**	**1.9248**	**0.6622**	**0.0243**	**0.6865**	**0.0000**	**704.5028**	**704.5028**	**0.2245**	**0.0000**	**710.1158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0300	1.6146	0.2504	1.9800e-003	0.0162	1.0500e-003	0.0172	4.2300e-003	1.0000e-003	5.2300e-003	0.0000	196.9185	196.9185	0.0313	0.0000	197.7011
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	9.2100e-003	0.0922	3.1000e-004	0.0341	2.3000e-004	0.0343	9.0600e-003	2.1000e-004	9.2700e-003	0.0000	28.4286	28.4286	7.5000e-004	0.0000	28.4474
Total	**0.0427**	**1.6238**	**0.3426**	**2.2900e-003**	**0.0503**	**1.2800e-003**	**0.0516**	**0.0133**	**1.2100e-003**	**0.0145**	**0.0000**	**225.3471**	**225.3471**	**0.0321**	**0.0000**	**226.1485**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.4154	0.0000	2.4154	0.9452	0.0000	0.9452	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6585	6.8721	5.0068	0.0120		0.2801	0.2801		0.2581	0.2581	0.0000	1,056.8043	1,056.8043	0.3367	0.0000	1,065.2217
Total	**0.6585**	**6.8721**	**5.0068**	**0.0120**	**2.4154**	**0.2801**	**2.6955**	**0.9452**	**0.2581**	**1.2033**	**0.0000**	**1,056.8043**	**1,056.8043**	**0.3367**	**0.0000**	**1,065.2217**

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0328	2.0560	0.3318	2.8600e-003	0.0173	9.1000e-004	0.0182	4.6300e-003	8.7000e-004	5.5000e-003	0.0000	284.8299	284.8299	0.0392	0.0000	285.8101
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0181	0.0126	0.1283	4.5000e-004	0.0512	3.3000e-004	0.0515	0.0136	3.1000e-004	0.0139	0.0000	41.0128	41.0128	1.0300e-003	0.0000	41.0386
Total	**0.0509**	**2.0686**	**0.4602**	**3.3100e-003**	**0.0684**	**1.2400e-003**	**0.0697**	**0.0182**	**1.1800e-003**	**0.0194**	**0.0000**	**325.8428**	**325.8428**	**0.0402**	**0.0000**	**326.8487**

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					2.4154	0.0000	2.4154	0.9452	0.0000	0.9452	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2943	5.7745	6.8959	0.0120		0.0365	0.0365		0.0365	0.0365	0.0000	1,056.8030	1,056.8030	0.3367	0.0000	1,065.2204
Total	**0.2943**	**5.7745**	**6.8959**	**0.0120**	**2.4154**	**0.0365**	**2.4519**	**0.9452**	**0.0365**	**0.9817**	**0.0000**	**1,056.8030**	**1,056.8030**	**0.3367**	**0.0000**	**1,065.2204**

3.4 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	0.0328	2.0560	0.3318	2.8600e-003	0.0173	9.1000e-004	0.0182	4.6300e-003	8.7000e-004	5.5000e-003	0.0000	284.8299	284.8299	0.0392	0.0000	285.8101
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0181	0.0126	0.1283	4.5000e-004	0.0512	3.3000e-004	0.0515	0.0136	3.1000e-004	0.0139	0.0000	41.0128	41.0128	1.0300e-003	0.0000	41.0386
Total	**0.0509**	**2.0686**	**0.4602**	**3.3100e-003**	**0.0684**	**1.2400e-003**	**0.0697**	**0.0182**	**1.1800e-003**	**0.0194**	**0.0000**	**325.8428**	**325.8428**	**0.0402**	**0.0000**	**326.8487**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0207	0.2038	0.2917	4.6000e-004		0.0102	0.0102		9.3900e-003	9.3900e-003	0.0000	40.0537	40.0537	0.0130	0.0000	40.3776
Paving	0.0419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0626**	**0.2038**	**0.2917**	**4.6000e-004**		**0.0102**	**0.0102**		**9.3900e-003**	**9.3900e-003**	**0.0000**	**40.0537**	**40.0537**	**0.0130**	**0.0000**	**40.3776**

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3200e-003	9.2000e-004	9.3800e-003	3.0000e-005	3.7400e-003	2.0000e-005	3.7700e-003	9.9000e-004	2.0000e-005	1.0200e-003	0.0000	2.9980	2.9980	8.0000e-005	0.0000	2.9999
Total	**1.3200e-003**	**9.2000e-004**	**9.3800e-003**	**3.0000e-005**	**3.7400e-003**	**2.0000e-005**	**3.7700e-003**	**9.9000e-004**	**2.0000e-005**	**1.0200e-003**	**0.0000**	**2.9980**	**2.9980**	**8.0000e-005**	**0.0000**	**2.9999**

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	0.0112	0.2259	0.3459	4.6000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	40.0537	40.0537	0.0130	0.0000	40.3775
Paving	0.0419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0531**	**0.2259**	**0.3459**	**4.6000e-004**		**1.8300e-003**	**1.8300e-003**		**1.8300e-003**	**1.8300e-003**	**0.0000**	**40.0537**	**40.0537**	**0.0130**	**0.0000**	**40.3775**

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3200e-003	9.2000e-004	9.3800e-003	3.0000e-005	3.7400e-003	2.0000e-005	3.7700e-003	9.9000e-004	2.0000e-005	1.0200e-003	0.0000	2.9980	2.9980	8.0000e-005	0.0000	2.9999
Total	**1.3200e-003**	**9.2000e-004**	**9.3800e-003**	**3.0000e-005**	**3.7400e-003**	**2.0000e-005**	**3.7700e-003**	**9.9000e-004**	**2.0000e-005**	**1.0200e-003**	**0.0000**	**2.9980**	**2.9980**	**8.0000e-005**	**0.0000**	**2.9999**

3.6 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	0.0180	0.1633	0.1859	3.1000e-004		7.9800e-003	7.9800e-003		7.5200e-003	7.5200e-003	0.0000	26.3630	26.3630	6.1000e-003	0.0000	26.5155
Total	**0.0180**	**0.1633**	**0.1859**	**3.1000e-004**		**7.9800e-003**	**7.9800e-003**		**7.5200e-003**	**7.5200e-003**	**0.0000**	**26.3630**	**26.3630**	**6.1000e-003**	**0.0000**	**26.5155**

3.6 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0198	0.6964	0.2124	2.2400e-003	0.0566	7.9000e-004	0.0574	0.0164	7.6000e-004	0.0171	0.0000	219.8015	219.8015	0.0153	0.0000	220.1845
Worker	0.1103	0.0770	0.7822	2.7600e-003	0.3119	2.0300e-003	0.3139	0.0829	1.8700e-003	0.0847	0.0000	249.9793	249.9793	6.2800e-003	0.0000	250.1363
Total	**0.1301**	**0.7734**	**0.9946**	**5.0000e-003**	**0.3685**	**2.8200e-003**	**0.3714**	**0.0992**	**2.6300e-003**	**0.1019**	**0.0000**	**469.7808**	**469.7808**	**0.0216**	**0.0000**	**470.3208**

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	7.6900e-003	0.1621	0.2035	3.1000e-004		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	26.3630	26.3630	6.1000e-003	0.0000	26.5154
Total	**7.6900e-003**	**0.1621**	**0.2035**	**3.1000e-004**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**26.3630**	**26.3630**	**6.1000e-003**	**0.0000**	**26.5154**

3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0198	0.6964	0.2124	2.2400e-003	0.0566	7.9000e-004	0.0574	0.0164	7.6000e-004	0.0171	0.0000	219.8015	219.8015	0.0153	0.0000	220.1845
Worker	0.1103	0.0770	0.7822	2.7600e-003	0.3119	2.0300e-003	0.3139	0.0829	1.8700e-003	0.0847	0.0000	249.9793	249.9793	6.2800e-003	0.0000	250.1363
Total	**0.1301**	**0.7734**	**0.9946**	**5.0000e-003**	**0.3685**	**2.8200e-003**	**0.3714**	**0.0992**	**2.6300e-003**	**0.1019**	**0.0000**	**469.7808**	**469.7808**	**0.0216**	**0.0000**	**470.3208**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0901	0.8163	0.9895	1.6400e-003		0.0374	0.0374		0.0352	0.0352	0.0000	140.9864	140.9864	0.0324	0.0000	141.7962
Total	**0.0901**	**0.8163**	**0.9895**	**1.6400e-003**		**0.0374**	**0.0374**		**0.0352**	**0.0352**	**0.0000**	**140.9864**	**140.9864**	**0.0324**	**0.0000**	**141.7962**

3.6 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1022	3.6726	1.0980	0.0119	0.3028	4.1200e-003	0.3069	0.0874	3.9400e-003	0.0914	0.0000	1,167.6374	1,167.6374	0.0808	0.0000	1,169.6568
Worker	0.5618	0.3776	3.9090	0.0142	1.6677	0.0107	1.6784	0.4431	9.8300e-003	0.4529	0.0000	1,283.9694	1,283.9694	0.0309	0.0000	1,284.7411
Total	**0.6640**	**4.0502**	**5.0069**	**0.0261**	**1.9705**	**0.0148**	**1.9853**	**0.5305**	**0.0138**	**0.5443**	**0.0000**	**2,451.6068**	**2,451.6068**	**0.1117**	**0.0000**	**2,454.3979**

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	0.0411	0.8668	1.0881	1.6400e-003		8.3000e-003	8.3000e-003		8.3000e-003	8.3000e-003	0.0000	140.9862	140.9862	0.0324	0.0000	141.7961
Total	**0.0411**	**0.8668**	**1.0881**	**1.6400e-003**		**8.3000e-003**	**8.3000e-003**		**8.3000e-003**	**8.3000e-003**	**0.0000**	**140.9862**	**140.9862**	**0.0324**	**0.0000**	**141.7961**

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1022	3.6726	1.0980	0.0119	0.3028	4.1200e-003	0.3069	0.0874	3.9400e-003	0.0914	0.0000	1,167.6374	1,167.6374	0.0808	0.0000	1,169.6568
Worker	0.5618	0.3776	3.9090	0.0142	1.6677	0.0107	1.6784	0.4431	9.8300e-003	0.4529	0.0000	1,283.9694	1,283.9694	0.0309	0.0000	1,284.7411
Total	**0.6640**	**4.0502**	**5.0069**	**0.0261**	**1.9705**	**0.0148**	**1.9853**	**0.5305**	**0.0138**	**0.5443**	**0.0000**	**2,451.6068**	**2,451.6068**	**0.1117**	**0.0000**	**2,454.3979**

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0834	0.7551	0.9808	1.6400e-003		0.0320	0.0320		0.0302	0.0302	0.0000	140.4876	140.4876	0.0321	0.0000	141.2893
Total	**0.0834**	**0.7551**	**0.9808**	**1.6400e-003**		**0.0320**	**0.0320**		**0.0302**	**0.0302**	**0.0000**	**140.4876**	**140.4876**	**0.0321**	**0.0000**	**141.2893**

3.6 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0987	3.6067	1.0706	0.0118	0.3016	3.9800e-003	0.3056	0.0871	3.8000e-003	0.0909	0.0000	1,155.9638	1,155.9638	0.0795	0.0000	1,157.9509
Worker	0.5354	0.3471	3.6363	0.0136	1.6614	0.0105	1.6718	0.4414	9.6300e-003	0.4510	0.0000	1,227.3308	1,227.3308	0.0284	0.0000	1,228.0407
Total	**0.6341**	**3.9538**	**4.7069**	**0.0253**	**1.9630**	**0.0144**	**1.9774**	**0.5285**	**0.0134**	**0.5419**	**0.0000**	**2,383.2946**	**2,383.2946**	**0.1079**	**0.0000**	**2,385.9916**

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	0.0410	0.8635	1.0839	1.6400e-003		8.2700e-003	8.2700e-003		8.2700e-003	8.2700e-003	0.0000	140.4875	140.4875	0.0321	0.0000	141.2891
Total	**0.0410**	**0.8635**	**1.0839**	**1.6400e-003**		**8.2700e-003**	**8.2700e-003**		**8.2700e-003**	**8.2700e-003**	**0.0000**	**140.4875**	**140.4875**	**0.0321**	**0.0000**	**141.2891**

3.6 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0987	3.6067	1.0706	0.0118	0.3016	3.9800e-003	0.3056	0.0871	3.8000e-003	0.0909	0.0000	1,155.9638	1,155.9638	0.0795	0.0000	1,157.9509
Worker	0.5354	0.3471	3.6363	0.0136	1.6614	0.0105	1.6718	0.4414	9.6300e-003	0.4510	0.0000	1,227.3308	1,227.3308	0.0284	0.0000	1,228.0407
Total	**0.6341**	**3.9538**	**4.7069**	**0.0253**	**1.9630**	**0.0144**	**1.9774**	**0.5285**	**0.0134**	**0.5419**	**0.0000**	**2,383.2946**	**2,383.2946**	**0.1079**	**0.0000**	**2,385.9916**

3.6 Building Construction - 2026

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	0.0834	0.7551	0.9808	1.6400e-003		0.0320	0.0320		0.0302	0.0302	0.0000	140.4876	140.4876	0.0321	0.0000	141.2893
Total	**0.0834**	**0.7551**	**0.9808**	**1.6400e-003**		**0.0320**	**0.0320**		**0.0302**	**0.0302**	**0.0000**	**140.4876**	**140.4876**	**0.0321**	**0.0000**	**141.2893**

3.6 Building Construction - 2026

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	0.0961	3.5565	1.0544	0.0117	0.3016	3.8600e-003	0.3055	0.0871	3.6900e-003	0.0908	0.0000	1,149.2071	1,149.2071	0.0786	0.0000	1,151.1710
Worker	0.5143	0.3231	3.4189	0.0131	1.6614	0.0101	1.6715	0.4414	9.3200e-003	0.4507	0.0000	1,182.3743	1,182.3743	0.0265	0.0000	1,183.0360
Total	**0.6104**	**3.8796**	**4.4732**	**0.0247**	**1.9630**	**0.0140**	**1.9770**	**0.5285**	**0.0130**	**0.5415**	**0.0000**	**2,331.5814**	**2,331.5814**	**0.1050**	**0.0000**	**2,334.2070**

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	0.0410	0.8635	1.0839	1.6400e-003		8.2700e-003	8.2700e-003		8.2700e-003	8.2700e-003	0.0000	140.4875	140.4875	0.0321	0.0000	141.2891
Total	**0.0410**	**0.8635**	**1.0839**	**1.6400e-003**		**8.2700e-003**	**8.2700e-003**		**8.2700e-003**	**8.2700e-003**	**0.0000**	**140.4875**	**140.4875**	**0.0321**	**0.0000**	**141.2891**

3.6 Building Construction - 2026

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	0.0961	3.5565	1.0544	0.0117	0.3016	3.8600e-003	0.3055	0.0871	3.6900e-003	0.0908	0.0000	1,149.2071	1,149.2071	0.0786	0.0000	1,151.1710
Worker	0.5143	0.3231	3.4189	0.0131	1.6614	0.0101	1.6715	0.4414	9.3200e-003	0.4507	0.0000	1,182.3743	1,182.3743	0.0265	0.0000	1,183.0360
Total	**0.6104**	**3.8796**	**4.4732**	**0.0247**	**1.9630**	**0.0140**	**1.9770**	**0.5285**	**0.0130**	**0.5415**	**0.0000**	**2,331.5814**	**2,331.5814**	**0.1050**	**0.0000**	**2,334.2070**

3.6 Building Construction - 2027

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	0.0834	0.7551	0.9808	1.6400e-003		0.0320	0.0320		0.0302	0.0302	0.0000	140.4876	140.4876	0.0321	0.0000	141.2893
Total	**0.0834**	**0.7551**	**0.9808**	**1.6400e-003**		**0.0320**	**0.0320**		**0.0302**	**0.0302**	**0.0000**	**140.4876**	**140.4876**	**0.0321**	**0.0000**	**141.2893**

3.6 Building Construction - 2027

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	0.0940	3.5086	1.0406	0.0116	0.3016	3.7600e-003	0.3054	0.0871	3.5900e-003	0.0907	0.0000	1,143.0366	1,143.0366	0.0778	0.0000	1,144.9804
Worker	0.4929	0.3018	3.2260	0.0126	1.6614	9.5800e-003	1.6709	0.4414	8.8100e-003	0.4502	0.0000	1,142.7690	1,142.7690	0.0248	0.0000	1,143.3887
Total	**0.5869**	**3.8104**	**4.2666**	**0.0242**	**1.9630**	**0.0133**	**1.9763**	**0.5285**	**0.0124**	**0.5409**	**0.0000**	**2,285.8056**	**2,285.8056**	**0.1025**	**0.0000**	**2,288.3691**

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	0.0410	0.8635	1.0839	1.6400e-003		8.2700e-003	8.2700e-003		8.2700e-003	8.2700e-003	0.0000	140.4875	140.4875	0.0321	0.0000	141.2891
Total	**0.0410**	**0.8635**	**1.0839**	**1.6400e-003**		**8.2700e-003**	**8.2700e-003**		**8.2700e-003**	**8.2700e-003**	**0.0000**	**140.4875**	**140.4875**	**0.0321**	**0.0000**	**141.2891**

3.6 Building Construction - 2027

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	0.0940	3.5086	1.0406	0.0116	0.3016	3.7600e-003	0.3054	0.0871	3.5900e-003	0.0907	0.0000	1,143.0366	1,143.0366	0.0778	0.0000	1,144.9804
Worker	0.4929	0.3018	3.2260	0.0126	1.6614	9.5800e-003	1.6709	0.4414	8.8100e-003	0.4502	0.0000	1,142.7690	1,142.7690	0.0248	0.0000	1,143.3887
Total	**0.5869**	**3.8104**	**4.2666**	**0.0242**	**1.9630**	**0.0133**	**1.9763**	**0.5285**	**0.0124**	**0.5409**	**0.0000**	**2,285.8056**	**2,285.8056**	**0.1025**	**0.0000**	**2,288.3691**

3.6 Building Construction - 2028

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	0.0831	0.7523	0.9771	1.6300e-003		0.0319	0.0319		0.0300	0.0300	0.0000	139.9494	139.9494	0.0319	0.0000	140.7480
Total	**0.0831**	**0.7523**	**0.9771**	**1.6300e-003**		**0.0319**	**0.0319**		**0.0300**	**0.0300**	**0.0000**	**139.9494**	**139.9494**	**0.0319**	**0.0000**	**140.7480**

3.6 Building Construction - 2028

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	0.0919	3.4551	1.0294	0.0115	0.3005	3.6600e-003	0.3041	0.0868	3.5000e-003	0.0903	0.0000	1,133.4954	1,133.4954	0.0767	0.0000	1,135.4134
Worker	0.4682	0.2819	3.0465	0.0122	1.6550	8.8300e-003	1.6638	0.4397	8.1200e-003	0.4478	0.0000	1,103.7815	1,103.7815	0.0233	0.0000	1,104.3635
Total	**0.5601**	**3.7370**	**4.0760**	**0.0237**	**1.9555**	**0.0125**	**1.9679**	**0.5264**	**0.0116**	**0.5381**	**0.0000**	**2,237.2769**	**2,237.2769**	**0.1000**	**0.0000**	**2,239.7769**

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	0.0408	0.8602	1.0798	1.6300e-003		8.2400e-003	8.2400e-003		8.2400e-003	8.2400e-003	0.0000	139.9492	139.9492	0.0319	0.0000	140.7478
Total	**0.0408**	**0.8602**	**1.0798**	**1.6300e-003**		**8.2400e-003**	**8.2400e-003**		**8.2400e-003**	**8.2400e-003**	**0.0000**	**139.9492**	**139.9492**	**0.0319**	**0.0000**	**140.7478**

3.6 Building Construction - 2028

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	0.0919	3.4551	1.0294	0.0115	0.3005	3.6600e-003	0.3041	0.0868	3.5000e-003	0.0903	0.0000	1,133.4954	1,133.4954	0.0767	0.0000	1,135.4134
Worker	0.4682	0.2819	3.0465	0.0122	1.6550	8.8300e-003	1.6638	0.4397	8.1200e-003	0.4478	0.0000	1,103.7815	1,103.7815	0.0233	0.0000	1,104.3635
Total	**0.5601**	**3.7370**	**4.0760**	**0.0237**	**1.9555**	**0.0125**	**1.9679**	**0.5264**	**0.0116**	**0.5381**	**0.0000**	**2,237.2769**	**2,237.2769**	**0.1000**	**0.0000**	**2,239.7769**

3.6 Building Construction - 2029

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	0.0428	0.3877	0.5036	8.4000e-004		0.0164	0.0164		0.0155	0.0155	0.0000	72.1278	72.1278	0.0165	0.0000	72.5393
Total	**0.0428**	**0.3877**	**0.5036**	**8.4000e-004**		**0.0164**	**0.0164**		**0.0155**	**0.0155**	**0.0000**	**72.1278**	**72.1278**	**0.0165**	**0.0000**	**72.5393**

3.6 Building Construction - 2029

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	0.0465	1.7595	0.5265	5.8900e-003	0.1549	1.8400e-003	0.1567	0.0447	1.7600e-003	0.0465	0.0000	581.5779	581.5779	0.0393	0.0000	582.5594
Worker	0.2284	0.1364	1.4882	6.1100e-003	0.8530	4.2200e-003	0.8572	0.2266	3.8800e-003	0.2305	0.0000	553.1950	553.1950	0.0113	0.0000	553.4781
Total	**0.2750**	**1.8959**	**2.0147**	**0.0120**	**1.0078**	**6.0600e-003**	**1.0139**	**0.2713**	**5.6400e-003**	**0.2770**	**0.0000**	**1,134.7729**	**1,134.7729**	**0.0506**	**0.0000**	**1,136.0375**

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	0.0210	0.4433	0.5565	8.4000e-004		4.2500e-003	4.2500e-003		4.2500e-003	4.2500e-003	0.0000	72.1277	72.1277	0.0165	0.0000	72.5392
Total	**0.0210**	**0.4433**	**0.5565**	**8.4000e-004**		**4.2500e-003**	**4.2500e-003**		**4.2500e-003**	**4.2500e-003**	**0.0000**	**72.1277**	**72.1277**	**0.0165**	**0.0000**	**72.5392**

3.6 Building Construction - 2029

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	0.0465	1.7595	0.5265	5.8900e-003	0.1549	1.8400e-003	0.1567	0.0447	1.7600e-003	0.0465	0.0000	581.5779	581.5779	0.0393	0.0000	582.5594
Worker	0.2284	0.1364	1.4882	6.1100e-003	0.8530	4.2200e-003	0.8572	0.2266	3.8800e-003	0.2305	0.0000	553.1950	553.1950	0.0113	0.0000	553.4781
Total	**0.2750**	**1.8959**	**2.0147**	**0.0120**	**1.0078**	**6.0600e-003**	**1.0139**	**0.2713**	**5.6400e-003**	**0.2770**	**0.0000**	**1,134.7729**	**1,134.7729**	**0.0506**	**0.0000**	**1,136.0375**

3.7 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	0.5712					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3200e-003	0.0494	0.0733	1.2000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	10.3407	10.3407	5.8000e-004	0.0000	10.3552
Total	**0.5786**	**0.0494**	**0.0733**	**1.2000e-004**		**2.4700e-003**	**2.4700e-003**		**2.4700e-003**	**2.4700e-003**	**0.0000**	**10.3407**	**10.3407**	**5.8000e-004**	**0.0000**	**10.3552**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0694	0.0467	0.4829	1.7500e-003	0.2060	1.3200e-003	0.2074	0.0547	1.2100e-003	0.0560	0.0000	158.6254	158.6254	3.8100e-003	0.0000	158.7208
Total	**0.0694**	**0.0467**	**0.4829**	**1.7500e-003**	**0.2060**	**1.3200e-003**	**0.2074**	**0.0547**	**1.2100e-003**	**0.0560**	**0.0000**	**158.6254**	**158.6254**	**3.8100e-003**	**0.0000**	**158.7208**

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	0.5712					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4100e-003	0.0550	0.0742	1.2000e-004		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	10.3407	10.3407	5.8000e-004	0.0000	10.3552
Total	**0.5737**	**0.0550**	**0.0742**	**1.2000e-004**		**5.8000e-004**	**5.8000e-004**		**5.8000e-004**	**5.8000e-004**	**0.0000**	**10.3407**	**10.3407**	**5.8000e-004**	**0.0000**	**10.3552**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0694	0.0467	0.4829	1.7500e-003	0.2060	1.3200e-003	0.2074	0.0547	1.2100e-003	0.0560	0.0000	158.6254	158.6254	3.8100e-003	0.0000	158.7208
Total	**0.0694**	**0.0467**	**0.4829**	**1.7500e-003**	**0.2060**	**1.3200e-003**	**0.2074**	**0.0547**	**1.2100e-003**	**0.0560**	**0.0000**	**158.6254**	**158.6254**	**3.8100e-003**	**0.0000**	**158.7208**

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0747	0.1181	1.9000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9315**	**0.0747**	**0.1181**	**1.9000e-004**		**3.3600e-003**	**3.3600e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1070	0.0694	0.7266	2.7100e-003	0.3319	2.0900e-003	0.3340	0.0882	1.9200e-003	0.0901	0.0000	245.2258	245.2258	5.6700e-003	0.0000	245.3676
Total	**0.1070**	**0.0694**	**0.7266**	**2.7100e-003**	**0.3319**	**2.0900e-003**	**0.3340**	**0.0882**	**1.9200e-003**	**0.0901**	**0.0000**	**245.2258**	**245.2258**	**5.6700e-003**	**0.0000**	**245.3676**

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	0.9203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0885	0.1196	1.9000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9242**	**0.0885**	**0.1196**	**1.9000e-004**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1070	0.0694	0.7266	2.7100e-003	0.3319	2.0900e-003	0.3340	0.0882	1.9200e-003	0.0901	0.0000	245.2258	245.2258	5.6700e-003	0.0000	245.3676
Total	**0.1070**	**0.0694**	**0.7266**	**2.7100e-003**	**0.3319**	**2.0900e-003**	**0.3340**	**0.0882**	**1.9200e-003**	**0.0901**	**0.0000**	**245.2258**	**245.2258**	**5.6700e-003**	**0.0000**	**245.3676**

3.7 Architectural Coating - 2026

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	0.9203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0747	0.1181	1.9000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9315**	**0.0747**	**0.1181**	**1.9000e-004**		**3.3600e-003**	**3.3600e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1028	0.0646	0.6831	2.6100e-003	0.3319	2.0200e-003	0.3340	0.0882	1.8600e-003	0.0901	0.0000	236.2433	236.2433	5.2900e-003	0.0000	236.3755
Total	**0.1028**	**0.0646**	**0.6831**	**2.6100e-003**	**0.3319**	**2.0200e-003**	**0.3340**	**0.0882**	**1.8600e-003**	**0.0901**	**0.0000**	**236.2433**	**236.2433**	**5.2900e-003**	**0.0000**	**236.3755**

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	0.9203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0885	0.1196	1.9000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9242**	**0.0885**	**0.1196**	**1.9000e-004**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1028	0.0646	0.6831	2.6100e-003	0.3319	2.0200e-003	0.3340	0.0882	1.8600e-003	0.0901	0.0000	236.2433	236.2433	5.2900e-003	0.0000	236.3755
Total	**0.1028**	**0.0646**	**0.6831**	**2.6100e-003**	**0.3319**	**2.0200e-003**	**0.3340**	**0.0882**	**1.8600e-003**	**0.0901**	**0.0000**	**236.2433**	**236.2433**	**5.2900e-003**	**0.0000**	**236.3755**

3.7 Architectural Coating - 2027

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	0.9203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0747	0.1181	1.9000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9315**	**0.0747**	**0.1181**	**1.9000e-004**		**3.3600e-003**	**3.3600e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0985	0.0603	0.6446	2.5200e-003	0.3319	1.9100e-003	0.3339	0.0882	1.7600e-003	0.0900	0.0000	228.3300	228.3300	4.9500e-003	0.0000	228.4538
Total	**0.0985**	**0.0603**	**0.6446**	**2.5200e-003**	**0.3319**	**1.9100e-003**	**0.3339**	**0.0882**	**1.7600e-003**	**0.0900**	**0.0000**	**228.3300**	**228.3300**	**4.9500e-003**	**0.0000**	**228.4538**

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	0.9203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0885	0.1196	1.9000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	16.6600	16.6600	9.1000e-004	0.0000	16.6827
Total	**0.9242**	**0.0885**	**0.1196**	**1.9000e-004**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**16.6600**	**16.6600**	**9.1000e-004**	**0.0000**	**16.6827**

3.7 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0985	0.0603	0.6446	2.5200e-003	0.3319	1.9100e-003	0.3339	0.0882	1.7600e-003	0.0900	0.0000	228.3300	228.3300	4.9500e-003	0.0000	228.4538
Total	**0.0985**	**0.0603**	**0.6446**	**2.5200e-003**	**0.3319**	**1.9100e-003**	**0.3339**	**0.0882**	**1.7600e-003**	**0.0900**	**0.0000**	**228.3300**	**228.3300**	**4.9500e-003**	**0.0000**	**228.4538**

3.7 Architectural Coating - 2028

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	0.9168					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.0745	0.1176	1.9000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	16.5962	16.5962	9.1000e-004	0.0000	16.6188
Total	**0.9279**	**0.0745**	**0.1176**	**1.9000e-004**		**3.3500e-003**	**3.3500e-003**		**3.3500e-003**	**3.3500e-003**	**0.0000**	**16.5962**	**16.5962**	**9.1000e-004**	**0.0000**	**16.6188**

3.7 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0936	0.0563	0.6087	2.4400e-003	0.3307	1.7600e-003	0.3324	0.0879	1.6200e-003	0.0895	0.0000	220.5401	220.5401	4.6500e-003	0.0000	220.6564
Total	**0.0936**	**0.0563**	**0.6087**	**2.4400e-003**	**0.3307**	**1.7600e-003**	**0.3324**	**0.0879**	**1.6200e-003**	**0.0895**	**0.0000**	**220.5401**	**220.5401**	**4.6500e-003**	**0.0000**	**220.6564**

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	0.9168					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8600e-003	0.0882	0.1191	1.9000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	16.5961	16.5961	9.1000e-004	0.0000	16.6188
Total	**0.9207**	**0.0882**	**0.1191**	**1.9000e-004**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**16.5961**	**16.5961**	**9.1000e-004**	**0.0000**	**16.6188**

3.7 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0936	0.0563	0.6087	2.4400e-003	0.3307	1.7600e-003	0.3324	0.0879	1.6200e-003	0.0895	0.0000	220.5401	220.5401	4.6500e-003	0.0000	220.6564
Total	**0.0936**	**0.0563**	**0.6087**	**2.4400e-003**	**0.3307**	**1.7600e-003**	**0.3324**	**0.0879**	**1.6200e-003**	**0.0895**	**0.0000**	**220.5401**	**220.5401**	**4.6500e-003**	**0.0000**	**220.6564**

3.7 Architectural Coating - 2029

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	0.4725					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7200e-003	0.0384	0.0606	1.0000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	8.5534	8.5534	4.7000e-004	0.0000	8.5651
Total	**0.4782**	**0.0384**	**0.0606**	**1.0000e-004**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**	**0.0000**	**8.5534**	**8.5534**	**4.7000e-004**	**0.0000**	**8.5651**

3.7 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0456	0.0273	0.2974	1.2200e-003	0.1704	8.4000e-004	0.1713	0.0453	7.8000e-004	0.0461	0.0000	110.5306	110.5306	2.2600e-003	0.0000	110.5872
Total	**0.0456**	**0.0273**	**0.2974**	**1.2200e-003**	**0.1704**	**8.4000e-004**	**0.1713**	**0.0453**	**7.8000e-004**	**0.0461**	**0.0000**	**110.5306**	**110.5306**	**2.2600e-003**	**0.0000**	**110.5872**

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	0.4725					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9900e-003	0.0455	0.0614	1.0000e-004		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	8.5534	8.5534	4.7000e-004	0.0000	8.5651
Total	**0.4745**	**0.0455**	**0.0614**	**1.0000e-004**		**4.8000e-004**	**4.8000e-004**		**4.8000e-004**	**4.8000e-004**	**0.0000**	**8.5534**	**8.5534**	**4.7000e-004**	**0.0000**	**8.5651**

3.7 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0456	0.0273	0.2974	1.2200e-003	0.1704	8.4000e-004	0.1713	0.0453	7.8000e-004	0.0461	0.0000	110.5306	110.5306	2.2600e-003	0.0000	110.5872
Total	**0.0456**	**0.0273**	**0.2974**	**1.2200e-003**	**0.1704**	**8.4000e-004**	**0.1713**	**0.0453**	**7.8000e-004**	**0.0461**	**0.0000**	**110.5306**	**110.5306**	**2.2600e-003**	**0.0000**	**110.5872**

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	0.9297	4.0523	12.2040	0.0520	5.8882	0.0332	5.9214	1.5761	0.0309	1.6070	0.0000	4,828.8494	4,828.8494	0.2272	0.0000	4,834.5292
Unmitigated	0.9297	4.0523	12.2040	0.0520	5.8882	0.0332	5.9214	1.5761	0.0309	1.6070	0.0000	4,828.8494	4,828.8494	0.2272	0.0000	4,834.5292

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	4,208.94	4,208.94	4208.94	15,632,966	15,632,966
Total	4,208.94	4,208.94	4,208.94	15,632,966	15,632,966

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
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	18.00	40.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.616428	0.037185	0.177402	0.097684	0.012090	0.005279	0.017663	0.025476	0.001931	0.001677	0.005617	0.000785	0.000782
Single Family Housing	0.616428	0.037185	0.177402	0.097684	0.012090	0.005279	0.017663	0.025476	0.001931	0.001677	0.005617	0.000785	0.000782

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive 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	517.4470	517.4470	0.0206	3.8600e-003	519.1105
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	594.1998	594.1998	0.0236	4.4300e-003	596.1101
NaturalGas Mitigated	0.0507	0.4332	0.1843	2.7700e-003		0.0350	0.0350		0.0350	0.0350	0.0000	501.7021	501.7021	9.6200e-003	9.2000e-003	504.6834
NaturalGas Unmitigated	0.0507	0.4332	0.1843	2.7700e-003		0.0350	0.0350		0.0350	0.0350	0.0000	501.7021	501.7021	9.6200e-003	9.2000e-003	504.6834

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	9.40154e+006	0.0507	0.4332	0.1843	2.7700e-003		0.0350	0.0350		0.0350	0.0350	0.0000	501.7021	501.7021	9.6200e-003	9.2000e-003	504.6834
Total		**0.0507**	**0.4332**	**0.1843**	**2.7700e-003**		**0.0350**	**0.0350**		**0.0350**	**0.0350**	**0.0000**	**501.7021**	**501.7021**	**9.6200e-003**	**9.2000e-003**	**504.6834**

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	9.40154e+006	0.0507	0.4332	0.1843	2.7700e-003		0.0350	0.0350		0.0350	0.0350	0.0000	501.7021	501.7021	9.6200e-003	9.2000e-003	504.6834
Total		**0.0507**	**0.4332**	**0.1843**	**2.7700e-003**		**0.0350**	**0.0350**		**0.0350**	**0.0350**	**0.0000**	**501.7021**	**501.7021**	**9.6200e-003**	**9.2000e-003**	**504.6834**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.25454e+006	594.1998	0.0236	4.4300e-003	596.1101
Total		**594.1998**	**0.0236**	**4.4300e-003**	**596.1101**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.83415e+006	517.4470	0.0206	3.8600e-003	519.1105
Total		**517.4470**	**0.0206**	**3.8600e-003**	**519.1105**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.5094	0.3077	3.0936	1.9000e-003		0.0387	0.0387		0.0387	0.0387	0.0000	321.5116	321.5116	0.0107	5.8000e-003	323.5094
Unmitigated	3.5094	0.3077	3.0936	1.9000e-003		0.0387	0.0387		0.0387	0.0387	0.0000	321.5116	321.5116	0.0107	5.8000e-003	323.5094

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	0.4722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.9161					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0320	0.2734	0.1163	1.7500e-003		0.0221	0.0221		0.0221	0.0221	0.0000	316.6352	316.6352	6.0700e-003	5.8000e-003	318.5168
Landscaping	0.0891	0.0343	2.9773	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.8764	4.8764	4.6500e-003	0.0000	4.9925
Total	**3.5093**	**0.3077**	**3.0936**	**1.9100e-003**		**0.0387**	**0.0387**		**0.0387**	**0.0387**	**0.0000**	**321.5116**	**321.5116**	**0.0107**	**5.8000e-003**	**323.5094**

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	0.4722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.9161					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0320	0.2734	0.1163	1.7500e-003		0.0221	0.0221		0.0221	0.0221	0.0000	316.6352	316.6352	6.0700e-003	5.8000e-003	318.5168
Landscaping	0.0891	0.0343	2.9773	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.8764	4.8764	4.6500e-003	0.0000	4.9925
Total	**3.5093**	**0.3077**	**3.0936**	**1.9100e-003**		**0.0387**	**0.0387**		**0.0387**	**0.0387**	**0.0000**	**321.5116**	**321.5116**	**0.0107**	**5.8000e-003**	**323.5094**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	97.3709	0.8570	0.0208	124.9992
Unmitigated	104.0697	0.8573	0.0209	131.7195

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	26.1919 / 16.5123	104.0697	0.8573	0.0209	131.7195
Total		**104.0697**	**0.8573**	**0.0209**	**131.7195**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	26.1919 / 13.2098	97.3709	0.8570	0.0208	124.9992
Total		**97.3709**	**0.8570**	**0.0208**	**124.9992**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	71.7827	4.2422	0.0000	177.8386
Unmitigated	95.7102	5.6563	0.0000	237.1181

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	471.5	95.7102	5.6563	0.0000	237.1181
Total		**95.7102**	**5.6563**	**0.0000**	**237.1181**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	353.625	71.7827	4.2422	0.0000	177.8386
Total		**71.7827**	**4.2422**	**0.0000**	**177.8386**

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