HELIX Environmental Planning

Brown Field Municipal Airport Master Plan Update

Greenhouse Gas Emissions Technical Report

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ALP	Airport Layout Plan
AMP	Airport Master Plan
APS	alternative planning strategy
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emission Estimator Model
CALGreen	California Green Building Standards Code
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBSC	California Building Standards Commission
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
CH_4	methane
City	City of San Diego
CO_2	carbon dioxide
CO_2e	CO_2-equivalent
EO	Executive Order
EPIC	University of San Diego School of Law, Energy Policy Initiative Center
EV	electric vehicles
°F	Fahrenheit (degrees)
FAA	Federal Aviation Administration
GHG	greenhouse gas
GWP	Global Warming Potential
HFCs	hydrofluorocarbons
HVAC	heating, ventilation, and air conditioning
IPCC	United Nations Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
MMT	million metric tons
MPOs	Metropolitan Planning Organizations
MT	metric ton

ACRONYMS AND ABBREVIATIONS (cont.)

N_2O	nitrous oxide
NASA	National Aeronautics and Space Administration
NHTSA	National Highway Traffic Safety Administration
NOAA	National Oceanic and Atmospheric Administration
NO_X	nitrogen oxides
PFCs	perfluorocarbons
ppm	parts per million
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF	square feet/foot
SF_6	sulfur hexafluoride
TPA	Transit Priority Area
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled

EXECUTIVE SUMMARY

This report presents an assessment of potential GHG emissions impacts associated with construction and operation (non-flight emissions related to vehicular use and building energy use) of the preferred plan (project) to implement the Airport Master Plan (AMP) for the Brown Field Municipal Airport (Airport) operated by the City of San Diego (City) located in the community of Otay Mesa. The AMP includes improvement activities to be implemented at the Airport over a 20-year planning period. Airside improvements in the AMP would include the reconfiguration of several taxiways to bring them into compliance with current federal design standards. Landside improvements in the AMP would include rehabilitation of the terminal building, a new maintenance building, and the construction of up to 107 new hangars.

Construction activities during the 20-year AMP planning period would result in GHG emissions from heavy construction equipment and worker vehicle trips. Changes in non-aircraft operational GHG emissions sources for the Airport would result from vehicle use associated with the new hangars; and energy, solid waste, water use, and refrigerant leaks associated with the rehabilitated terminal, new maintenance building, and new hangars. Implementation of the AMP could conflict with the City's 2022 CAP. Mitigation measures to require City owned and operated project buildings to be all electric (no natural gas) and require compliance with the City's construction and demolition debris ordinance would ensure implementation of the AMP would be consistent with the City's 2022 CAP. With mitigation incorporated the project would not result in significant GHG emissions impacts, or impact related to conflicts with applicable GHG reduction plans.

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1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report analyzes, at programmatic level, potential greenhouse gas (GHG) emissions impacts associated with the preferred alternative (project) to implement the proposed Airport Master Plan (AMP) for Brown Field Municipal Airport (also referred to as "Airport" or by its Federal Aviation Administration [FAA] identifier "SDM"). The analysis includes a description of existing conditions in the Airport vicinity and an assessment of potential impacts associated with the construction and operation (non-flight operations such as vehicular use and building energy use) of improvements included within the AMP. The analysis within this report addresses the relevant issues listed in Appendix G of the California Environmental Quality Act (CEQA) Guidelines and addresses consistency with the City of San Diego's Climate Action Plan (CAP). The assessment of aircraft-related emissions is not included in this report.

1.2 PROJECT BACKGROUND

The City of San Diego (City) owns and operates SDM as a General Aviation (GA) airport. Airport planning occurs at the national, state, regional, and local level; and in 2017, the City began developing an AMP to determine the extent, type, and schedule of development needed. An AMP presents the community and airport's vision for a 20-year strategic development plan based on the forecast of activity. It is used as a decision-making tool and is intended to complement other local and regional plans.

The AMP consists of a report documenting existing conditions of the airport, a forecast of activity, facility requirements (the airport's needs based on the forecast and compliance with Federal Aviation Administration (FAA) Design Standards for airports), development and evaluation of alternatives to meet those needs, and a funding plan for that development. Project objectives include maintaining a balance between airport user interests and the surrounding community, remedying areas with a history of potential risk of collisions or runway incursions and modernizing Airport facilities. The AMP includes an Airport Layout Plan (ALP) which graphically depicts all planned development at the Airport within the 20-year planning period as determined in the AMP. This drawing requires approval by the FAA, which makes the airport eligible to receive federal funding for airport improvements and maintenance under the FAA's Airport Improvement Program. The ALP Update for Brown Field Municipal Airport is referred to as the project for the purposes of this analysis (C&S Companies 2022).

1.3 PROJECT LOCATION

The project is located within the boundaries of the Airport, which is in the City of San Diego community of Otay Mesa community north of Otay Mesa Road, east of Heritage Road, south of Pogo Row, and west of La Media Road. Refer to Figure 1, *Regional Location*, and Figure 2, *Project Vicinity (Aerial Photograph)*.

1.4 PROJECT DESCRIPTION

The proposed AMP would involve both landside and airside components. Much of SDM has been leased by the City to the proposed developers of the Metropolitan Airpark Project (MAP), which was reviewed previously in a separate EIR (SCH No. 2010071054) and is not a part of the project.

The landside improvements to be covered by the AMP include:

- A 14,000-square foot (SF) terminal building. This would be accomplished by rehabilitating the existing terminal building and tower in accordance with the U.S. Secretary of the Interior Standards for the Treatment of Historic Properties.

- Up to 107 new hangars (154,000 SF); however, the hangars would not be developed by the City until there is sufficient demand, and net demand may be affected by how fast the MAP is developed. An aircraft wash rack is proposed within the hangar site as well as approximately 83 new automobile parking spaces which are intended to compensate for the loss of a parking area off the west end of the runway apron as a result of proposed AMP improvements.

- Demolition of several small structures which house equipment and supplies and consolidating those facilities into one 10,000-SF centralized maintenance building.

- A new fuel storage tank and various utility and fencing improvements around the airfield.

As a separate project not included in the AMP, a new 4,000-SF U.S. Customs and Border Protection building would be constructed. This improvement project has received a CEQA exemption and is not a part of the project. Because construction of the U.S. Customs and Border Protection building could coincide with project construction activities, to be conservative in estimating maximum daily construction emissions, construction activities for the building and associated ramp improvements are included in this analysis.

Airside improvements proposed at SDM include the reconfiguration of several taxiways to bring them into compliance with current FAA design standards, pavement repair and maintenance activities for various taxiways and runway 8R/26L, and the relocation of windsocks and the segmented circle outside of the runway safety zone. Refer to Figure 3, *Proposed Airport Plan*.

1.5 REGULATORY REQUIREMENTS APPLICABLE TO NEW BUILDING CONSTRUCTION

1.5.1 Energy Efficiencies

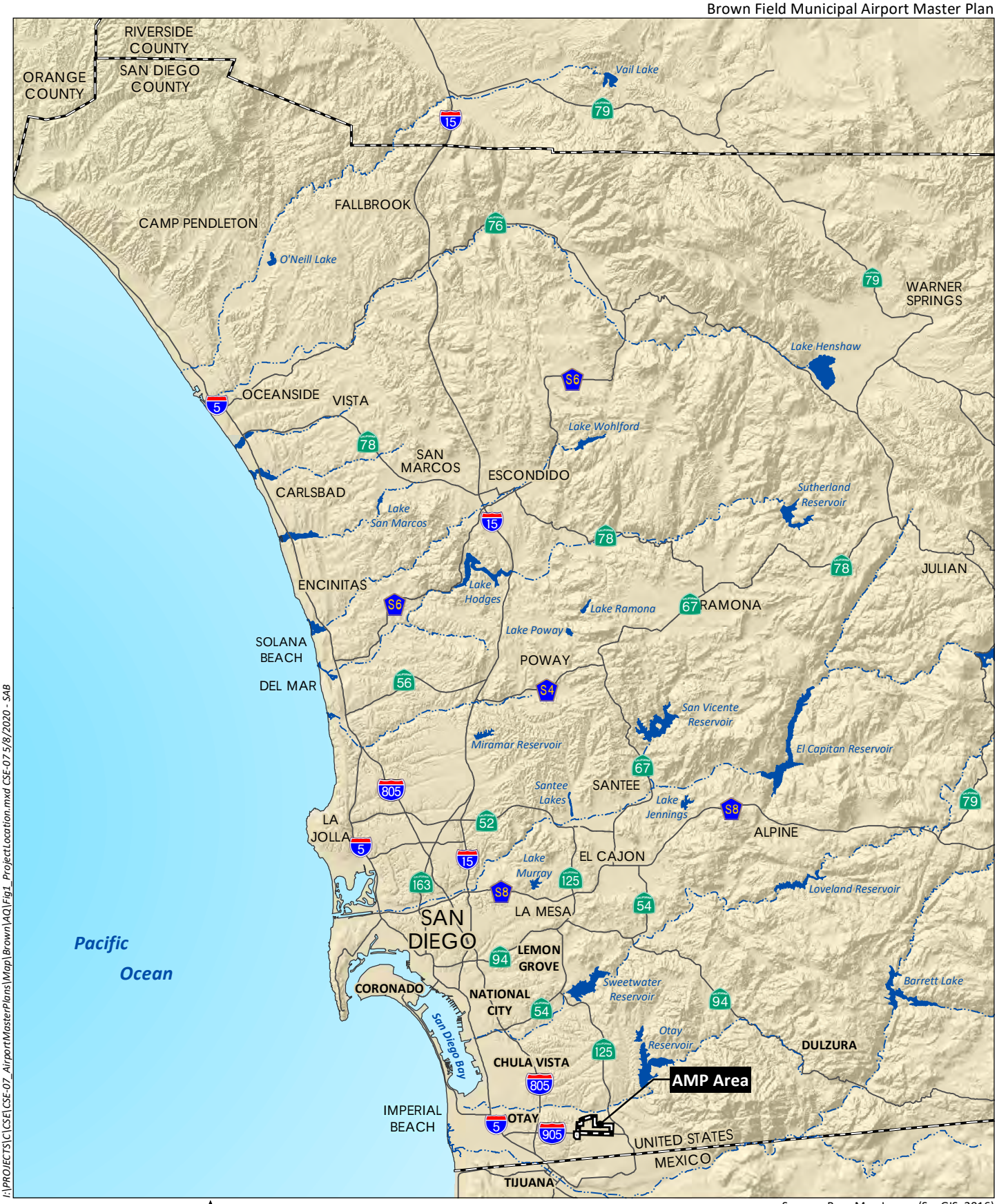
New buildings developed under the proposed AMP would, at a minimum, be designed to meet applicable Title 24 energy efficiency standards. In accordance with the requirements of the 2022 Title 24, new buildings would be required to have:

- Enhanced ceiling, attic, and wall insulation,

- High efficiency window glazing,

- The installation of all heating, ventilation, and air conditioning (HVAC) units verified by a third party, and

- The installation of photovoltaic systems (depending on the building use and size), including energy storage).



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Source: Base Map Layers (SanGIS, 2016)

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Regional Location

Figure 1

Source: Aerial (SanGIS 2017)

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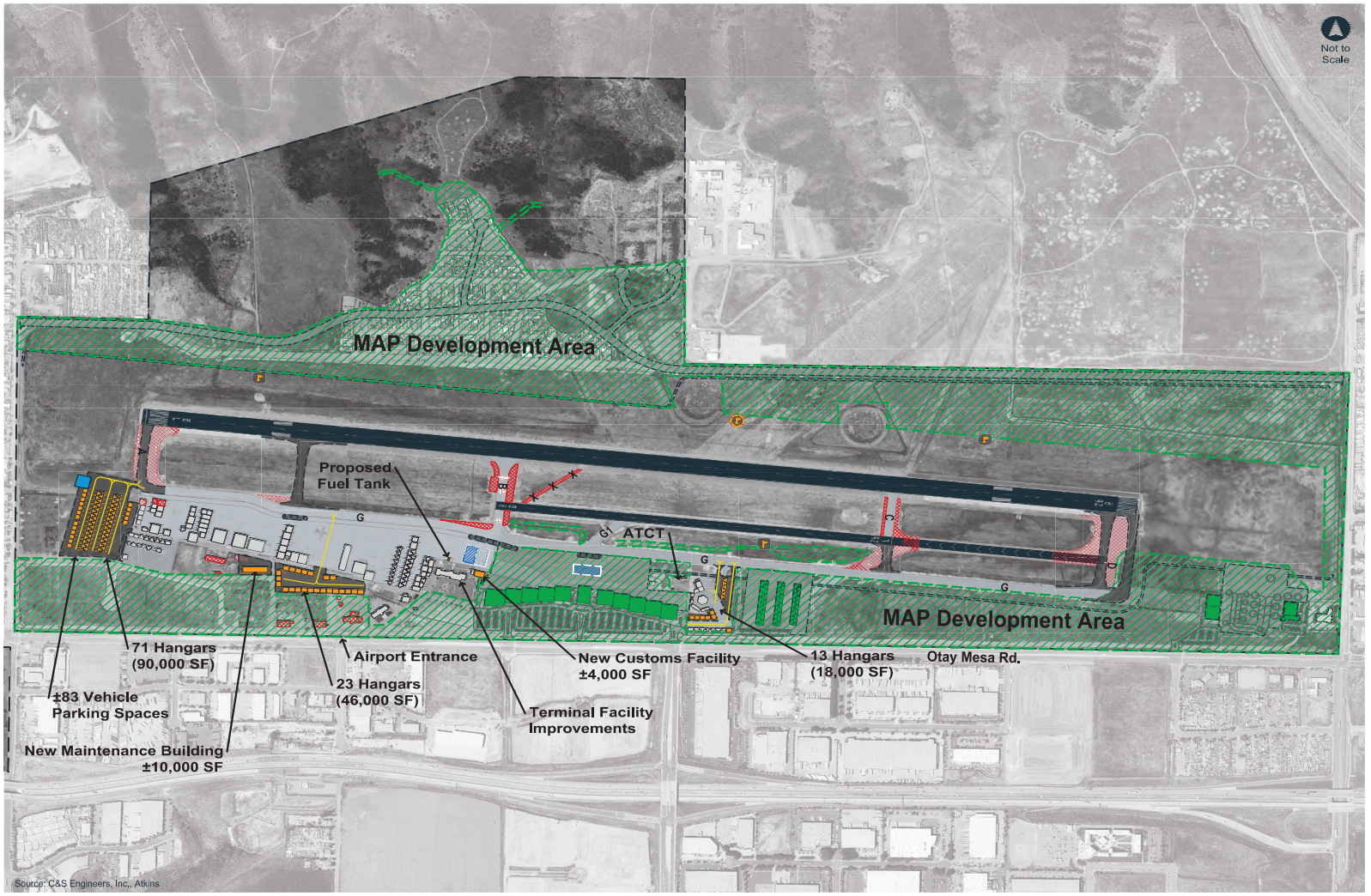
Project Vicinity (Aerial Photograph)

Figure 2



SD Airports

Brown Field Municipal Airport Master Plan

Legend

- Property Line
- Existing Buildings
- Proposed Buildings
- Existing Airfield Pavement
- Proposed Pavement
- MAP Development Area
- Proposed MAP Buildings
- Proposed Demolition
- Proposed Taxiway/Taxilane Centerline
- Proposed Wash Rack
- Existing Customs Box
- Proposed Customs Box Expansion
- Proposed Segmented Circl
- Proposed Wind Cone
- Proposed "No-Taxi" Island

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C&S COMPANIES

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Source: C&S Companies 2024

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Proposed Airport Plan

Figure 3

1.5.2 Water Conservation

In accordance with 2022 California Green Building Standards Code (CALGreen) mandatory measures for new building development under the proposed AMP would:

- Reduce potable water use,
- Install low-flow water fixtures,
- Reduce wastewater generation,
- Install low-flow bathroom fixtures, and
- Install weather-based smart irrigation control systems.

1.5.3 Solid Waste Reduction

- Divert at least 75 percent of construction and demolition debris in accordance with City Municipal Ordinances.
- Divert at least 75 percent of operational waste from landfills through reuse and recycling in accordance with Assembly Bill (AB) 341.
- Provide areas for storage and collection of recyclables and yard waste in accordance with 2022 CALGreen.

2.0 ENVIRONMENTAL SETTING

2.1 CLIMATE CHANGE OVERVIEW

Global climate change refers to changes in average climatic conditions on Earth including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with: (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The temperature record shows a decades-long trend of warming, with earth's average surface temperature in 2023 confirmed the warmest on record. Per scientists at the National Aeronautics and Space Administration's [NASA's] Goddard Institute for Space Studies, global temperatures in 2023 were around 2.1 degrees Fahrenheit (°F; 1.2 degrees Celsius) above NASA's 1951-1980 baseline period average (NASA 2024). GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th century (United Nations Intergovernmental Panel on Climate Change [IPCC] 2013). The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The statistical models show a "high confidence" that temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees

Celsius relative to pre-industrial levels if atmospheric concentrations are stabilized at about 450 parts per million (ppm) carbon dioxide equivalent (CO_2e) by the year 2100 (IPCC 2014).

2.2 GREENHOUSE GASES

The GHGs defined under California's Assembly Bill (AB) 32 include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Carbon Dioxide. CO_2 is the most important and common anthropogenic GHG. CO_2 is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO_2 include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO_2 concentrations remained steady prior to the current period for approximately 10,000 years. The atmospheric CO_2 concentration in 2010 was 390 ppm, 39 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). In 2023, the average atmospheric CO_2 concentration was 421 ppm, the highest annual average measured at the Mauna Loa Observatory since data collection began in 1959. As of March 2024, the CO_2 concentration exceeded 423 ppm (National Oceanic and Atmospheric Administration [NOAA] 2024).

Methane. CH_4 is the main component of natural gas used in homes. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from decay of organic material in landfills, fermentation of manure, and cattle digestion.

Nitrous Oxide. N_2O is produced by both natural and human-related sources. N_2O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Hydrofluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). Chlorofluorocarbons were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the 1989 Montreal Protocol.

Sulfur Hexafluoride. SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHG emissions to disperse around the globe. Because GHG emissions vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2. For example, because methane and N_2O are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). CO_2e is a quantity that enables all GHG

emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e.

Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR). In 2007, IPCC updated the GWP values based on the latest science at the time in its Fourth Assessment Report (AR4). The updated GWPs in the IPCC AR4 have begun to be used in recent GHG emissions inventories. In 2013, IPCC again updated the GWP values based on the latest science in its Fifth Assessment Report (AR5) (IPCC 2013). However, United Nations Framework Convention on Climate Change (UNFCCC) reporting guidelines for national inventories require the use of GWP values from the AR4. To comply with international reporting standards under the UNFCCC, official emission estimates for California and the U.S. are reported using AR4 GWP values. Therefore, statewide and national GHG inventories have not yet updated their GWP values to the AR5 values.

By applying the GWP ratios, project-related CO_2e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO_2 over a 100-year period is used as a baseline. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 1, *Global Warming Potentials and Atmospheric Lifetimes*.

Table 1
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-324a	14	1,430
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

Source: IPCC 2007
HFC: hydrofluorocarbon; PFC: perfluorocarbon

2.3 REGULATORY FRAMEWORK

All levels of government have some responsibility for the protection of air quality, and each level (federal, State, and regional/local) has specific responsibilities relating to air quality regulation. GHG emissions and the regulation of GHGs is a relatively new component of air quality.

2.3.1 Federal

2.3.1.1 Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* (USEPA*)* that CO_2 is an air pollutant, as defined under the Clean Air Act (CAA), and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO_2, CH_4, N_2O, HFC, PFC, and SF_6) threaten the public health and welfare of the American people (USEPA 2017). This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty

vehicles, which were jointly proposed by the USEPA and the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA).

2.3.1.2 Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the NHTSA worked together on developing a national program of regulations to reduce GHG emissions and improve fuel economy of light-duty vehicles. The USEPA established the first-ever national GHG emissions standards under the CAA, and the NHTSA established Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking that established standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. In March 2022, the agencies finalized standards for model years 2024 through 2026 and established an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026 (NHTSA 2023).

2.3.2 California Greenhouse Gas Regulations

There are numerous State plans, policies, regulations, and laws related to GHG emissions and global climate change. Following is a discussion of some of these plans, policies, and regulations that (1) establish overall State policies and GHG emission reduction targets; (2) require State or local actions that result in direct or indirect GHG emission reductions for the proposed project; and (3) require CEQA analysis of GHG emissions.

2.3.2.1 California Code of Regulations, Title 24, Part 6

CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for space or water heating) results in GHG emissions. The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2022 Title 24 standards became effective on January 1, 2023. The 2022 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. New for the 2022 Title 24 standards are non-residential on-site PV (solar panels) electricity generation and energy storage requirements (California Energy Commission [CEC] 2022).

The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

2.3.2.2 California Code of Regulations, Title 24, Part 11

CCR Title 24, Part 11: The California Green Building Standards Code (CALGreen) is a code with mandatory requirements for all nonresidential buildings (including industrial buildings) and residential buildings for which no other state agency has the authority to adopt green building standards. CALGreen also

contains voluntary measures (i.e., Tier 1, Tier 2) which exceed minimum regulatory requirements. The 2022 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings became effective on January 1, 2023 (California Building Standards Commission [CBSC] 2022).

The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

CALGreen contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

2.3.2.3 Executive Order S-3-05

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

2.3.2.4 Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that the California Air Resources Board (CARB) develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

2.3.2.5 Executive Order S-3-05

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2.3.2.6 Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that CARB develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed by AB 32 to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

2.3.2.7 Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28 nation European Union. California is on track to meet or exceed the target of reducing GHGs emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050.

2.3.2.8 Senate Bill 32

Senate Bill (SB) 32 (Amendments to the California Global Warming Solutions Action of 2006) extends California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EO B-30-15 of 80 percent below 1990 emissions levels by 2050.

2.3.2.9 Assembly Bill 197

A condition of approval for SB 32 was the passage of AB 197. AB 197 requires that CARB consider the social costs of GHG emissions and prioritize direct reductions in GHG emissions at mobile sources and large stationary sources. AB 197 also gives the California legislature more oversight over CARB through the addition of two legislatively appointed members to the CARB Board and the establishment a legislative committee to make recommendations about CARB programs to the legislature.

2.3.2.10 Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." On September 24, 2009, CARB adopted amendments to the Pavley regulations that intend to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single packet of standards called Advanced Clean Cars (CARB 2024a).

2.3.2.11 Assembly Bill 341

The state legislature enacted AB 341 (PRC Section 42649.2), increasing the diversion target to 75 percent statewide. AB 341 requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The final regulation was approved by the Office of Administrative Law on May 7, 2012, and went into effect on July 1, 2012.

2.3.2.12 Executive Order S-01-07

This EO, signed by Governor Schwarzenegger on January 18, 2007, directs that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by the year 2020. It orders that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California and directs CARB to determine whether a LCFS can be adopted as a discrete early action measure pursuant to AB 32. CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in April 2010. Although challenged in 2011, the Ninth Circuit reversed the District Court's opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB is therefore continuing to implement the LCFS statewide.

2.3.2.13 Senate Bill 350

Approved by Governor Brown on October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers resource needs, reduce GHG emissions, and increase the use of clean energy.

2.3.2.14 Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act of 2008, supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPOs). CARB periodically reviews and updates the targets, as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy (APS) to meet the targets. The APS is not a part of the RTP. Qualified projects consistent with an approved SCS or Alternative Planning Strategy categorized as "transit priority projects" would receive incentives to streamline CEQA processing.

2.3.2.15 Senate Bill 100

Approved by Governor Brown on September 10, 2018, SB 100 extends the renewable electricity procurement goals and requirements of SB 350. SB 100 requires that all retail sales of electricity to California end-use customers be procured from 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

2.3.2.16 Executive Order N-79-20

EO N-79-20, signed by Governor Newsom on September 23, 2020, establishes three goals for the implementation of zero emissions vehicles in California: first, 100 percent of in-state sales of new passenger cars and trucks will be zero-emissions by 2035; second, 100 percent of medium- and heavy-duty vehicles in the state will be zero-emissions vehicles by 2045 for all operations where feasible, and by 2035 for drayage trucks; and third, 100 percent of off-road vehicles and equipment will be zero emissions by 2035 where feasible.

2.3.2.17 Assembly Bill 1279

Approved by Governor Newsom on September 16, 2022, AB 1279, the California Climate Crisis Act, declares the policy of the State to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. AB 1279 anticipates achieving these policies through direct GHG emissions reductions, removal of CO_2 from the atmosphere (carbon capture), and an almost complete transition away from fossil fuels.

2.3.2.18 Senate Bill 905

Approved by Governor Newsom on September 16, 2022, SB 905, Carbon Sequestration: Carbon Capture, Removal, Utilization, and Storage Program, requires CARB to establish a Carbon Capture, Removal, Utilization, and Storage Program to evaluate the efficacy, safety, and viability of carbon capture, utilization, or storage technologies and CO_2 removal technologies and facilitate the capture and sequestration of CO_2 from those technologies, where appropriate. SB 905 is an integral part of achieving the state policies mandated in AB 1279.

2.3.2.19 California Air Resources Board: Scoping Plan

The Scoping Plan is a strategy CARB develops and updates at least once every five years, as required by AB 32. It lays out the transformations needed across California's society and economy to reduce emissions and reach climate targets. The current 2022 Scoping Plan is the third update to the original plan that was adopted in 2008. The initial 2008 Scoping Plan laid out a path to achieve the AB 32 mandate of returning to 1990 levels of GHG emissions by 2020, a reduction of approximately 15 percent below business as usual. The 2008 Scoping Plan included a mix of incentives, regulations, and carbon pricing, laying out the portfolio approach to addressing climate change and clearly making the case for using multiple tools to meet California's GHG emission targets. The 2013 Scoping Plan assessed progress toward achieving the 2020 mandate and made the case for addressing short-lived climate pollutants (SLCPs). The 2017 Scoping Plan also assessed the progress toward achieving the 2020 limit and provided a technologically feasible and cost-effective path to achieving the SB 32 mandate of reducing GHGs by at least 40 percent below 1990 levels by 2030.

On December 15, 2022, CARB approved the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels; further reductions in SLCPs; support for sustainable development; increased action on natural and working lands to reduce emissions and sequester carbon; and the capture and storage of carbon (CARB 2022).

2.3.3 Local

2.3.3.1 San Diego Association of Governments San Diego Forward: The Regional Plan

SANDAG's 2021 Regional Plan (Regional Plan) is a long-range planning document developed to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The underlying purpose is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout the region. The 2021 Regional Plan is a 30-year plan that considers how the community will grow, where residents will live, and how residents and visitors will move around the region. It combines the RTP, SCS, and Regional Comprehensive Plan. As such, the 2021 Regional Plan must comply with specific state and federal mandates. These include an SCS, per SB 375, that achieves GHG emissions reduction targets set by the CARB; compliance with federal civil rights requirements (Title VI); environmental justice considerations; air quality conformity; and public participation (SANDAG 2021).

2.3.3.2 City of San Diego General Plan

The City of San Diego General Plan includes several climate change-related policies aimed at reducing GHG emissions from future development and City operations. For example, Conservation Element policy CE-A.2 aims to reduce the City's carbon footprint and to develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth related to climate change (City 2008). The Land Use and Community Planning Element; the Mobility Element; the Urban Design Element; and the Public Facilities, Services and Safety Element also identify GHG reduction and climate change adaptation goals. These elements contain policy language related to sustainable land use patterns, alternative modes of transportation, energy efficiency, water conservation, waste reduction, and greater landfill efficiency. The overall intent of these policies is to support climate protection actions, while retaining flexibility in the design of implementation measures, which could be influenced by new scientific research, technological advances, environmental conditions, or State and federal legislation. The 2008 General Plan was adopted in 2009 and amended in 2010 and 2012.

2.3.3.3 City of San Diego Climate Action Plan

A Climate Action Plan (CAP) was adopted by the City Council in December 2015. The CAP quantifies existing GHG emissions as well as projected emissions for the years 2030 and 2035 resulting from activities within the City's jurisdiction. The CAP also identifies City target emissions levels, below which the Citywide GHG impacts would be less than significant. The CAP and the accompanying certified Final Environmental Impact Report (EIR) also identify and analyze the GHG emissions that would result from the business-as-usual scenario for the years 2030 and 2035. The CAP includes a monitoring and reporting program to ensure its progress toward achieving the specified GHG emission reductions and specifies actions that, if implemented, would achieve the specified GHG emission reductions targets. In 2015, the CAP was adopted in a public process following certification of the EIR [SCH No. 2015021053 (City 2015)]. After the adoption of the CAP, the City also established additional specific measures (CAP Consistency Checklist) that, if implemented on a project-by-project basis, would further ensure that the City achieves the specified GHG emission reduction targets in the CAP.

On August 2, 2022, the City Council adopted an update to the CAP (2022 CAP), in a public process following certification of the Second Addendum to Final EIR [SCH No. 2015021053 (City 2022a)]. As

proposed in the 2022 CAP, in October 2022, the City Council approved an amendment to the Land Development Code (San Diego Municipal Code Chapter 14, Article 3, Division 14), which established the CAP Consistency Regulations. The CAP Consistency Regulations replaced the CAP Consistency Checklist as the measures that could be implemented on a project-by-project basis pursuant to CEQA Guidelines Section 15183.5(b)(1)(D). Proposed new development projects that are consistent with the CAP, as determined through compliance with the CAP Consistency Regulations, or as determined from City consistency guidance for program- and plan level documents and infrastructure projects, may rely on the CAP for the cumulative impact analysis of GHG emissions.

The City's 2022 CAP lays out a set of 6 strategies to achieve City's interim 2030 fair-share GHG emissions reduction goal and 2035 goal of net zero greenhouse gas (GHG) emissions (City 2022a).

- Strategy 1: Decarbonization of the Built Environment: Decarbonization is defined in the 2022 CAP as the removal of carbon from a system, with a focus on the source with the greatest potential for reduction: natural gas or methane. For municipal building and facilities, including Brown Field Municipal Airport, the 2022 CAP has this goal (City 2022a p. 43):

  > *The City is committed to leading by example in the building decarbonization effort. The City has adopted a goal to achieve zero emissions municipal buildings and operations by 2035 and has developed a Municipal Energy Implementation Plan and supporting policies that will be brought forward to the City Council for consideration immediately following the adoption of the CAP. These actions will ensure all new construction projects and major retrofits of City owned and operated facilities achieve zero emissions - meaning the buildings are very energy efficient, all-electric, and powered by 100% renewable energy - either from onsite generation like solar panels or purchase of 100% renewable electricity from SDCP* [San Diego Community Power].

- Strategy 2: Access to Clean & Renewable Energy: Transitioning the City's and community's energy system away from fossil fuels and toward clean and renewable sources. This strategy includes working to provide City operations and the community with electricity sources from 100 percent renewable sources; supporting the transition to electric vehicles (EV) through programs to increase the availability of EV charging stations; supporting the installation of renewable electricity generation and energy storage for new and existing development and City facilities; and transition to low or zero-emission vehicles in the City's municipal fleet.

- Strategy 3: Mobility & Land Use: Reduce GHG emissions and other pollutant emissions from cars, diesel-powered trucks, buses, and other heavy-duty equipment. This strategy includes reducing vehicle miles traveled (VMT) for trips through transportation infrastructure and technology improvements, transportation demand management programs, and land use changes.

- Strategy 4: Circular Economy & Clean Communities: Reducing discharges to land, water or air that threaten public and environmental health. This strategy includes waste diversion methods such as composting, reduction and reuse.

- Strategy 5: Resilient Infrastructure and Healthy Ecosystems: Actions related to climate resilient systems in both natural and built environments. This strategy includes developing a Parks

Master Plan prioritizing underserved communities, issuing an Urban Forest Management Plan and planning for the long-term maintenance of additional trees.

- Strategy 6: Emerging Climate Actions: Further action, new policies, technological innovation, partnerships and research for GHG emissions reductions and capture beyond the current ability to quantify and assess. This strategy includes collaboration on research and projects with the private sector; advancements to ensure energy resilience and exploration of alternative fuel sources; further research to understand potential land and water carbon sequestration opportunities; and developing pilot projects that catalyze new techniques and technologies from all sectors.

3.0 EXISTING CONDITIONS

3.1 WORLDWIDE AND NATIONAL GREENHOUSE GAS INVENTORY

In 2020, total anthropogenic GHG emissions worldwide were estimated at 49,800 million metric tons (MMT) of CO_2e emissions (PBL Netherlands Environmental Assessment Agency [PBL] 2022). The five largest emitting countries and the European Union (EU-27), together account for about 60 percent of total global GHG emissions: China (27%), the United States (12%), the European Union (about 7%), India (7%), the Russian Federation (4.5%) and Japan (2.4%) (PBL 2022).

Per USEPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2020, total United States GHG emissions were approximately 5,981 MMT CO_2e in 2020 (USEPA 2022). The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 76.4% of total GHG emissions (4,760 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 92.8% of CO_2 emissions in 2018 (5,031.8 MMT CO_2e). Relative to 1990, gross United States GHG emissions in 2020 were lower by 7.3%, down from a high of 15.2% above 1990 levels in 2007. GHG emissions decreased from 2019 to 2020 by 10.6% and overall, net emissions in 2020 were 21.4% below 2005 levels (USEPA 2022).

3.2 STATE AND REGIONAL GHG INVENTORIES

CARB performed statewide inventories for the years 2000 to 2020, as shown in Table 2, *California Greenhouse Gas Emissions by Sector*. The inventory is divided into five broad sectors of economic activity: agriculture, commercial and residential, electricity generation, industrial, and transportation. Emissions are quantified in MMT CO_2e.

Table 2
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR

Sector	Emissions (MMT CO_2e)			
	1990	2000	2010	2020
Agriculture and Forestry	18.9 (4%)	31.0 (7%)	33.7 (8%)	31.6 (9%)
Commercial and Residential	44.1 (10%)	45.8 (10%)	52.2 (12%)	38.7 (10%)
Electricity Generation	110.5 (26%)	105.4 (22%)	90.6 (20%)	59.5 (16%)
Industrial	105.3 (24%)	105.8 (22%)	101.8 (23%)	73.3 (20%)
Transportation	150.6 (35%)	183.2 (39%)	170.2 (38%)	135.8 (37%)

Sector	Emissions (MMT CO_2e)			
	1990	2000	2010	2020
Unspecified Remaining	1.3 (<1%)	0.0 (0%)	0.0 (0%)	30.2 (8%)
Total	**430.7**	**471.1**	**448.5**	**369.1**

Source: CARB 2007; CARB 2024b
MMT = million metric tons; CO_2e = carbon dioxide equivalent

As shown in Table 7, statewide GHG source emissions totaled 430.7 MMT CO_2e in 1990, 471.1 MMT CO_2e in 2000, 448.5 MMT CO_2e in 2010, and 369.1 MMT CO_2e in 2020. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions (CARB 2007 and CARB 2024b).

A San Diego regional emissions inventory was prepared by the University of San Diego School of Law, Energy Policy Initiative Center (EPIC) that took into account the unique characteristics of the region. Their 2014 emissions inventory for San Diego is duplicated below in Table 3, *San Diego County Greenhouse Gas Emissions by Sector*. The sectors included in this inventory are somewhat different from those in the statewide inventory. Similar to the statewide emissions, transportation-related GHG emissions contributed the most countywide, followed by emissions associated with energy use (County of San Diego 2014).

Table 1
SAN DIEGO COUNTY GHG EMISSIONS BY SECTOR IN 2014

Sector	2014 Emissions MMT CO_2e (% total)[1]
On-Road Transportation	1.46 (45%)
Electricity	0.76 (24%)
Solid Waste	0.34 (11%)
Natural Gas Consumption	0.29 (9%)
Agriculture	0.16 (5%)
Water	0.13 (4%)
Off-Road Transportation	0.04 (1%)
Wastewater	0.02 (1%)
Propane	0.01 (<0.5%)
Total	**3.21**

Source: County of San Diego 2014
[1] Percentages may not total 100 due to rounding.
MMT = million metric tons; CO_2e = carbon dioxide equivalent

3.3 CITY OF SAN DIEGO CAP INVENTORY

As reported in the City of San Diego CAP Annual Report 2020, the total community wide GHG emissions from the of City San Diego in 2019 were approximately 9.6 million MMT CO_2e, a 25 percent decrease in emissions from 2010. Decreases in GHG emissions from electricity consumption, transportation, solid waste and water use offset some increase seen from natural gas consumption and wastewater production year-over-year (City 2024).

4.0 METHODOLOGY AND SIGNIFICANCE CRITERIA

4.1 METHODOLOGY

GHG emissions from the project construction activities and non-aircraft operational sources were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. CalEEMod is a computer model used to estimate air emissions resulting from land development projects throughout the state of California. CalEEMod was developed by the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air quality management and air pollution control districts. The calculation methodology, source of emission factors used, and default data is described in the CalEEMod User's Guide, and Appendices C, D, and G (CAPCOA 2022).

In brief, CalEEMod is a computer model that estimates criteria air pollutant and greenhouse gas emissions from mobile (i.e., vehicular) sources, area sources (fireplaces, woodstoves, and landscape maintenance equipment), energy use (electricity and natural gas used in space heating, ventilation, and cooling; lighting; and plug-in appliances), water use and wastewater generation, and solid waste disposal. Emissions are estimated based on land use information input to the model by the user.

In the first module, the user defines the specific land uses that will occur at the project site. The user also selects the appropriate land use setting (urban or rural), operational year, location, climate zone, and utility provider. The input land uses, size features, and population are used throughout CalEEMod in determining default variables and calculations in each of the subsequent modules. The input land use information consists of land use subtypes (such as the residential subtypes of single-family residential and multi-family medium-rise residential) and their unit or square footage quantities.

Subsequent modules include construction (including off-road vehicle emissions), mobile (on-road vehicle emissions), area sources (woodstoves, fireplaces, consumer products [cleansers, aerosols, solvents], landscape maintenance equipment, architectural coatings), water and wastewater, and solid waste. Each module comprises multiple components including an associated mitigation module to account for further reductions in the reported baseline calculations. Other inputs include trip generation rates, trip lengths, vehicle fleet mix (percentage autos, medium truck, etc.), trip distribution (i.e., percent work to home, etc.), duration of construction phases, construction equipment usage, grading areas, season, and ambient temperature, as well as other parameters.

In various places the user can input additional information and/or override the default assumptions to account for project- or location-specific parameters. For this assessment, the default parameters were not changed unless otherwise noted. The CalEEMod output files for the project are included in Appendix A to this report.

4.1.1 Construction Emissions

4.1.1.1 Construction Phasing

Airport improvements identified in the AMP are proposed over the 20-year planning period (2017 to 2037) and are broken down into two 5-year periods (Phase I and Phase II) and one 10-year period (Phase III). Table 4, *SDM Airport Master Plan Phasing*, lists the improvement tasks and the phasing. All tasks are

assumed to occur sequentially (no overlap). Because a portion of the AMP planning period has already passed, for the purposes of this analysis Phase I construction is assumed to commence in January 2025, followed by Phase II construction is in January 2026 and Phase III in January 2030. Construction is assumed to occur 8 hours per day, 5 days per week. Some construction activities may occur at night.

Table 4
SDM AIRPORT MASTER PLAN PHASING

Task #	Improvement Projects
Phase I Near-Term 0 - 5 Years	
1-1	Runway 8R/26L and Associated Projects
1-2	Taxiway G West End Improvements and New Taxiway
1-3	New Customs Border Protection Facility and Transient Ramp Improvements*
1-4	Fencing Improvements
1-5	Avigation Easements for Runway 8L/26R Runway Protection Zones[1]
1-6	Customs Border Protection Customs Box Expansion
1-7	Proposed Fuel Tank
1-8	Relocate Segmented Circle and Wind Cones out of Safety Areas
Phase II Mid-Term 6 - 10 Years	
2-1	Realign Taxiway D and Taxiway G improvements
2-2	Rehabilitate Terminal Building
2-3	Construct New Maintenance Building
2-4	Demolish Abandoned Buildings
2-5	Demolish/Relocate Hangars in Taxiway Object Free Area
2-6	Runway 8R/26L and Associated Projects Preventative Maintenance
2-7	Construct New 2,000 sq/ft Hangars / Add Pavement
Phase III Long-Term 11 - 20 Years	
3-1	New T-Hangars on West End of Apron

Source: C&S Companies 2022

[1] Avigation Easements are assumed to require no construction activity.

* Exempt from CEQA.

4.1.1.2 Pavement Maintenance

AMP tasks identified as runway, taxiway or ramp improvements are assumed to be pavement maintenance treatments in accordance with the *Pavement Maintenance Management Plan* (Atkins 2018). All pavement improvements are assumed to require re-application of runway and taxiway markings following paving activities. Pavement maintenance and improvements are broken into four categories:

- **Preventative Maintenance and Rehabilitation**: Pavement preventative maintenance or rehabilitation would involve a combination of any of the following operations: crack sealing; shallow patching; deep patching; and/or surface treatment. To be conservative, preventative maintenance is assumed to require the same level of treatment a rehabilitation. Three inches of material is assumed to be remove during shallow patching and six inches of material is assumed to be removed during deep patching. Surface treatment is assumed to be a spray application of a bituminous slurry (also known as a seal coat) without added aggregate. It is assumed that the rehabilitated areas would require new pavement marking. Approximately 450,760 SF of pavement is assumed to require rehabilitative maintenance. Rehabilitation work rate is assumed

to be 10,000 SF per day. The percentage of each rehabilitation area affected by repair operations is assumed to be:

  - Crack Sealing – 100%
  - Shallow Patching – 5%
  - Deep Patching – 2%
  - Surface Treatment – 20%
  - Marking – 10%

- **Reconstruction**: Pavement reconstruction is assumed to require removing up to 6 inches of asphalt concrete using a pavement milling machine and exporting the ground asphalt from the project site. A new layer of asphalt concrete would be placed by a paving machine followed by a roller. It assumed that the rehabilitated areas would require new pavement marking. Approximately 686,910 SF of pavement is assumed to require reconstruction. Reconstruction work rate is assumed to be approximately 25,000 SF per day.

- **New Surface**: The construction of new surfaces for runways, taxiways, aprons, and hangar/tiedown areas is assumed to require excavating to a depth of approximately 18 inches using a combination of rubber-tired dozers and graders and rubber-tired loader and exporting the material from the site. New surfaces are assumed to be typically 12 inches of compacted with a steel drum vibratory roller, followed by 6 inches of asphalt concrete laid by a paving machine and compacted with a steel drum vibratory roller. Approximately 1,239,175 SF of pavement is assumed to require new surfacing. New surface work rate is assumed to be 12,000 SF per day.

- **Pavement Demolition**: Pavement demolition is assumed to require the removal of the asphalt concrete layer (leaving any aggregate subgrade), grinding the removed asphalt, and exporting the material from the site. Approximately 483,140 SF of pavement is assumed to be demolished. Pavement demolition work rate is assumed to be approximately 10,000 SF per day.

4.1.1.3 Pavement Marking

For new or repaired runway or taxiway surfaces, 10 percent of the surface is assumed to require new marking. It is assumed that the area to be marked would be cleaned of rubber and old paint prior to marking using a self-propelled high-pressure blasting truck, followed by a self-propelled automated pavement marking machine with an assumed total 712 hp (2 engines). For new or repaired runway or taxiway surfaces, 483,140 SF is assumed to require new marking. Marking work rate is assumed to be 35,000 SF per day.

4.1.1.4 Hangar Construction Assumptions

Hangars are assumed to be pre-fabricated and pre-painted panels assembled onto a welded frame with a crane and/or a fork lift on a concrete slab foundation. For a series of hangars, the work rate is assumed to be approximately 500 SF per day.

4.1.1.5 Building Demolition Assumptions

Demolition of buildings and structures, including hangars and conservatively including the terminal building, were modeled using the CalEEMod default equipment, schedule and crew size, based on the estimated building square footage from the proposed AMP.

4.1.1.6 Maintenance Building Construction and Terminal Rehabilitation

Construction of the proposed maintenance building and the rehabilitated terminal building were modeled using the CalEEMod default equipment and schedule, based on the building square footage from the proposed AMP. Grid electrical power was assumed to be used for all small construction equipment (no diesel-powered generators, welders, or air compressors). The maintenance building construction and terminal building rehabilitation was conservatively assumed to require a crew of up to ten and one vendor deliveries per day.

4.1.1.7 Construction Equipment Assumptions

The construction equipment to be used for each improvement task in the proposed AMP has not been determined at the time of this programmatic analysis. A conservative (high) estimate of the maximum anticipated required equipment is shown in Table 5, *Construction Equipment Assumptions*.

Table 5
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Activity Type	Equipment	Quantity	Hours per Day
Pavement Maintenance/Rehabilitation	Crack Sealing Truck	1	5
	Concrete Saw	1	2
	Tractors/Loaders/Backhoes	1	7
	Paving Equipment	1	2
	Roller	1	2
Pavement Reconstruction	Pavement Milling Machine	1	6
	Paving Machine	1	6
	Paving Equipment	1	6
	Roller	1	7
Pavement New Surface	Rubber Tired Dozer	1	4
	Rubber Tired Loader	1	4
	Grader	1	4
	Paving Machine	1	5
	Paving Equipment	1	5
	Roller	1	5
Pavement Demolition	Concrete Saw	1	2
	Rubber Tired Dozer	1	7
	Rubber Tired Loader	1	4
	Excavator	1	7
	Grinding/Crushing Machine	1	4
Pavement Marking	Blasting Truck	1	4
	Marking Machine	1	4

Activity Type	Equipment	Quantity	Hours per Day
Hangar Construction	Rubber Tired Dozer	1	4
	Tractors/Loaders/Backhoes	1	4
	Crane	1	3
	Forklift	1	3
	Aerial Lift	1	3
	Welder	1	2
	Generator	1	6
Building Demolition	Concrete Saw	1	8
	Excavator	1	8
	Rubber Tired Dozer	1	8
Building Construction	Crane	1	4
	Forklift	1	6
	Tractors/Loaders/Backhoes	1	8
Fencing and Miscellaneous	Tractors/Loaders/Backhoes	1	7
Fuel Tank Excavation	Excavator	1	7
	Tractors/Loaders/Backhoes	1	7

Source: CalEEMod (output data, including equipment horsepower, is provided in Appendix A)

4.1.2 Operation Emissions

For long-term operation, emissions resulting from the 14,000 SF renovated or new terminal building, the new 10,000-SF maintenance building, and the 107 new hangars were modeled. The new hangars would be built as needed to meet demand during the AMP planning period. To be conservative in estimating the highest potential increase in operational emissions, all hangars were assumed to be completed by the end of 2030.

4.1.2.1 Mobile (Transportation) Sources

Operational emissions from mobile source emissions are associated with project related VMT (calculated in the model from trip generation and trip lengths). Project trip generation was analyzed in the *Brown Field Municipal Airport Transportation Impact Analysis and Local Mobility Analysis*. Project trip generation was based on vehicular counts for airport driveways during one week in March 2024, and on airport flight operations during the same week. Trips and employees per flight operation were calculated and used to estimate 231 new daily airport trips in 2037 (CR Associates 2024). The calculated net new project trips were used in the emissions modeling with the CalEEMod default distances, purposes, and fleet mix.

4.1.2.2 Area Sources

Area sources include emissions from landscaping equipment, the use of consumer products, and the reapplication of architectural coatings for maintenance. Emissions associated with area sources were estimated using the CalEEMod default values.

4.1.2.3 Energy Sources

Development within the project site would use electricity for lighting, heating, cooling, and appliances. Electricity generation typically entails the combustion of fossil fuels, including natural gas and coal,

which is then transmitted to end users. A building's electricity use is thus associated with the off-site or indirect emission of GHGs at the source of electricity generation (power plant).

Energy use for the terminal building and the maintenance building were modeled using CalEEMod defaults. Hangers were assumed to use only CalEEMod default electricity not subject to Title 24 (lighting, plug-in appliances, and tools). Although new project buildings would be required to comply with the current Title 24 Part 6 building energy efficiency regulations, including potential requirements for on-site photovoltaic electricity generation (e.g., solar panels) and energy storage (e.g., batteries), because of uncertainties about the amount of conditioned space (i.e., with heating and air conditioning) in new project buildings, no reduction in project building energy use due to the installation of solar panels was assumed in the modeling.

For the mitigated scenario with all-electric buildings, the default CalEEMod natural gas use for the terminal building and maintenance building was converted to the equivalent energy in electricity (1,000 British Thermal Units is equal to 0.293 kilowatts of electricity) and added to the CalEEMod default electricity use. New hangars were assumed to not use any natural gas.

4.1.2.4 Water and Wastewater Sources

Water-related GHG emissions are from the conveyance and treatment of water and wastewater. Indoor water use (and wastewater generation) and outdoor water use (i.e., landscape irrigation). The project would not install new irrigated landscaping and would not result in an increase in water use for irrigation on the project site. Indoor water use (and the resulting wastewater generation) for the terminal building and maintenance building was modeled using CalEEMod defaults. New hangars were assumed to not use any water.

4.1.2.5 Solid Waste Sources

Solid waste generation for the terminal building and the maintenance building was modeled using CalEEMod defaults. Solid waste generation for the new hangars would generate minimal solid waste, conservatively assumed to be 0.1 ton per year per 1,000 SF of hangar space.

4.1.2.6 Refrigerants

CalEEMod calculates GHG emissions associated with refrigerants (typically HFCs or blends of gases containing HFCs) which are emitted through leakage or maintenance from project refrigeration systems, freezers, and air conditioning systems. Refrigerant emissions from the terminal building and maintenance building HVAC systems, refrigerators, and freezers were calculated using CalEEMod defaults. Refrigerant leakage from the terminal building HVAC systems, refrigerators, and freezers were modeled using CalEEMod defaults. New hangars were assumed to not have any HVAC or refrigeration systems.

4.2 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

Given the relatively small levels of emissions generated by a typical development in relationship to the total amount of GHG emissions generated on a national or global basis, individual development projects are not expected to result in significant, direct impacts with respect to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from new

development could result in significant, cumulative impacts with respect to climate change. Thus, the potential for a significant GHG impact is limited to cumulative impacts.

The City (2022b) has approved guidelines for determining significance based on Appendix G.VII of the State CEQA Guidelines, which provide guidance that a project would have a significant environmental impact if it would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

2. Conflict with the City's CAP or another applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

As discussed in Section 2.3.3, in 2022, the City Council approved an amendment to the Land Development Code which incorporated a revised CAP consistency checklist CAP (Consistency Regulations) which replaced the CAP Consistency Checklist as the measures that could be implemented on a project-by-project basis pursuant to CEQA Guidelines Section 15183.5(b)(1)(D). The environmental analysis for public infrastructure projects should include a discussion of overall consistency with each of the strategies of the 2022 CAP: Strategy 1: Decarbonization of the Built Environment; Strategy 2: Access to Clean and Renewable Energy; Strategy 3: Mobility and Land Use; Strategy 4: Circular Economy and Clean Communities; Strategy 5: Resilient Infrastructure and Healthy Ecosystems; and Strategy 6: Emerging Climate Action (City 2022c).

5.0 PROJECT IMPACTS

This section evaluates potential related to the generation of GHG emissions resulting from implementation of the project.

5.1 GENERATION OF GREENHOUSE GAS EMISSIONS

5.1.1 Impacts

5.1.1.1 Construction Emissions

Construction activities associated with implementation of the proposed AMP would result in emissions of GHGs from the use of construction equipment, from worker and vendor vehicles, and from haul trucks. For the purpose of disclosing the increase in GHG emissions that would occur as a result of implementation of the proposed AMP, an inventory of construction emissions was developed using CalEEMod, as described in Section 4.1. Table 6, *Maximum Annual Construction GHG Emissions*, shows the estimated maximum annual construction GHG emissions through the horizon of the proposed AMP. These maximum annual emissions estimates assume that construction of each improvement task listed in Table 4 would occur sequentially without gaps for each construction period, starting in 2025. Actual annual emissions would be lower if construction of improvement tasks would be spread throughout each construction period.

Table 6
MAXIMUM ANNUAL CONSTRUCTION GHG EMISSIONS

Construction Period	Annual Emissions (MT CO_2e/year)
Near-Term (maximum in 2025)	419.6
Mid-Term (maximum in 2026)	431.6
Long-Term (maximum in 2030)	209.4
Maximum Annual	**419.6**

Source: CalEEMod. Model output data is provided in Appendix A.
MT = metric tons; CO_2e = carbon dioxide equivalent

5.1.1.2 Operational Emissions

Existing sources of non-aircraft related GHG emissions associated with operation of the Airport include: mobile sources such as exhaust from visitor, pilot, employee, and vendor vehicles; area sources such as the use of landscape maintenance and aviation support equipment; the use of consumer products and paint for cleaning and maintenance; indirect emissions from off-site generation of electric used by project buildings; direct emissions from the use of natural gas in project buildings; indirect emissions from the treatment and transport of water and wastewater; indirect emissions from the disposal of solid waste; and direct emission from leaks of refrigerants from building HVAC systems and appliances. For the purpose of disclosing the increase in GHG emissions that would occur as a result of implementation of the proposed AMP, the potential increase in non-aircraft operational emissions resulting from implementation of the project is shown in Table 7, *Unmitigated Annual Operation GHG Emissions (Non-Aircraft)*.

Table 7
UNMITIGATED ANNUAL OPERATION EMISSIONS (NON-AIRCRAFT)

Source	Annual Emissions (MT CO_2e/year)
Mobile	285.9
Area	2.6
Energy	87.8
Water and Wastewater	9.1
Solid Waste	12.7
Refrigerants	0.4
Total Annual	**398.6**

Source: CalEEMod. Model output data is provided in Appendix A.
MT = metric tons; CO2e = carbon dioxide equivalent

5.1.1.3 CAP Consistency Checklist

To determine the significance of GHG emissions attributable to the implementation of the proposed AMP, the project was evaluated for consistency with the City's CAP utilizing the City's Implementation Strategies and guidance memo for Plan- and Policy-Level Environmental Documents and Public Infrastructure Projects (City 2022c). These Strategies outline how the City will achieve GHG reductions through the following:

Strategy 1: Decarbonization of the Built Environment

As discussed in Section 2.3.3.3, the City has adopted a goal to achieve zero emissions municipal buildings and operations by 2035 (City 2022a). If any new project building or renovation of existing buildings were to utilize natural gas, the project would be inconsistent with the City's 2022 CAP, resulting in a potentially significant impact.

Strategy 2: Access to Clean & Renewable Energy

Similar to Strategy 1, above, if any new project building or renovation of existing buildings were to utilize natural gas, the project would be inconsistent with State goals and City 2022 CAP goals for 100 percent renewable energy, resulting in a potentially significant impact.

Strategy 3: Mobility & Land Use

The Airport is not within a TPA designated by the City. The project would not conflict with City plans for bicycle, pedestrian, or transit infrastructure improvement projects, or conflict with Strategy 3 of the City's 2022 CAP.

Strategy 4: Circular Economy & Clean Facilities

The City ordinance Article 6, Division 6, Construction and Demolition Debris Diversion Deposit Program, requires all applicants for a Building Permit or a Demolition/Removal Permit to submit a Waste Management Form and divert 75 percent by weight of the total construction and demolition debris to a certified recycling facility. Because some construction and demolition activities associated with implementation of the AMP may not be subject to the City's Construction and Demolition Debris Diversion Deposit Program ordinance, if a minimum of 75 percent of all project construction and demolition debris (including pavement) would not be diverted to a certified recycling facility, the project would be inconsistent with Strategy 4 of the City's 2022 CAP, resulting in a potentially significant impact.

Strategy 5: Resilient Infrastructure and Healthy Ecosystems

The project does not include removal of existing trees or planting of new trees on streets within the public right-of-way of streets. The project would not conflict with Strategy 5 of the City's 2022 CAP.

Strategy 6: Emerging Climate Action

The project would not conflict with or obstruct implementation of any State of City emerging climate action plan, goal, or strategy (e.g., carbon capture). The project would not conflict with Strategy 6 of the City's 2022 CAP.

5.1.2 Significance of Impacts

Without requiring all new or renovated project buildings to be all electric and requiring a 75 percent construction and demolition debris diversion rate, the project would be inconsistent with the City's 2022 CAP requirements for infrastructure projects. Therefore, the impact would be potentially significant.

5.1.3 Mitigation Measures

The following mitigation measures would ensure consistency with the City's 2022 CAP:

GHG-1 Prohibition of Natural Gas Use in City Facilities. To facilitate the City's goal of achieving zero emissions for municipal buildings and operations by 2035, the City shall require and verify the specification on the applicable plans that no natural gas appliances or natural gas plumbing are included in new City-owned and operated buildings prior to project design approval. Further, for existing City-owned buildings, the City shall replace existing fossil-fuel energy sources with electric or renewable energy sources as those buildings are scheduled for upgrades. For the existing terminal building or other facilities identified as historically significant, such upgrades would need to comply with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties.

GHG-2 Construction and Demolition Waste Diversion. Prior to issuing building or demolition permits, or approving construction contracts which include building or pavement demolition for any AMP implementation project, the City shall require completion of a Waste Management Form Part I, and all debris diversion and verification requirements specified in the City of San Diego Municipal Article 6, *Collection, Transportation and Disposal of Refuse and Solid Waste*; Division 6, *Construction and Demolition Debris Diversion Deposit Program.*

Designing new and renovated project buildings to be all-electric would replace natural gas energy use with electric energy use. The effect of mitigation Measure GHG-1 is shown in Table 8, *Mitigated Annual Operation GHG Emissions (Non-Aircraft)*.

Table 8
MITIGATED ANNUAL OPERATION EMISSIONS (NON-AIRCRAFT)

Source	Annual Emissions (MT CO_2e/year)
Mobile	285.9
Area	2.6
Energy	84.7
Water and Wastewater	9.1
Solid Waste	12.7
Refrigerants	0.4
Total Annual	**395.8**

Source: CalEEMod. Model output data is provided in Appendix A.
MT = metric tons; CO2e = carbon dioxide equivalent

As shown in Table 8, the calculated mitigated GHG emissions would result in 395.8 MT CO_2e per year, a decrease of 3.1 MT CO_2e per year. The mitigated modeling replaced the natural gas energy use with the equivalent quantity of electrical energy, and the modeling does not account for the increased energy efficiency of electric appliances (e.g., hot water heaters and furnaces/heat pumps) compared to natural gas appliances. In addition, the calculated GHG emissions are for the year 2031. Beyond 2031, the indirect GHG emissions from electricity use would decrease and eventually approach zero GHG emissions as the state's electricity supply is decarbonized.

5.1.4 Significance After Mitigation

With the implementation of mitigation measures GHG-1 and GHG-2, the project be consistent with the City's 2022 CAP and would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The impact would be less than significant with mitigation incorporated.

5.2 CONFLICT WITH GHG REDUCTION PLANS

5.2.1 Impacts

The project was analyzed for conflicts with the City's 2022 CAP, the Regional Plan; and the CARB 2022 Scoping Plan.

5.2.1.1 City of San Diego 2022 Climate Action Plan

As discussed in Section 5.1, above, without requiring all new or renovated project buildings to be all electric and requiring a 75 percent construction and demolition debris diversion rate, the project would be inconsistent with the City's 2022 CAP resulting in a potentially significant impact.

5.2.1.2 San Diego Association of Government Regional Plan

As discussed in Section 2.3, the underlying purpose of the Regional Plan is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout San Diego County as stipulated under SB 375. Implementation of the project would not result in regional residential growth and the Airport is not within a TPA identified in the Regional Plan. Therefore, the proposed project would not conflict with the goals and measures of the Regional Plan for the reduction of transportation-related GHGs.

5.2.1.3 California Air Resource Board 2022 Scoping Plan

There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State plan and policy is AB 32, the California Global Warming Solutions Act of 2006. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. SB 32 requires further reductions of 40 percent below 1990 levels by 2030. Beyond 2030, AB 1279 aims to achieve carbon neutrality in the state by 2045. As discussed in Section 2.3.2, the 2022 Scoping Plan lays out a path for achieving the regulatory requirements of AB 32, SB 32, and AB 1279. Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the LCFS, and regulations requiring an increasing proportion of electricity to be generated from renewable sources are being implemented at the statewide level; as such, compliance at the project level is not addressed. Therefore, the proposed project does not conflict with State GHG reduction plans and regulations.

5.2.2 Significance of Impacts

Without requiring all new or renovated project buildings to be all electric, and requiring a 75 percent construction and demolition debris diversion rate, the project would be inconsistent with the City's 2022 CAP. Therefore, the project could conflict with the City's CAP, and the impact would be potentially significant.

5.2.3 Mitigation Framework

Implementation of mitigation measures GHG-1 and GHG-2, described above in Section 5.1, would ensure consistency with the City's 2022 CAP.

5.2.4 Significance After Mitigation

With the implementation of mitigation measures GHG-1 and GHG-2, the project would not conflict with the City's CAP or another applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The impact would be less than significant with mitigation incorporated.

6.0 LIST OF PREPARERS

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Victor Ortiz	Senior Air Quality Specialist
Joanne M. Dramko, AICP	Project Manager, Principal Technical Specialist

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Appendix A

CalEEMod Output

SDM AMP Near-Term Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SDM AMP Near-Term Construction
Construction Start Date	1/2/2025
Lead Agency	City of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	21.8
Location	32.572419898935365, -116.9806118044164
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6601
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.23

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Asphalt Surfaces	1,202	1000sqft	27.6	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.9	18.4	12.2	0.07	0.46	2.01	2.48	0.44	0.55	0.99	10,524
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.7	21.8	16.2	0.08	0.66	6.60	7.26	0.62	1.50	1.97	13,121
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.89	5.88	5.64	0.02	0.19	0.91	1.10	0.18	0.20	0.37	2,534
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	1.07	1.03	< 0.005	0.03	0.17	0.20	0.03	0.04	0.07	420

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	14.9	18.4	12.2	0.07	0.46	2.01	2.48	0.44	0.55	0.99	10,524
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	10.7	21.8	16.2	0.08	0.66	6.60	7.26	0.62	1.50	1.97	13,121

Average Daily	—	—	—	—	—	—	—	—	—	—	—
2025	1.89	5.88	5.64	0.02	0.19	0.91	1.10	0.18	0.20	0.37	2,534
Annual	—	—	—	—	—	—	—	—	—	—	—
2025	0.34	1.07	1.03	< 0.005	0.03	0.17	0.20	0.03	0.04	0.07	420

3. Construction Emissions Details

3.1. Pavement Demolition (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	12.1	12.5	0.02	0.54	—	0.54	0.50	—	0.50	2,102
Demolition	—	—	—	—	—	4.84	4.84	—	0.73	0.73	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.12	1.16	< 0.005	0.05	—	0.05	0.05	—	0.05	196
Demolition	—	—	—	—	—	0.45	0.45	—	0.07	0.07	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	32.4
Demolition	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	8.56	3.12	0.04	0.12	1.62	1.74	0.12	0.44	0.56	6,604
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	12.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.80	0.29	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	616
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.15	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	102

3.3. New Surface Grading (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	6.07	5.59	0.01	0.28	—	0.28	0.26	—	0.26	977
Dust From Material Movement	—	—	—	—	—	1.41	1.41	—	0.67	0.67	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	18.7
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.10
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	45.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.24	15.7	5.71	0.07	0.21	2.98	3.19	0.21	0.82	1.03	12,099
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.30	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	232
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	38.4

3.5. New CPB Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	5.14	6.94	0.01	0.22	—	0.22	0.20	—	0.20	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	5.14	6.94	0.01	0.22	—	0.22	0.20	—	0.20	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.41	1.90	< 0.005	0.06	—	0.06	0.05	—	0.05	359
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	59.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.93	0.00	0.00	0.17	0.17	0.00	0.04	0.04	193
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	52.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.81	0.00	0.00	0.17	0.17	0.00	0.04	0.04	182
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	52.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	50.3
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	14.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.32
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.37
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. New Surface Paving (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.33	3.12	< 0.005	0.11	—	0.11	0.10	—	0.10	474
Paving	10.3	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.09

Paving	0.20	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.50
Paving	0.04	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.30	0.00	0.00	0.06	0.06	0.00	0.01	0.01	68.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	3.92	1.43	0.02	0.05	0.74	0.80	0.05	0.20	0.26	3,025
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.08	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	58.0
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	9.61

3.9. Pavement Marking (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	5.36	4.40	0.02	0.18	—	0.18	0.17	—	0.17	2,068
Architectural Coatings	14.2	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.41	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	159
Architectural Coatings	1.09	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	26.3
Architectural Coatings	0.20	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.46	0.00	0.00	0.08	0.08	0.00	0.02	0.02	96.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.04

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. New CPB Building Painting (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	6.92	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.84
Architectural Coatings	0.09	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.30

Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.41	0.00	0.00	0.08	0.08	0.00	0.02	0.02	90.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Pavement Rehabilitation (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	3.60	4.71	0.01	0.13	—	0.13	0.12	—	0.12	1,262
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	3.60	4.71	0.01	0.13	—	0.13	0.12	—	0.12	1,262
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.28	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	96.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.58	0.00	0.00	0.11	0.11	0.00	0.02	0.02	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.17	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	136
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.51	0.00	0.00	0.11	0.11	0.00	0.02	0.02	113
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.18	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	136
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.4
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.46

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.72

3.15. Pavement Reconstruction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	8.58	8.03	0.02	0.33	—	0.33	0.30	—	0.30	2,576
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.54	0.51	< 0.005	0.02	—	0.02	0.02	—	0.02	162
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	26.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.46	0.00	0.00	0.08	0.08	0.00	0.02	0.02	96.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.16	9.81	3.66	0.05	0.14	1.93	2.07	0.14	0.53	0.67	7,851
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.64	0.23	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	494
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.12	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	81.8

3.17. Fencing, Seg. Circle & Windsock (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.96	1.67	< 0.005	0.04	—	0.04	0.03	—	0.03	255
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.99
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.16
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	24.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Fuel Tank Excavation (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.69	2.56	< 0.005	0.06	—	0.06	0.05	—	0.05	379
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.72
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.04	0.04	0.00	0.01	0.01	48.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Pavement Demolition	Demolition	1/2/2025	2/18/2025	5.00	34.0	—
New Surface Grading	Grading	2/19/2025	2/27/2025	5.00	7.00	—
New CPB Building Construction	Building Construction	7/26/2025	12/12/2025	5.00	100	—
New Surface Paving	Paving	2/28/2025	3/10/2025	5.00	7.00	—
Pavement Marking	Architectural Coating	5/21/2025	6/27/2025	5.00	28.0	—
New CPB Building Painting	Architectural Coating	12/13/2025	12/19/2025	5.00	5.00	—
Pavement Rehabilitation	Trenching	3/11/2025	4/17/2025	5.00	28.0	—
Pavement Reconstruction	Trenching	4/18/2025	5/20/2025	5.00	23.0	—
Fencing, Seg. Circle & Windsock	Trenching	6/28/2025	7/11/2025	5.00	10.0	—
Fuel Tank Excavation	Trenching	7/12/2025	7/25/2025	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Pavement Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73
Pavement Demolition	Other Construction Equipment	Diesel	Average	1.00	4.00	85.0	0.78
Pavement Demolition	Excavators	Diesel	Average	1.00	7.00	36.0	0.38
Pavement Demolition	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Pavement Demolition	Rubber Tired Loaders	Diesel	Average	1.00	4.00	150	0.36
Pavement Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
New Surface Grading	Graders	Diesel	Average	1.00	4.00	148	0.41
New Surface Grading	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40

New CPB Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
New CPB Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
New CPB Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
New Surface Paving	Pavers	Diesel	Average	1.00	5.00	81.0	0.42
New Surface Paving	Paving Equipment	Diesel	Average	1.00	5.00	89.0	0.36
New Surface Paving	Rollers	Diesel	Average	1.00	5.00	36.0	0.38
Pavement Marking	Other Construction Equipment	Diesel	Average	1.00	4.00	712	0.42
Pavement Marking	Off-Highway Trucks	Diesel	Average	1.00	4.00	376	0.38
New CPB Building Painting	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Pavement Rehabilitation	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73
Pavement Rehabilitation	Off-Highway Trucks	Diesel	Average	1.00	5.00	376	0.38
Pavement Rehabilitation	Paving Equipment	Diesel	Average	1.00	2.00	89.0	0.36
Pavement Rehabilitation	Rollers	Diesel	Average	1.00	2.00	36.0	0.38
Pavement Rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Pavement Reconstruction	Other Construction Equipment	Diesel	Average	1.00	6.00	675	0.42
Pavement Reconstruction	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Pavement Reconstruction	Paving Equipment	Diesel	Average	1.00	6.00	89.0	0.36
Pavement Reconstruction	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Fencing, Seg. Circle & Windsock	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Fuel Tank Excavation	Excavators	Diesel	Average	1.00	7.00	36.0	0.38

Fuel Tank Excavation	Tractors/Loaders/Backh	Diesel	Average	1.00	7.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Pavement Demolition	—	—	—	—
Pavement Demolition	Worker	15.0	12.0	LDA,LDT1,LDT2
Pavement Demolition	Vendor	—	7.63	HHDT,MHDT
Pavement Demolition	Hauling	87.6	20.0	HHDT
Pavement Demolition	Onsite truck	—	—	HHDT
New Surface Grading	—	—	—	—
New Surface Grading	Worker	5.00	12.0	LDA,LDT1,LDT2
New Surface Grading	Vendor	—	7.63	HHDT,MHDT
New Surface Grading	Hauling	161	20.0	HHDT
New Surface Grading	Onsite truck	—	—	HHDT
New Surface Paving	—	—	—	—
New Surface Paving	Worker	7.50	12.0	LDA,LDT1,LDT2
New Surface Paving	Vendor	—	7.63	HHDT,MHDT
New Surface Paving	Hauling	40.1	20.0	HHDT
New Surface Paving	Onsite truck	—	—	HHDT
Pavement Marking	—	—	—	—
Pavement Marking	Worker	10.0	12.0	LDA,LDT1,LDT2
Pavement Marking	Vendor	—	7.63	HHDT,MHDT
Pavement Marking	Hauling	0.00	20.0	HHDT
Pavement Marking	Onsite truck	—	—	HHDT
Pavement Rehabilitation	—	—	—	—

Pavement Rehabilitation	Worker	12.5	12.0	LDA,LDT1,LDT2
Pavement Rehabilitation	Vendor	—	7.63	HHDT,MHDT
Pavement Rehabilitation	Hauling	1.80	20.0	HHDT
Pavement Rehabilitation	Onsite truck	—	—	HHDT
Pavement Reconstruction	—	—	—	—
Pavement Reconstruction	Worker	10.0	12.0	LDA,LDT1,LDT2
Pavement Reconstruction	Vendor	—	7.63	HHDT,MHDT
Pavement Reconstruction	Hauling	104	20.0	HHDT
Pavement Reconstruction	Onsite truck	—	—	HHDT
Fencing, Seg. Circle & Windsock	—	—	—	—
Fencing, Seg. Circle & Windsock	Worker	2.50	12.0	LDA,LDT1,LDT2
Fencing, Seg. Circle & Windsock	Vendor	—	7.63	HHDT,MHDT
Fencing, Seg. Circle & Windsock	Hauling	0.00	20.0	HHDT
Fencing, Seg. Circle & Windsock	Onsite truck	—	—	HHDT
Fuel Tank Excavation	—	—	—	—
Fuel Tank Excavation	Worker	5.00	12.0	LDA,LDT1,LDT2
Fuel Tank Excavation	Vendor	—	7.63	HHDT,MHDT
Fuel Tank Excavation	Hauling	0.00	20.0	HHDT
Fuel Tank Excavation	Onsite truck	—	—	HHDT
New CPB Building Construction	—	—	—	—
New CPB Building Construction	Worker	20.0	12.0	LDA,LDT1,LDT2
New CPB Building Construction	Vendor	2.00	7.63	HHDT,MHDT
New CPB Building Construction	Hauling	0.00	20.0	HHDT
New CPB Building Construction	Onsite truck	—	—	HHDT
New CPB Building Painting	—	—	—	—
New CPB Building Painting	Worker	10.0	12.0	LDA,LDT1,LDT2
New CPB Building Painting	Vendor	—	7.63	HHDT,MHDT

New CPB Building Painting	Hauling	0.00	20.0	HHDT
New CPB Building Painting	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Pavement Marking	0.00	0.00	0.00	0.00	86,025
New CPB Building Painting	0.00	0.00	7,840	7,080	0.00

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Pavement Demolition	0.00	0.00	0.00	11,917	—
New Surface Grading	4,496	4,496	1.50	0.00	—
New Surface Paving	0.00	0.00	0.00	0.00	27.6

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	27.6	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	589	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.36	annual days of extreme heat
Extreme Precipitation	2.30	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	9.20	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—

AQ-Ozone	35.3
AQ-PM	91.2
AQ-DPM	40.2
Drinking Water	23.5
Lead Risk Housing	23.3
Pesticides	0.00
Toxic Releases	83.2
Traffic	35.6
Effect Indicators	—
CleanUp Sites	58.2
Groundwater	78.9
Haz Waste Facilities/Generators	87.7
Impaired Water Bodies	23.9
Solid Waste	98.0
Sensitive Population	—
Asthma	44.2
Cardio-vascular	32.2
Low Birth Weights	63.3
Socioeconomic Factor Indicators	—
Education	63.4
Housing	28.7
Linguistic	59.0
Poverty	28.4
Unemployment	43.1

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	75.43949698
Employed	5.838573078
Median HI	79.10945721
Education	—
Bachelor's or higher	36.87925061
High school enrollment	100
Preschool enrollment	28.78224047
Transportation	—
Auto Access	98.98626973
Active commuting	31.93891954
Social	—
2-parent households	63.27473374
Voting	50.45553702
Neighborhood	—
Alcohol availability	88.24586167
Park access	62.71012447
Retail density	19.73566021
Supermarket access	30.0012832
Tree canopy	7.609393045
Housing	—
Homeownership	50.03208007
Housing habitability	62.77428461
Low-inc homeowner severe housing cost burden	69.56242782
Low-inc renter severe housing cost burden	76.63287566
Uncrowded housing	34.15886052

Health Outcomes	—
Insured adults	38.36776594
Arthritis	94.2
Asthma ER Admissions	45.5
High Blood Pressure	96.6
Cancer (excluding skin)	93.3
Asthma	72.9
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	67.4
Life Expectancy at Birth	58.2
Cognitively Disabled	92.5
Physically Disabled	92.6
Heart Attack ER Admissions	59.6
Mental Health Not Good	49.5
Chronic Kidney Disease	85.5
Obesity	60.5
Pedestrian Injuries	45.3
Physical Health Not Good	66.1
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	17.1
Current Smoker	52.6
No Leisure Time for Physical Activity	45.0
Climate Change Exposures	—
Wildfire Risk	73.6
SLR Inundation Area	0.0

Children	33.8
Elderly	92.4
English Speaking	61.8
Foreign-born	71.1
Outdoor Workers	75.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	63.1
Traffic Density	67.4
Traffic Access	55.4
Other Indices	—
Hardship	46.0
Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	57.0
Healthy Places Index Score for Project Location (b)	50.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Schedule estimated from AMP task list and Pavement Maintenance Management Plan.
Construction: Off-Road Equipment	Equipment estimated based on the ALP and activities described in the Pavement Maintenance Plan. Other Construction Equipment for pavement demolition = asphalt and concrete debris crusher. Off-Highway Truck for pavement marking = automated runway striping machine. Other Construction Equipment for pavement marking = pavement paint blasting machine. Off-Highway Truck for pavement rehabilitation = crack sealing truck. Other Construction Equipment for pavement rehabilitation = pavement milling machine.
Construction: Trips and VMT	Pavement Marking and building painting crew size estimated at 5 per day (10 worker trips/day). Pavement haul trips are 1 way (2 trips per load) and assume 16 CY per tandem trailer load. Import and export is not phased. CPB Building Construction crew size estimate at 10 per day (20 worker trips/day), vendor trips estimated at 2 per day.
Construction: Architectural Coatings	Marking assumed to be 10% of new or repaired pavement.
Construction: Dust From Material Movement	Grading assumes 18 inches soil removed and replaced with 18 inches of uncompressed aggregate.

SDM AMP Mid-Term Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SDM AMP Mid-Term Construction
Construction Start Date	1/2/2026
Lead Agency	City of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	21.8
Location	32.572419898935365, -116.9806118044164
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6601
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.23

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Asphalt Surfaces	1,310	1000sqft	30.1	0.00	0.00	—	—	—

Government Office Building	14.0	1000sqft	0.32	14,000	0.00	—	—	—
General Light Industry	10.0	1000sqft	0.23	10,000	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	64.0	1000sqft	1.47	64,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.1	21.0	19.8	0.05	0.66	3.85	4.50	0.59	0.71	1.30	6,831
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.72	25.6	15.6	0.11	0.60	6.18	6.79	0.53	1.74	2.19	16,561
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.43	5.99	6.23	0.02	0.19	0.86	1.04	0.17	0.21	0.37	2,607
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26	1.09	1.14	< 0.005	0.03	0.16	0.19	0.03	0.04	0.07	432

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	15.1	21.0	19.8	0.05	0.66	3.85	4.50	0.59	0.71	1.30	6,831
2027	5.94	4.67	7.75	0.01	0.17	0.18	0.35	0.15	0.04	0.20	1,545
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	4.72	25.6	15.6	0.11	0.60	6.18	6.79	0.53	1.74	2.19	16,561
2027	0.55	4.68	7.65	0.01	0.17	0.18	0.35	0.15	0.04	0.20	1,534
2028	0.42	3.15	4.40	0.01	0.10	0.18	0.29	0.10	0.04	0.14	979
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2026	1.43	5.99	6.23	0.02	0.19	0.86	1.04	0.17	0.21	0.37	2,607
2027	0.43	2.82	4.28	0.01	0.10	0.13	0.23	0.09	0.03	0.12	889
2028	< 0.005	0.02	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.67
Annual	—	—	—	—	—	—	—	—	—	—	—
2026	0.26	1.09	1.14	< 0.005	0.03	0.16	0.19	0.03	0.04	0.07	432
2027	0.08	0.51	0.78	< 0.005	0.02	0.02	0.04	0.02	0.01	0.02	147
2028	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.27

3. Construction Emissions Details

3.1. Pavement Demolition (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.24	11.2	12.1	0.02	0.50	—	0.50	0.46	—	0.46	2,103
Demolition	—	—	—	—	—	4.54	4.54	—	0.69	0.69	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.52	0.56	< 0.005	0.02	—	0.02	0.02	—	0.02	97.9
Demolition	—	—	—	—	—	0.21	0.21	—	0.03	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.2
Demolition	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.12	7.71	2.88	0.04	0.11	1.52	1.63	0.07	0.42	0.49	6,058
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.36	0.13	< 0.005	0.01	0.07	0.08	< 0.005	0.02	0.02	282
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	46.7

3.3. Building Demolition (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	16.4	17.0	0.03	0.59	—	0.59	0.55	—	0.55	2,765
Demolition	—	—	—	—	—	2.72	2.72	—	0.41	0.41	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.67	0.70	< 0.005	0.02	—	0.02	0.02	—	0.02	114
Demolition	—	—	—	—	—	0.11	0.11	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	18.8
Demolition	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	1.08	0.00	0.00	0.21	0.21	0.00	0.05	0.05	236
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.08	4.46	1.71	0.02	0.07	0.91	0.98	0.04	0.25	0.29	3,643
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	9.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.19	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	150
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.8

3.5. New Surface Grading (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	6.19	6.92	0.01	0.29	—	0.29	0.27	—	0.27	1,228
Dust From Material Movement	—	—	—	—	—	1.42	1.42	—	0.67	0.67	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.31	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	60.6

Dust From Material Movement	—	—	—	—	—	0.07	0.07	—	0.03	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.0
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	66.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.31	19.4	7.27	0.10	0.27	3.83	4.11	0.18	1.05	1.23	15,266
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.95	0.36	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	753
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.17	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	125

3.7. Maintenance Building Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.58	2.27	< 0.005	0.06	—	0.06	0.06	—	0.06	430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.29	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	71.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.86	0.00	0.00	0.17	0.17	0.00	0.04	0.04	189
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	51.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	178
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	51.3

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	59.1
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	16.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	9.78
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.80
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Terminal Building Rehab (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	71.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	178
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	51.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	9.85
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.81
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.63
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Terminal Building Rehab (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	1.62	2.46	< 0.005	0.06	—	0.06	0.05	—	0.05	466
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.30	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	77.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.82	0.00	0.00	0.17	0.17	0.00	0.04	0.04	186
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	50.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.72	0.00	0.00	0.17	0.17	0.00	0.04	0.04	175
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	50.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	0.06	0.06	0.00	0.01	0.01	62.9
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	17.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.4
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.96

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Hangar Construction (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	3.18	3.69	0.01	0.11	—	0.11	0.10	—	0.10	758
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	3.18	3.69	0.01	0.11	—	0.11	0.10	—	0.10	758
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.10	1.27	< 0.005	0.04	—	0.04	0.04	—	0.04	261
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.20	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	43.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.82	0.00	0.00	0.17	0.17	0.00	0.04	0.04	186
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	50.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.72	0.00	0.00	0.17	0.17	0.00	0.04	0.04	175
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	50.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	60.8
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	17.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.86
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Hangar Construction (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	3.03	3.69	0.01	0.10	—	0.10	0.09	—	0.09	758
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.93
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.98
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.68	0.00	0.00	0.17	0.17	0.00	0.04	0.04	172
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	49.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.38
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.22
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.17. New Surface Paving (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.24	2.22	3.11	< 0.005	0.10	—	0.10	0.09	—	0.09	474
Paving	4.38	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.4
Paving	0.22	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.87
Paving	0.04	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	66.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.08	4.86	1.82	0.02	0.07	0.96	1.03	0.05	0.26	0.31	3,816
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.24	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	188
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	31.2

3.19. Terminal Building Painting (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	5.80	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.84
Architectural Coatings	0.08	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.30
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.02	0.41	0.00	0.00	0.08	0.08	0.00	0.02	0.02	92.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Pavement Marking (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	5.16	4.44	0.02	0.18	—	0.18	0.16	—	0.16	2,069
Architectural Coatings	14.4	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.24	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	96.4
Architectural Coatings	0.67	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.0
Architectural Coatings	0.12	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	94.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Maintenance Building Painting (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	1.85	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.84
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.30
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.38	0.00	0.00	0.08	0.08	0.00	0.02	0.02	89.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Pavement Rehabilitation (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	3.38	4.71	0.01	0.12	—	0.12	0.11	—	0.11	1,263
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	3.38	4.71	0.01	0.12	—	0.12	0.11	—	0.11	1,263
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.21	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	79.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.54	0.00	0.00	0.11	0.11	0.00	0.02	0.02	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	70.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.48	0.00	0.00	0.11	0.11	0.00	0.02	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	70.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.42
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.73

3.27. Pavement Reconstruction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.89	8.31	8.06	0.02	0.31	—	0.31	0.29	—	0.29	2,577
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	49.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.18
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	94.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.09	5.10	1.96	0.03	0.07	1.04	1.12	0.05	0.29	0.34	4,159
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	79.7
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	13.2

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Pavement Demolition	Demolition	1/2/2026	1/26/2026	5.00	17.0	—
Building Demolition	Demolition	5/22/2026	6/11/2026	5.00	15.0	—
New Surface Grading	Grading	1/27/2026	2/19/2026	5.00	18.0	—
Maintenance Building Construction	Building Construction	6/12/2026	11/26/2026	5.00	120	—
Terminal Building Rehab	Building Construction	12/4/2026	7/1/2027	5.00	150	—
Hangar Construction	Building Construction	7/9/2027	1/4/2028	5.00	128	—
New Surface Paving	Paving	2/20/2026	3/17/2026	5.00	18.0	—
Terminal Building Painting	Architectural Coating	7/2/2027	7/8/2027	5.00	5.00	—
Pavement Marking	Architectural Coating	4/29/2026	5/21/2026	5.00	17.0	—
Maintenance Building Painting	Architectural Coating	11/27/2026	12/3/2026	5.00	5.00	—
Pavement Rehabilitation	Trenching	3/18/2026	4/17/2026	5.00	23.0	—
Pavement Reconstruction	Trenching	4/18/2026	4/28/2026	5.00	7.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Pavement Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73

Pavement Demolition	Other Construction Equipment	Diesel	Average	1.00	4.00	85.0	0.78
Pavement Demolition	Excavators	Diesel	Average	1.00	7.00	36.0	0.38
Pavement Demolition	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Pavement Demolition	Rubber Tired Loaders	Diesel	Average	1.00	4.00	150	0.36
Pavement Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Building Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Building Demolition	Excavators	Diesel	Average	8.00	8.00	36.0	0.38
Building Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
New Surface Grading	Graders	Diesel	Average	1.00	4.00	148	0.41
New Surface Grading	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40
New Surface Grading	Rubber Tired Loaders	Diesel	Average	1.00	4.00	150	0.36
Maintenance Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Maintenance Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Maintenance Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Terminal Building Rehab	Cranes	Diesel	Average	1.00	4.00	367	0.29
Terminal Building Rehab	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Terminal Building Rehab	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Hangar Construction	Cranes	Diesel	Average	1.00	3.00	367	0.29
Hangar Construction	Forklifts	Diesel	Average	1.00	3.00	82.0	0.20
Hangar Construction	Generator Sets	Diesel	Average	1.00	6.00	14.0	0.74
Hangar Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37

Hangar Construction	Welders	Diesel	Average	1.00	4.00	46.0	0.45
New Surface Paving	Pavers	Diesel	Average	1.00	5.00	81.0	0.42
New Surface Paving	Paving Equipment	Diesel	Average	1.00	5.00	89.0	0.36
New Surface Paving	Rollers	Diesel	Average	1.00	5.00	36.0	0.38
Terminal Building Painting	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Pavement Marking	Other Construction Equipment	Diesel	Average	1.00	4.00	712	0.42
Pavement Marking	Off-Highway Trucks	Diesel	Average	1.00	4.00	376	0.38
Maintenance Building Painting	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Pavement Rehabilitation	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73
Pavement Rehabilitation	Off-Highway Trucks	Diesel	Average	1.00	5.00	376	0.38
Pavement Rehabilitation	Paving Equipment	Diesel	Average	1.00	2.00	89.0	0.36
Pavement Rehabilitation	Rollers	Diesel	Average	1.00	2.00	36.0	0.38
Pavement Rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Pavement Reconstruction	Other Construction Equipment	Diesel	Average	1.00	6.00	675	0.42
Pavement Reconstruction	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Pavement Reconstruction	Paving Equipment	Diesel	Average	1.00	6.00	89.0	0.36
Pavement Reconstruction	Rollers	Diesel	Average	1.00	7.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Pavement Demolition	—	—	—	—
Pavement Demolition	Worker	15.0	12.0	LDA,LDT1,LDT2
Pavement Demolition	Vendor	—	7.63	HHDT,MHDT
Pavement Demolition	Hauling	82.1	20.0	HHDT
Pavement Demolition	Onsite truck	—	—	HHDT
New Surface Grading	—	—	—	—
New Surface Grading	Worker	7.50	12.0	LDA,LDT1,LDT2
New Surface Grading	Vendor	—	7.63	HHDT,MHDT
New Surface Grading	Hauling	207	20.0	HHDT
New Surface Grading	Onsite truck	—	—	HHDT
New Surface Paving	—	—	—	—
New Surface Paving	Worker	7.50	12.0	LDA,LDT1,LDT2
New Surface Paving	Vendor	—	7.63	HHDT,MHDT
New Surface Paving	Hauling	51.7	20.0	HHDT
New Surface Paving	Onsite truck	—	—	HHDT
Pavement Marking	—	—	—	—
Pavement Marking	Worker	10.0	12.0	LDA,LDT1,LDT2
Pavement Marking	Vendor	—	7.63	HHDT,MHDT
Pavement Marking	Hauling	0.00	20.0	HHDT
Pavement Marking	Onsite truck	—	—	HHDT
Pavement Rehabilitation	—	—	—	—
Pavement Rehabilitation	Worker	12.5	12.0	LDA,LDT1,LDT2
Pavement Rehabilitation	Vendor	—	7.63	HHDT,MHDT
Pavement Rehabilitation	Hauling	0.95	20.0	HHDT
Pavement Rehabilitation	Onsite truck	—	—	HHDT
Pavement Reconstruction	—	—	—	—
Pavement Reconstruction	Worker	10.0	12.0	LDA,LDT1,LDT2

Pavement Reconstruction	Vendor	—	7.63	HHDT,MHDT
Pavement Reconstruction	Hauling	56.3	20.0	HHDT
Pavement Reconstruction	Onsite truck	—	—	HHDT
Maintenance Building Construction	—	—	—	—
Maintenance Building Construction	Worker	20.0	12.0	LDA,LDT1,LDT2
Maintenance Building Construction	Vendor	2.00	7.63	HHDT,MHDT
Maintenance Building Construction	Hauling	0.00	20.0	HHDT
Maintenance Building Construction	Onsite truck	—	—	HHDT
Maintenance Building Painting	—	—	—	—
Maintenance Building Painting	Worker	10.0	12.0	LDA,LDT1,LDT2
Maintenance Building Painting	Vendor	—	7.63	HHDT,MHDT
Maintenance Building Painting	Hauling	0.00	20.0	HHDT
Maintenance Building Painting	Onsite truck	—	—	HHDT
Building Demolition	—	—	—	—
Building Demolition	Worker	25.0	12.0	LDA,LDT1,LDT2
Building Demolition	Vendor	—	7.63	HHDT,MHDT
Building Demolition	Hauling	49.3	20.0	HHDT
Building Demolition	Onsite truck	—	—	HHDT
Terminal Building Rehab	—	—	—	—
Terminal Building Rehab	Worker	20.0	12.0	LDA,LDT1,LDT2
Terminal Building Rehab	Vendor	2.00	7.63	HHDT,MHDT
Terminal Building Rehab	Hauling	0.00	20.0	HHDT
Terminal Building Rehab	Onsite truck	—	—	HHDT
Hangar Construction	—	—	—	—
Hangar Construction	Worker	20.0	12.0	LDA,LDT1,LDT2
Hangar Construction	Vendor	2.00	7.63	HHDT,MHDT
Hangar Construction	Hauling	0.00	20.0	HHDT

Hangar Construction	Onsite truck	—	—	HHDT
Terminal Building Painting	—	—	—	—
Terminal Building Painting	Worker	10.0	12.0	LDA,LDT1,LDT2
Terminal Building Painting	Vendor	—	7.63	HHDT,MHDT
Terminal Building Painting	Hauling	0.00	20.0	HHDT
Terminal Building Painting	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Pavement Marking	0.00	0.00	0.00	0.00	52,972
Maintenance Building Painting	0.00	0.00	2,000	2,000	0.00
Terminal Building Painting	0.00	0.00	10,000	2,500	0.00

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Pavement Demolition	0.00	0.00	0.00	5,579	—
Building Demolition	0.00	0.00	0.00	64,190	—
New Surface Grading	14,886	14,886	1.50	0.00	—
New Surface Paving	0.00	0.00	0.00	0.00	30.1

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	30.1	100%
Government Office Building	0.00	0%
General Light Industry	0.00	0%
Unrefrigerated Warehouse-No Rail	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	589	0.03	< 0.005
2027	0.00	589	0.03	< 0.005
2028	0.00	589	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.36	annual days of extreme heat
Extreme Precipitation	2.30	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	9.20	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.3
AQ-PM	91.2
AQ-DPM	40.2
Drinking Water	23.5
Lead Risk Housing	23.3
Pesticides	0.00
Toxic Releases	83.2
Traffic	35.6
Effect Indicators	—
CleanUp Sites	58.2
Groundwater	78.9
Haz Waste Facilities/Generators	87.7
Impaired Water Bodies	23.9
Solid Waste	98.0
Sensitive Population	—
Asthma	44.2
Cardio-vascular	32.2

Low Birth Weights	63.3
Socioeconomic Factor Indicators	—
Education	63.4
Housing	28.7
Linguistic	59.0
Poverty	28.4
Unemployment	43.1

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	75.43949698
Employed	5.838573078
Median HI	79.10945721
Education	—
Bachelor's or higher	36.87925061
High school enrollment	100
Preschool enrollment	28.78224047
Transportation	—
Auto Access	98.98626973
Active commuting	31.93891954
Social	—
2-parent households	63.27473374
Voting	50.45553702
Neighborhood	—
Alcohol availability	88.24586167

Park access	62.71012447
Retail density	19.73566021
Supermarket access	30.0012832
Tree canopy	7.609393045
Housing	—
Homeownership	50.03208007
Housing habitability	62.77428461
Low-inc homeowner severe housing cost burden	69.56242782
Low-inc renter severe housing cost burden	76.63287566
Uncrowded housing	34.15886052
Health Outcomes	—
Insured adults	38.36776594
Arthritis	94.2
Asthma ER Admissions	45.5
High Blood Pressure	96.6
Cancer (excluding skin)	93.3
Asthma	72.9
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	67.4
Life Expectancy at Birth	58.2
Cognitively Disabled	92.5
Physically Disabled	92.6
Heart Attack ER Admissions	59.6
Mental Health Not Good	49.5
Chronic Kidney Disease	85.5
Obesity	60.5

Pedestrian Injuries	45.3
Physical Health Not Good	66.1
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	17.1
Current Smoker	52.6
No Leisure Time for Physical Activity	45.0
Climate Change Exposures	—
Wildfire Risk	73.6
SLR Inundation Area	0.0
Children	33.8
Elderly	92.4
English Speaking	61.8
Foreign-born	71.1
Outdoor Workers	75.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	63.1
Traffic Density	67.4
Traffic Access	55.4
Other Indices	—
Hardship	46.0
Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	57.0

Healthy Places Index Score for Project Location (b)	50.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Schedule estimated from AMP task list and Pavement Maintenance Management Plan.
Construction: Off-Road Equipment	Equipment estimated based on the ALP and activities described in the Pavement Maintenance Plan. Other Construction Equipment for pavement demolition = asphalt and concrete debris crusher. Off-Highway Truck for pavement marking = automated runway striping machine. Other Construction Equipment for pavement marking = pavement paint blasting machine. Off-Highway Truck for pavement rehabilitation = crack sealing truck. Other Construction Equipment for pavement rehabilitation = pavement milling machine.
Construction: Trips and VMT	Pavement Marking and building painting crew size estimated at 5 per day (10 worker trips/day). Pavement haul trips are 1 way (2 trips per load) and assume 16 CY per tandem trailer load. Import and export is not phased. Building Construction crew size estimate at 10 per day (20 worker trips/day), vendor trips estimated at 2 per day.
Construction: Architectural Coatings	Marking assumed to be 10% of new or repaired pavement.
Construction: Dust From Material Movement	Grading assumes 18 inches soil removed and replaced with 18 inches of uncompressed aggregate.

SDM AMP Long-Term Construction Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SDM AMP Long-Term Construction
Construction Start Date	1/2/2030
Lead Agency	City of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	21.8
Location	32.572419898935365, -116.9806118044164
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6601
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.23

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Asphalt Surfaces	1,310	1000sqft	30.1	0.00	0.00	—	—	—

Unrefrigerated Warehouse-No Rail	90.0	1000sqft	2.07	90,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.40	2.95	4.38	0.01	0.09	0.18	0.27	0.08	0.04	0.13	980
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.52	22.8	14.3	0.11	0.43	5.58	6.01	0.41	1.81	2.22	15,913
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46	2.61	2.90	0.01	0.07	0.35	0.42	0.06	0.10	0.17	1,265
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.48	0.53	< 0.005	0.01	0.06	0.08	0.01	0.02	0.03	209

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2030	0.40	2.95	4.38	0.01	0.09	0.18	0.27	0.08	0.04	0.13	980

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2030	5.52	22.8	14.3	0.11	0.43	5.58	6.01	0.41	1.81	2.22	15,913
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2030	0.46	2.61	2.90	0.01	0.07	0.35	0.42	0.06	0.10	0.17	1,265
Annual	—	—	—	—	—	—	—	—	—	—	—
2030	0.08	0.48	0.53	< 0.005	0.01	0.06	0.08	0.01	0.02	0.03	209

3. Construction Emissions Details

3.1. New Surface Grading (2030) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	4.96	6.88	0.01	0.24	—	0.24	0.22	—	0.22	1,229
Dust From Material Movement	—	—	—	—	—	1.42	1.42	—	0.67	0.67	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.20	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	50.5
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.36
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	62.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.23	17.8	7.20	0.10	0.19	4.10	4.29	0.19	1.12	1.32	14,622
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.73	0.29	< 0.005	0.01	0.17	0.17	0.01	0.05	0.05	601
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	99.5

3.3. Hangar Construction (2030) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.86	3.67	0.01	0.09	—	0.09	0.08	—	0.08	758
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.86	3.67	0.01	0.09	—	0.09	0.08	—	0.08	758
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.41	1.81	< 0.005	0.05	—	0.05	0.04	—	0.04	374
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	61.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.69	0.00	0.00	0.17	0.17	0.00	0.04	0.04	176
Vendor	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	46.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.60	0.00	0.00	0.17	0.17	0.00	0.04	0.04	166
Vendor	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	46.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.02	0.30	0.00	0.00	0.08	0.08	0.00	0.02	0.02	82.6
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	22.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	13.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.76
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. New Surface Paving (2030) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	1.96	3.09	< 0.005	0.07	—	0.07	0.06	—	0.06	474
Paving	5.25	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	19.5
Paving	0.22	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.22
Paving	0.04	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	62.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	3.23	1.31	0.02	0.04	0.74	0.78	0.04	0.20	0.24	2,656
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	109
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	18.1

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

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

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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
New Surface Grading	Grading	1/2/2030	1/22/2030	5.00	15.0	—
Hangar Construction	Building Construction	2/13/2030	10/22/2030	5.00	180	—
New Surface Paving	Paving	1/23/2030	2/12/2030	5.00	15.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
New Surface Grading	Graders	Diesel	Average	1.00	4.00	148	0.41
New Surface Grading	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40
New Surface Grading	Rubber Tired Loaders	Diesel	Average	1.00	4.00	150	0.36
Hangar Construction	Cranes	Diesel	Average	1.00	3.00	367	0.29
Hangar Construction	Forklifts	Diesel	Average	1.00	3.00	82.0	0.20
Hangar Construction	Generator Sets	Diesel	Average	1.00	6.00	14.0	0.74
Hangar Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Hangar Construction	Welders	Diesel	Average	1.00	4.00	46.0	0.45
New Surface Paving	Pavers	Diesel	Average	1.00	5.00	81.0	0.42
New Surface Paving	Paving Equipment	Diesel	Average	1.00	5.00	89.0	0.36
New Surface Paving	Rollers	Diesel	Average	1.00	5.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
New Surface Grading	—	—	—	—
New Surface Grading	Worker	7.50	12.0	LDA,LDT1,LDT2
New Surface Grading	Vendor	—	7.63	HHDT,MHDT
New Surface Grading	Hauling	221	20.0	HHDT
New Surface Grading	Onsite truck	—	—	HHDT
New Surface Paving	—	—	—	—

New Surface Paving	Worker	7.50	12.0	LDA,LDT1,LDT2
New Surface Paving	Vendor	—	7.63	HHDT,MHDT
New Surface Paving	Hauling	40.1	20.0	HHDT
New Surface Paving	Onsite truck	—	—	HHDT
Hangar Construction	—	—	—	—
Hangar Construction	Worker	20.0	12.0	LDA,LDT1,LDT2
Hangar Construction	Vendor	2.00	7.63	HHDT,MHDT
Hangar Construction	Hauling	0.00	20.0	HHDT
Hangar Construction	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
New Surface Grading	13,257	13,257	1.50	0.00	—
New Surface Paving	0.00	0.00	0.00	0.00	30.1

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction

Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	30.1	100%
Unrefrigerated Warehouse-No Rail	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00	589	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.36	annual days of extreme heat
Extreme Precipitation	2.30	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	9.20	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

Flooding	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.3
AQ-PM	91.2
AQ-DPM	40.2
Drinking Water	23.5
Lead Risk Housing	23.3
Pesticides	0.00
Toxic Releases	83.2
Traffic	35.6
Effect Indicators	—
CleanUp Sites	58.2
Groundwater	78.9
Haz Waste Facilities/Generators	87.7
Impaired Water Bodies	23.9
Solid Waste	98.0
Sensitive Population	—
Asthma	44.2
Cardio-vascular	32.2
Low Birth Weights	63.3
Socioeconomic Factor Indicators	—
Education	63.4
Housing	28.7
Linguistic	59.0
Poverty	28.4

Unemployment	43.1

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	75.43949698
Employed	5.838573078
Median HI	79.10945721
Education	—
Bachelor's or higher	36.87925061
High school enrollment	100
Preschool enrollment	28.78224047
Transportation	—
Auto Access	98.98626973
Active commuting	31.93891954
Social	—
2-parent households	63.27473374
Voting	50.45553702
Neighborhood	—
Alcohol availability	88.24586167
Park access	62.71012447
Retail density	19.73566021
Supermarket access	30.0012832
Tree canopy	7.609393045
Housing	—
Homeownership	50.03208007

Housing habitability	62.77428461
Low-inc homeowner severe housing cost burden	69.56242782
Low-inc renter severe housing cost burden	76.63287566
Uncrowded housing	34.15886052
Health Outcomes	—
Insured adults	38.36776594
Arthritis	94.2
Asthma ER Admissions	45.5
High Blood Pressure	96.6
Cancer (excluding skin)	93.3
Asthma	72.9
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	67.4
Life Expectancy at Birth	58.2
Cognitively Disabled	92.5
Physically Disabled	92.6
Heart Attack ER Admissions	59.6
Mental Health Not Good	49.5
Chronic Kidney Disease	85.5
Obesity	60.5
Pedestrian Injuries	45.3
Physical Health Not Good	66.1
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	17.1
Current Smoker	52.6

No Leisure Time for Physical Activity	45.0
Climate Change Exposures	—
Wildfire Risk	73.6
SLR Inundation Area	0.0
Children	33.8
Elderly	92.4
English Speaking	61.8
Foreign-born	71.1
Outdoor Workers	75.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	63.1
Traffic Density	67.4
Traffic Access	55.4
Other Indices	—
Hardship	46.0
Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	57.0
Healthy Places Index Score for Project Location (b)	50.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Schedule estimated from AMP task list and Pavement Maintenance Management Plan.
Construction: Off-Road Equipment	Equipment estimated based on the ALP and modeling for Near- and Mid-Term components.
Construction: Trips and VMT	Pavement haul trips are 1 way (2 trips per load) and assume 16 CY per tandem trailer load. Import and export is not phased. Building Construction crew size estimate at 10 per day (20 worker trips/day), vendor trips estimated at 2 per day.
Construction: Architectural Coatings	Marking assumed to be 10% of new or repaired pavement.
Construction: Dust From Material Movement	Grading assumes 18 inches soil removed and replaced with 18 inches of uncompressed aggregate.

SDM AMP Operation R2 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SDM AMP Operation R2
Operational Year	2031
Lead Agency	City of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	21.8
Location	32.572419898935365, -116.9806118044164
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6601
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.25

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	154	1000sqft	3.54	154,000	0.00	—	—	—

General Office Building	14.0	1000sqft	0.32	14,000	0.00	—	—	—
General Light Industry	10.0	1000sqft	0.23	10,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.26	0.94	15.5	0.02	0.04	1.97	2.02	0.04	0.50	0.54	2,815
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.98	0.94	7.23	0.02	0.03	1.97	2.00	0.03	0.50	0.53	2,687
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.45	0.85	9.99	0.02	0.04	1.65	1.68	0.03	0.42	0.45	2,408
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.00	0.16	1.82	< 0.005	0.01	0.30	0.31	0.01	0.08	0.08	399

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.94	0.64	7.56	0.02	0.01	1.97	1.99	0.01	0.50	0.51	2,118
Area	5.31	0.07	7.74	< 0.005	0.01	—	0.01	0.01	—	0.01	31.9
Energy	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	530
Water	—	—	—	—	—	—	—	—	—	—	54.8
Waste	—	—	—	—	—	—	—	—	—	—	77.0
Refrig.	—	—	—	—	—	—	—	—	—	—	2.64
Total	6.26	0.94	15.5	0.02	0.04	1.97	2.02	0.04	0.50	0.54	2,815
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.93	0.71	7.04	0.02	0.01	1.97	1.99	0.01	0.50	0.51	2,022
Area	4.04	—	—	—	—	—	—	—	—	—	—
Energy	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	530
Water	—	—	—	—	—	—	—	—	—	—	54.8
Waste	—	—	—	—	—	—	—	—	—	—	77.0
Refrig.	—	—	—	—	—	—	—	—	—	—	2.64
Total	4.98	0.94	7.23	0.02	0.03	1.97	2.00	0.03	0.50	0.53	2,687
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.78	0.59	5.98	0.02	0.01	1.65	1.66	0.01	0.42	0.43	1,727
Area	4.66	0.03	3.82	< 0.005	0.01	—	0.01	0.01	—	0.01	15.8
Energy	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	530
Water	—	—	—	—	—	—	—	—	—	—	54.8
Waste	—	—	—	—	—	—	—	—	—	—	77.0
Refrig.	—	—	—	—	—	—	—	—	—	—	2.64
Total	5.45	0.85	9.99	0.02	0.04	1.65	1.68	0.03	0.42	0.45	2,408
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.14	0.11	1.09	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	286
Area	0.85	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.61
Energy	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	87.8

Water	—	—	—	—	—	—	—	—	—	—	9.08
Waste	—	—	—	—	—	—	—	—	—	—	12.7
Refrig.	—	—	—	—	—	—	—	—	—	—	0.44
Total	1.00	0.16	1.82	< 0.005	0.01	0.30	0.31	0.01	0.08	0.08	399

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.77	0.53	6.21	0.02	0.01	1.62	1.63	0.01	0.41	0.42	1,741
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Light Industry	0.17	0.11	1.35	< 0.005	< 0.005	0.35	0.35	< 0.005	0.09	0.09	377
Total	0.94	0.64	7.56	0.02	0.01	1.97	1.99	0.01	0.50	0.51	2,118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.76	0.58	5.79	0.02	0.01	1.62	1.63	0.01	0.41	0.42	1,663
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Light Industry	0.17	0.13	1.25	< 0.005	< 0.005	0.35	0.35	< 0.005	0.09	0.09	360

Total	0.93	0.71	7.04	0.02	0.01	1.97	1.99	0.01	0.50	0.51	2,022
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.14	0.10	1.06	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	277
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Light Industry	< 0.005	< 0.005	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	8.58
Total	0.14	0.11	1.09	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	286

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	105
General Office Building	—	—	—	—	—	—	—	—	—	—	109
General Light Industry	—	—	—	—	—	—	—	—	—	—	42.2
Total	—	—	—	—	—	—	—	—	—	—	257
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	105

General Office Building	—	—	—	—	—	—	—	—	—	—	109
General Light Industry	—	—	—	—	—	—	—	—	—	—	42.2
Total	—	—	—	—	—	—	—	—	—	—	257
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	17.4
General Office Building	—	—	—	—	—	—	—	—	—	—	18.1
General Light Industry	—	—	—	—	—	—	—	—	—	—	6.99
Total	—	—	—	—	—	—	—	—	—	—	42.5

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	144
General Light Industry	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	130
Total	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	274
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	144
General Light Industry	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	130
Total	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	274
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.9
General Light Industry	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	21.5
Total	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	45.3

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.81	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.23	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.27	0.07	7.74	< 0.005	0.01	—	0.01	0.01	—	0.01	31.9
Total	5.31	0.07	7.74	< 0.005	0.01	—	0.01	0.01	—	0.01	31.9

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.81	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.23	—	—	—	—	—	—	—	—	—	—
Total	4.04	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.70	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.61
Total	0.85	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.61

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	28.4
General Light Industry	—	—	—	—	—	—	—	—	—	—	26.4
Total	—	—	—	—	—	—	—	—	—	—	54.8

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	28.4
General Light Industry	—	—	—	—	—	—	—	—	—	—	26.4
Total	—	—	—	—	—	—	—	—	—	—	54.8
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	4.71
General Light Industry	—	—	—	—	—	—	—	—	—	—	4.37
Total	—	—	—	—	—	—	—	—	—	—	9.08

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	29.0
General Office Building	—	—	—	—	—	—	—	—	—	—	24.6

General Light Industry	—	—	—	—	—	—	—	—	—	—	23.4
Total	—	—	—	—	—	—	—	—	—	—	77.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	29.0
General Office Building	—	—	—	—	—	—	—	—	—	—	24.6
General Light Industry	—	—	—	—	—	—	—	—	—	—	23.4
Total	—	—	—	—	—	—	—	—	—	—	77.0
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	4.81
General Office Building	—	—	—	—	—	—	—	—	—	—	4.06
General Light Industry	—	—	—	—	—	—	—	—	—	—	3.87
Total	—	—	—	—	—	—	—	—	—	—	12.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.03

General Light Industry	—	—	—	—	—	—	—	—	—	—	2.60
Total	—	—	—	—	—	—	—	—	—	—	2.64
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.03
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.60
Total	—	—	—	—	—	—	—	—	—	—	2.64
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.01
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.43
Total	—	—	—	—	—	—	—	—	—	—	0.44

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	231	231	231	84,315	2,299	2,299	2,299	839,216
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Light Industry	0.00	0.00	50.0	2,607	0.00	0.00	498	25,950

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	267,000	89,000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	223,482	170	0.0330	0.0040	0.00
General Office Building	232,324	170	0.0330	0.0040	448,322
General Light Industry	89,734	170	0.0330	0.0040	403,643

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	0.00	0.00
General Office Building	2,488,272	0.00
General Light Industry	2,312,500	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	15.4	—
General Office Building	13.0	—
General Light Industry	12.4	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.36	annual days of extreme heat
Extreme Precipitation	2.30	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	9.20	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2

Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.3
AQ-PM	91.2
AQ-DPM	40.2
Drinking Water	23.5
Lead Risk Housing	23.3
Pesticides	0.00
Toxic Releases	83.2
Traffic	35.6
Effect Indicators	—
CleanUp Sites	58.2
Groundwater	78.9

Haz Waste Facilities/Generators	87.7
Impaired Water Bodies	23.9
Solid Waste	98.0
Sensitive Population	—
Asthma	44.2
Cardio-vascular	32.2
Low Birth Weights	63.3
Socioeconomic Factor Indicators	—
Education	63.4
Housing	28.7
Linguistic	59.0
Poverty	28.4
Unemployment	43.1

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	75.43949698
Employed	5.838573078
Median HI	79.10945721
Education	—
Bachelor's or higher	36.87925061
High school enrollment	100
Preschool enrollment	28.78224047
Transportation	—
Auto Access	98.98626973

Active commuting	31.93891954
Social	—
2-parent households	63.27473374
Voting	50.45553702
Neighborhood	—
Alcohol availability	88.24586167
Park access	62.71012447
Retail density	19.73566021
Supermarket access	30.0012832
Tree canopy	7.609393045
Housing	—
Homeownership	50.03208007
Housing habitability	62.77428461
Low-inc homeowner severe housing cost burden	69.56242782
Low-inc renter severe housing cost burden	76.63287566
Uncrowded housing	34.15886052
Health Outcomes	—
Insured adults	38.36776594
Arthritis	94.2
Asthma ER Admissions	45.5
High Blood Pressure	96.6
Cancer (excluding skin)	93.3
Asthma	72.9
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	67.4
Life Expectancy at Birth	58.2

Cognitively Disabled	92.5
Physically Disabled	92.6
Heart Attack ER Admissions	59.6
Mental Health Not Good	49.5
Chronic Kidney Disease	85.5
Obesity	60.5
Pedestrian Injuries	45.3
Physical Health Not Good	66.1
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	17.1
Current Smoker	52.6
No Leisure Time for Physical Activity	45.0
Climate Change Exposures	—
Wildfire Risk	73.6
SLR Inundation Area	0.0
Children	33.8
Elderly	92.4
English Speaking	61.8
Foreign-born	71.1
Outdoor Workers	75.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	63.1
Traffic Density	67.4
Traffic Access	55.4
Other Indices	—
Hardship	46.0

Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	57.0
Healthy Places Index Score for Project Location (b)	50.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Schedule estimated from AMP task list and Pavement Maintenance Management Plan.
Construction: Off-Road Equipment	Equipment estimated based on the ALP and modeling for Near- and Mid-Term components.
Construction: Trips and VMT	Pavement haul trips are 1 way (2 trips per load) and assume 16 CY per tandem trailer load. Import and export is not phased. Building Construction crew size estimate at 10 per day (20 worker trips/day), vendor trips estimated at 2 per day.

Construction: Architectural Coatings	Marking assumed to be 10% of new or repaired pavement.
Construction: Dust From Material Movement	Grading assumes 18 inches soil removed and replaced with 18 inches of uncompressed aggregate.
Operations: Vehicle Data	Project net increased trip generation over existing trips (231 ADT) per project Transportation Impact Analysis and Local Mobility Analysis (CR Associates, June 20, 2024).
Operations: Architectural Coatings	—
Operations: Energy Use	No natural gas use and Non-Title 24 electricity use only for hangars.
Operations: Water and Waste Water	No water use for hangars.
Operations: Solid Waste	Minimal solid waste generation for hangars, assumed at 0.1 ton per year per 1,000 SF.

SDM AMP Operation Mitigated R2 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SDM AMP Operation Mitigated R2
Operational Year	2031
Lead Agency	City of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	21.8
Location	32.572419898935365, -116.9806118044164
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6601
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.25

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	154	1000sqft	3.54	154,000	0.00	—	—	—

General Office Building	14.0	1000sqft	0.32	14,000	0.00	—	—	—
General Light Industry	10.0	1000sqft	0.23	10,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.26	0.83	15.4	0.02	0.04	1.97	2.01	0.03	0.50	0.53	2,796
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.97	0.83	7.14	0.02	0.02	1.97	2.00	0.02	0.50	0.52	2,668
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.45	0.74	9.90	0.02	0.03	1.65	1.68	0.02	0.42	0.44	2,389
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.99	0.14	1.81	< 0.005	< 0.005	0.30	0.31	< 0.005	0.08	0.08	395

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.94	0.64	7.56	0.02	0.01	1.97	1.99	0.01	0.50	0.51	2,118
Area	5.31	0.07	7.74	< 0.005	0.01	—	0.01	0.01	—	0.01	31.9
Energy	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	511
Water	—	—	—	—	—	—	—	—	—	—	54.8
Waste	—	—	—	—	—	—	—	—	—	—	77.0
Refrig.	—	—	—	—	—	—	—	—	—	—	2.64
Total	6.26	0.83	15.4	0.02	0.04	1.97	2.01	0.03	0.50	0.53	2,796
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.93	0.71	7.04	0.02	0.01	1.97	1.99	0.01	0.50	0.51	2,022
Area	4.04	—	—	—	—	—	—	—	—	—	—
Energy	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	511
Water	—	—	—	—	—	—	—	—	—	—	54.8
Waste	—	—	—	—	—	—	—	—	—	—	77.0
Refrig.	—	—	—	—	—	—	—	—	—	—	2.64
Total	4.97	0.83	7.14	0.02	0.02	1.97	2.00	0.02	0.50	0.52	2,668
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.78	0.59	5.98	0.02	0.01	1.65	1.66	0.01	0.42	0.43	1,727
Area	4.66	0.03	3.82	< 0.005	0.01	—	0.01	0.01	—	0.01	15.8
Energy	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	511
Water	—	—	—	—	—	—	—	—	—	—	54.8
Waste	—	—	—	—	—	—	—	—	—	—	77.0
Refrig.	—	—	—	—	—	—	—	—	—	—	2.64
Total	5.45	0.74	9.90	0.02	0.03	1.65	1.68	0.02	0.42	0.44	2,389
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.14	0.11	1.09	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	286
Area	0.85	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.61
Energy	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	84.7

Water	—	—	—	—	—	—	—	—	—	—	9.08
Waste	—	—	—	—	—	—	—	—	—	—	12.7
Refrig.	—	—	—	—	—	—	—	—	—	—	0.44
Total	0.99	0.14	1.81	< 0.005	< 0.005	0.30	0.31	< 0.005	0.08	0.08	395

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.77	0.53	6.21	0.02	0.01	1.62	1.63	0.01	0.41	0.42	1,741
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Light Industry	0.17	0.11	1.35	< 0.005	< 0.005	0.35	0.35	< 0.005	0.09	0.09	377
Total	0.94	0.64	7.56	0.02	0.01	1.97	1.99	0.01	0.50	0.51	2,118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.76	0.58	5.79	0.02	0.01	1.62	1.63	0.01	0.41	0.42	1,663
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Light Industry	0.17	0.13	1.25	< 0.005	< 0.005	0.35	0.35	< 0.005	0.09	0.09	360

Total	0.93	0.71	7.04	0.02	0.01	1.97	1.99	0.01	0.50	0.51	2,022
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.14	0.10	1.06	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	277
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Light Industry	< 0.005	< 0.005	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	8.58
Total	0.14	0.11	1.09	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	286

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	105
General Office Building	—	—	—	—	—	—	—	—	—	—	171
General Light Industry	—	—	—	—	—	—	—	—	—	—	91.2
Total	—	—	—	—	—	—	—	—	—	—	367
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	105

General Office Building	—	—	—	—	—	—	—	—	—	—	171
General Light Industry	—	—	—	—	—	—	—	—	—	—	91.2
Total	—	—	—	—	—	—	—	—	—	—	367
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	17.4
General Office Building	—	—	—	—	—	—	—	—	—	—	28.3
General Light Industry	—	—	—	—	—	—	—	—	—	—	15.1
Total	—	—	—	—	—	—	—	—	—	—	60.8

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	144
General Light Industry	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	144
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	144
General Light Industry	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	144
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.9
General Light Industry	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	23.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.81	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.23	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.27	0.07	7.74	< 0.005	0.01	—	0.01	0.01	—	0.01	31.9
Total	5.31	0.07	7.74	< 0.005	0.01	—	0.01	0.01	—	0.01	31.9

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.81	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.23	—	—	—	—	—	—	—	—	—	—
Total	4.04	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.70	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.61
Total	0.85	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.61

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	28.4
General Light Industry	—	—	—	—	—	—	—	—	—	—	26.4
Total	—	—	—	—	—	—	—	—	—	—	54.8

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	28.4
General Light Industry	—	—	—	—	—	—	—	—	—	—	26.4
Total	—	—	—	—	—	—	—	—	—	—	54.8
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	4.71
General Light Industry	—	—	—	—	—	—	—	—	—	—	4.37
Total	—	—	—	—	—	—	—	—	—	—	9.08

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	29.0
General Office Building	—	—	—	—	—	—	—	—	—	—	24.6

General Light Industry	—	—	—	—	—	—	—	—	—	—	23.4
Total	—	—	—	—	—	—	—	—	—	—	77.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	29.0
General Office Building	—	—	—	—	—	—	—	—	—	—	24.6
General Light Industry	—	—	—	—	—	—	—	—	—	—	23.4
Total	—	—	—	—	—	—	—	—	—	—	77.0
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	4.81
General Office Building	—	—	—	—	—	—	—	—	—	—	4.06
General Light Industry	—	—	—	—	—	—	—	—	—	—	3.87
Total	—	—	—	—	—	—	—	—	—	—	12.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.03

General Light Industry	—	—	—	—	—	—	—	—	—	—	2.60
Total	—	—	—	—	—	—	—	—	—	—	2.64
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.03
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.60
Total	—	—	—	—	—	—	—	—	—	—	2.64
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.01
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.43
Total	—	—	—	—	—	—	—	—	—	—	0.44

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	231	231	231	84,315	2,299	2,299	2,299	839,216
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Light Industry	0.00	0.00	50.0	2,607	0.00	0.00	498	25,950

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	267,000	89,000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	223,482	170	0.0330	0.0040	0.00
General Office Building	363,682	170	0.0330	0.0040	448,322
General Light Industry	194,001	170	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	0.00	0.00
General Office Building	2,488,272	0.00
General Light Industry	2,312,500	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	15.4	—
General Office Building	13.0	—
General Light Industry	12.4	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.36	annual days of extreme heat
Extreme Precipitation	2.30	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	9.20	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2

Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.3
AQ-PM	91.2
AQ-DPM	40.2
Drinking Water	23.5
Lead Risk Housing	23.3
Pesticides	0.00
Toxic Releases	83.2
Traffic	35.6
Effect Indicators	—
CleanUp Sites	58.2
Groundwater	78.9

Haz Waste Facilities/Generators	87.7
Impaired Water Bodies	23.9
Solid Waste	98.0
Sensitive Population	—
Asthma	44.2
Cardio-vascular	32.2
Low Birth Weights	63.3
Socioeconomic Factor Indicators	—
Education	63.4
Housing	28.7
Linguistic	59.0
Poverty	28.4
Unemployment	43.1

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	75.43949698
Employed	5.838573078
Median HI	79.10945721
Education	—
Bachelor's or higher	36.87925061
High school enrollment	100
Preschool enrollment	28.78224047
Transportation	—
Auto Access	98.98626973

Active commuting	31.93891954
Social	—
2-parent households	63.27473374
Voting	50.45553702
Neighborhood	—
Alcohol availability	88.24586167
Park access	62.71012447
Retail density	19.73566021
Supermarket access	30.0012832
Tree canopy	7.609393045
Housing	—
Homeownership	50.03208007
Housing habitability	62.77428461
Low-inc homeowner severe housing cost burden	69.56242782
Low-inc renter severe housing cost burden	76.63287566
Uncrowded housing	34.15886052
Health Outcomes	—
Insured adults	38.36776594
Arthritis	94.2
Asthma ER Admissions	45.5
High Blood Pressure	96.6
Cancer (excluding skin)	93.3
Asthma	72.9
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	67.4
Life Expectancy at Birth	58.2

Cognitively Disabled	92.5
Physically Disabled	92.6
Heart Attack ER Admissions	59.6
Mental Health Not Good	49.5
Chronic Kidney Disease	85.5
Obesity	60.5
Pedestrian Injuries	45.3
Physical Health Not Good	66.1
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	17.1
Current Smoker	52.6
No Leisure Time for Physical Activity	45.0
Climate Change Exposures	—
Wildfire Risk	73.6
SLR Inundation Area	0.0
Children	33.8
Elderly	92.4
English Speaking	61.8
Foreign-born	71.1
Outdoor Workers	75.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	63.1
Traffic Density	67.4
Traffic Access	55.4
Other Indices	—
Hardship	46.0

Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	57.0
Healthy Places Index Score for Project Location (b)	50.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Schedule estimated from AMP task list and Pavement Maintenance Management Plan.
Construction: Off-Road Equipment	Equipment estimated based on the ALP and modeling for Near- and Mid-Term components.
Construction: Trips and VMT	Pavement haul trips are 1 way (2 trips per load) and assume 16 CY per tandem trailer load. Import and export is not phased. Building Construction crew size estimate at 10 per day (20 worker trips/day), vendor trips estimated at 2 per day.

Construction: Architectural Coatings	Marking assumed to be 10% of new or repaired pavement.
Construction: Dust From Material Movement	Grading assumes 18 inches soil removed and replaced with 18 inches of uncompressed aggregate.
Operations: Vehicle Data	Project net increased trip generation over existing trips (231 ADT) per project Transportation Impact Analysis and Local Mobility Analysis (CR Associates, June 20, 2024).
Operations: Energy Use	No natural gas use and Non-Title 24 electricity use only for hangars. Per mitigation measure GHG-01, natural gas use for the terminal building and maintenance building converted to the equivalent electricity use (1 kBTU = 0.293 kWh) and added to the default electricity use.
Operations: Water and Waste Water	No water use for hangars.
Operations: Solid Waste	Minimal solid waste generation for hangars, assumed at 0.1 ton per year per 1,000 SF.