Appendix E

Greenhouse Gas Emissions Technical Report

HELIX Environmental Planning

Santee Town Center Specific Plan Update

Greenhouse Gas Emissions Technical Report

July 2024 | 01427.00004.001

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Acronyms and Abbreviations

AB	Assembly Bill
AEN	Arts and Entertainment Neighborhood
ALUCP	Airport Land Use Compatibility Plan
APN	Assessor's Parcel Number
AR4	United Nations Intergovernmental Panel on Climate Change Fourth Assessment Report
AR5	United Nations Intergovernmental Panel on Climate Change Fifth Assessment Report
CAA	Clean Air Act (Federal)
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emission Estimator Model
CALGreen	CCR Title 24 Part 11, California Green Building Standards code
CalRecycle	California Department of Resources Recycling and Recovery
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBSC	California Building Standards Commission
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFC	chlorofluorocarbons
CH_4	methane
City	City of Santee
CNRA	California Natural Resources Agency
CO_2	carbon dioxide
CO_2e	CO_2-equivalent
EO	Executive Order
EU-27	European Union
EV	electric vehicle
°F	degrees Fahrenheit
GHG	greenhouse gases
GWP	Global Warming Potential
HAP	Housing Acceleration Program
HCD	California Department of Housing and Community Development
HE	Housing Element
HFCs	hydrofluorocarbons
IPCC	United Nations Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard

Acronyms and Abbreviations (cont.)

MMT	million metric tons
MPO	Metropolitan Planning Organization
MT	metric ton
N_2O	nitrous oxide
NASA	National Aeronautics and Space Administration
NHTSA	National Highway Traffic Safety Administration
PFCs	perfluorocarbons
ppm	parts per million
RHNA	Regional Housing Needs Allocation
RPS	Renewable Portfolio Standard
RTP	regional transportation plan
SANDAG	San Diego Association of Governments
SAR	United Nations Intergovernmental Panel on Climate Change Second Assessment Report
SARA	Solar Access Roof Area
SB	Senate Bill
SCS	Sustainable Communities Strategy
SDAPCD	San Diego County Air Pollution Control District
SDG&E	San Diego Gas and Electric
SF_6	sulfur hexafluoride
SMAQMD	Sacramento Metropolitan Air Quality Management District
SR	State Route
SWRCB	State Water Resources Control Board
TCSP	Town Center Specific Plan
UNFCCC	United Nations Framework Convention on Climate Change
USEPA	U.S. Environmental Protection Agency

EXECUTIVE SUMMARY

This report presents an assessment of potential greenhouse gas (GHG) impacts associated with the City of Santee (City) Town Center Specific Plan (TCSP) Amendment Project (project). The report evaluates the potential for GHG emission impacts during the construction and operation of the project. The project proposes updates to the existing TCSP and to the Santee Arts and Entertainment Neighborhood (AEN). It also proposes conceptual planning and objective design standards for four large strategic Housing Elements (HE) within the TCSP area. The HE sites include Properties 16A, 16B, 20A, and 20B as delineated in the Sixth Cycle Housing Element EIR. The overall TCSP is approximately 651.42 acres, of which 341.72 acres are within the AEN, 11.04 acres are within HE Property 16A, 8.65 acres are within HE Property 16B, 7.76 acres are within Property 20A, and 9.92 acres are within Property 20B. The entire TCSP is located in the City of Santee, bordered by North Magnolia Avenue to the east, Mast Boulevard to the north, and Mission Gorge Road to the south. The western border of the TCSP runs through the San Diego River approximately 0.43 mile west of Cuyamaca Street and 0.27 mile east of Carlton Hills Boulevard.

The project would result in a comprehensive update to the existing TCSP involving expanding the TCSP area by 42 acres, updating the boundaries of the TCSP districts to create five neighborhoods within the TCSP, and identifying potential future residential and non-residential development potential within the TCSP area. Future development allowed throughout the TCSP area would not be increased by the project; however, development regulations and criteria in the proposed TCSP would replace the current TCSP. the project would not increase emissions that are not already accounted for in the Sustainable Santee Plan.

The project includes several transportation projects including adding new multi-use pathways and bike routes to existing roadways as well as identifying roadway connections throughout the TCSP area and AEN consistent with Sustainable Santee Plan Goal 6, Measures 6.1 and 6.2, and Goal 8, Measure 8.1. The majority of the TCSP area, including the AEN, is located within a designated Transit Priority Area (TPA). By placing these uses within a TPA, the project would implement the Sustainable Santee Plan strategies by focusing projected future growth into mixed-use and multiple-use activity centers that are pedestrian- and bicycle-friendly and linked to transit. Increasing residential and commercial density in transit corridors and within a TPA would support the City in achieving the GHG emissions reduction targets of the Sustainable Santee Plan, and thus, TCSP area and AEN impacts associated with GHG emissions would be less than significant.

The Sustainable Santee Plan Project Consistency Checklist (Checklist) was completed for the development of HE sites 16A, 16B, 20A, and 20B. These sites are designated for residential land uses in the existing TCSP and zoned for residential development in the City's Housing Element. When compared to the existing zoning and land use designations, the project would not increase the development potential allowed at the four Housing Element sites. Therefore, under Step 1 of the Checklist, development of the HE sites would be consistent with the land use assumptions used in the Sustainable Santee Plan. Implementation of mitigation measures GHG-1 through GHG-5 related to energy efficiency, tree planting, electric vehicle charging, solid waste reduction, and clean energy, would be required to ensure the four HE sites would be consistent with the applicable strategies and actions for reducing GHG emissions included in Step 2 of the Checklist.

The development of the HE sites would be consistent with the Sustainable Santee Plan, a qualified GHG reduction plan consistent with California Environmental Quality Act (CEQA) guidelines Section 15183.5, with implementation of mitigation measures GHG-1 through GHG-5. Development projects consistent with an applicable local qualified GHG reduction plan are eligible for streamlined GHG analysis. Therefore, the project would not conflict with or obstruct the implementation of a GHG reduction plan or policy, the project would be consistent with statewide GHG reduction goals, and the project's GHG emissions would result in a less than significant impact with mitigation incorporated.

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report analyzes potential greenhouse gas (GHG) impacts associated with the City of Santee (City) Town Center Specific Plan (TCSP) Amendment Project (project) and includes an assessment of potential impacts associated with project construction and project operation. The project proposes to update the City of Santee General Plan, modify the Arts and Entertainment Neighborhood (AEN), and provide objective design standards and contextual designs for four strategic Housing Element (HE) sites within the TCSP. Analysis within this report was prepared to support impact analysis pursuant to the California Environmental Quality Act (CEQA; Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Section 15000 et seq. of the California Code of Regulations).

1.2 PROJECT LOCATION

The project area is located in the City of Santee, in the eastern portion of the County of San Diego, north of State Route (SR) 52 and west of SR 67 (Figure 1, *Regional Location*). The proposed project area extends across over 1,000 Assessor's Parcel Numbers (APNs), within the TCSP Area in the central portion of the City, bounded by Mission Gorge Road to the south, Mast Boulevard to the north, and Magnolia Avenue to the east (Figure 2, *Aerial Photograph*). Cuyamaca Street runs north-south through the western portion of the project area, forming segments of the western project boundary, and the San Diego River runs through the central northern portion of the project area (Figure 2). The topography of the project area is bisected by the San Diego River, which originates within the Santa Ysabel Open Space Preserve East and flows west and southwest and ultimately reaches the Pacific Ocean.

The overall project area consists of 651.42 acres, which includes the proposed AEN (341.72 acres) and four HE Properties: Lot 16A is 11.04 acres, Lot 16B is 8.65 acres, Lot 20A is 7.76 acres, and Lot 20B is 9.92 acres.

1.3 PROJECT DESCRIPTION

The proposed project consists of a comprehensive update to the TCSP to modify or establish new land use designations, land uses, development standards, and conceptual guidelines that would apply to future development within the TCSP area. As part of this effort, the City would also make modifications to the AEN and provide objective design standards and conceptual designs for strategic HE sites within the TCSP. A more detailed description of each of the proposed project components is described below.

1.3.1 Town Center Specific Plan

Amendments to the TCSP would incorporate relevant updates to the plan's vision, land use permissions, and development standards. As part of the updates, new text and graphics would be developed and organized into a series of chapters, such as Introduction, Land Use and Urban Form, Mobility and Beautification, Infrastructure and Public Facilities, Implementation, and Administration. Text and concepts that remain relevant to the vision and goals of the TCSP would be maintained and incorporated into the updated TCSP document format and structure.

The amended TCSP would incorporate updated allowable and permitted land uses and development standards tailored to the project area. The updated TCSP would include graphics that illustrate the planned land use concepts and the plan's vision at key sites. As part of the TCSP, the circulation network exhibits of the plan would be updated, including the bicycle, pedestrian, and transit network maps, and street cross sections. The TCSP would include concepts for key improvements in the public right-of-way to enhance circulation within the project area. The TCSP would incorporate concepts to illustrate wayfinding and branding signage at important locations within the public right-of-way and public trails, such as signs tailored for pedestrian, bicyclists, and transit users, signs designed to direct vehicular traffic and refer to parking areas, as well as iconic gateway structures that enhance the identity and sense of place in the project area.

The TCSP would also outline fundamental elements for the administration of the plan, such as the process for future specific plan amendments, and the development review, permit, and approval process for projects within the TCSP area. Additionally, the TCSP would address the relationship between the TCSP document and other planning documents, as well as consistency with the General Plan. The TCSP would also include a section describing how to use the document and guide reviewers and applicants through the path for review and approval of proposals within the TCSP area.

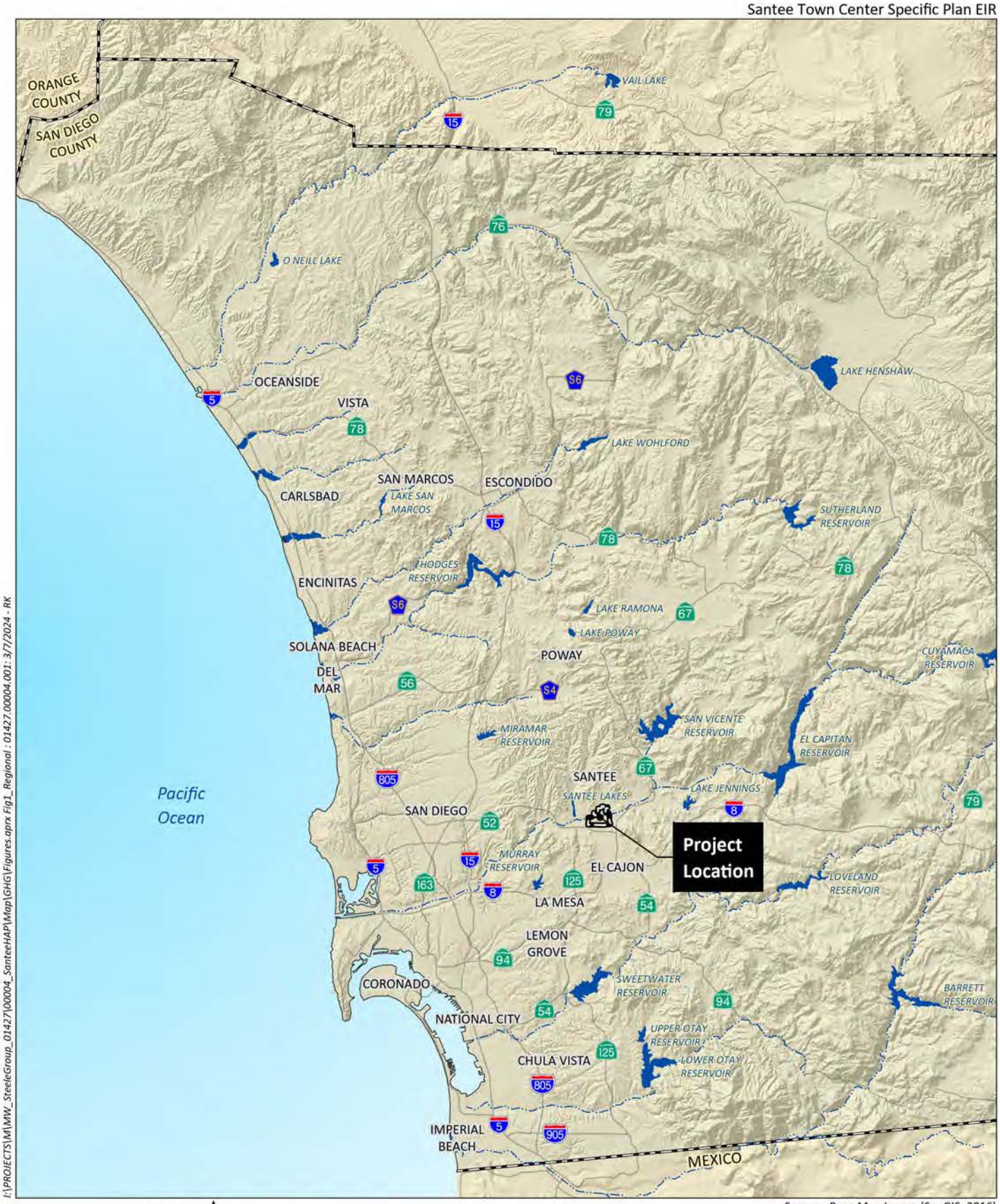
Finally, the TCSP amendment would also incorporate an adjustment to the Specific Plan boundaries to include additional sites such as the shopping center located at the northwest corner of Mission Gorge Road and Cuyamaca Road, and the shopping center located west of Cuyamaca Road, between Mission Creek Drive and River Park Drive. As a result of the boundary adjustment, the TCSP area would expand from 609.70 to 651.42 acres,[1] increasing by 41.72 acres.

1.3.2 Arts and Entertainment Neighborhood

The TCSP would include an amendment to the AEN. The City adopted the AEN in 2019 with the intent of encouraging the development of an Arts & Entertainment Neighborhood within a significant portion of the TCSP. The update would incorporate the vision, guidelines, and development standards specific to the AEN as a subsection of the Land Use and Urban Form chapter of the TCSP. This section of the TCSP would also incorporate tailored land use designations that support uses related to art and culture, entertainment, commercial recreation, visitor, and civic uses.

The update to the vision and development standards for the AEN would aim to enhance connections to the San Diego River, strengthen the sense of place by creating an attraction for residents and visitors to gather, and public space concepts that would incorporate streetscape concepts with features such as landscaping, water elements, shade, lighting, and wayfinding. The concepts would also aim to create a central destination within the TCSP area, with a strong emphasis on connecting Arts & Entertainment to the natural environment.

[1] The original Town Center Specific Plan published in 1986 cited the TCSP area as 706 acres, however amendments to the plan have reduced the Specific Plan total acreage. Additionally, the original acreage was based on an estimate; due to improved geographic information software over time, the number of reported acres in the TCSP has changed as the accuracy of the data has increased.



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0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

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Regional Location

Figure 1

- Proposed Santee Town Center Specific Plan
- Proposed Arts and Entertainment Neighborhood
- Site 16A
- Site 16B
- Site 20A
- Site 20B

0 850 Feet

Source: Aerial (SanGIS, 2023)

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Aerial Photograph

Figure 2

Additionally, the update would incorporate an adjustment to the AEN boundaries to include additional sites such as the open space designated areas along the San Diego River, areas north of the San Diego River, south of Riverwalk Drive, west of River Park Drive, east of Cuyamaca Street, and west of Magnolia Avenue. As a result of the boundary adjustments, the AEN area would expand from 172.49[2] to 341.72 acres, increasing by a total of 169.23 acres.

1.3.3 Four Strategic Housing Element Sites (2021-2029 Sixth Cycle)

The City Council adopted the Housing Element (2021-2029 Sixth Cycle) on May 11, 2022. The HE was prepared in compliance with State housing law as determined by the California Department of Housing and Community Development (HCD) on December 6, 2022. The HE included a Sites Inventory map and table (Figure C-1 and Table C-1 of the HE), that included a series of sites that are currently undeveloped or underutilized. The identified sites provide an opportunity for the City to meet its Regional Housing Needs Allocation (RHNA) housing production goals. Four strategic undeveloped housing sites identified in the Sites Inventory are located within the boundary of the TCSP and the AEN. The sites are identified as 16A, 16B, 20A, and 20B. Sites 16A and 16B are undeveloped sites located just north of Mission Gorge Road and east of Riverview Parkway in the Santee Town Center. The area surrounding the sites is primarily developed with Santee Trolley Square immediately west of the site, the Las Colinas Detention Facility to the east, and open space associated with the San Diego River to the north. A portion of Site 16A is located within the Airport Safety Zone 4 as designated in the Gillespie Field Airport Land Use Compatibility Plan (ALUCP). Sites 20A and 20B are undeveloped sites located just west of Magnolia Avenue, south of Riverview Parkway, and east of Edgemoor Drive. Sites 20A and 20B surround the Historic Edgemoor Polo or Dairy Barn. To the west of Site 20A is the Las Colinas Detention Facility, to the east is a gated 55+ manufactured home community. Site 20B is bordered by single-family residential homes to the south, multifamily residential to the east, and Las Colinas and Riverview Office Park to the west. A portion of the site is located within the Gillespie Field ALUCP Airport Safety Zone 4. The sites are proposed to be developed with residential uses.

The HE Implementation Program identified specific sites that would require rezoning to allow for residential uses, and/or to allow for the estimated housing capacity included in the HE. The HE proposed zoning changes for sites 16A, 16B, 20A, and 20B. As part of the realization of the Housing Element Implementation Program, the City analyzed and approved the re-zone of the four above-mentioned sites and adopted the rezoning on October 26, 2022. The zoning for sites 16A, 16B, 20A, and 20B as a result of the HE Implementation Program can be found in Table 1, *Housing Element Sites Zoning.*

Table 1
HOUSING ELEMENT SITES ZONING

Site	Size (acres)	Current Zoning	Current Density (dwelling units per acre)
16A	11.11	Residential (TC-R-30)	30 to 36
16B	8.61	Residential (TC-R-14)	14 to 22
20A	7.75	Residential (TC-R-22)	22 to 30
20B	10.00	Residential (TC-R-30)	30 to 36

[2] The 2019 Art and Entertainment Overlay District refers to 155 acres; however, current GIS data shows 172 acres for the same area.

To further advance the housing production in Santee, City staff applied for a Housing Acceleration Program (HAP) grant from the San Diego Association of Governments (SANDAG), which was awarded. The HAP grant provides funding for project-level analysis of HE sites 16A, 16B, 20A, and 20B. The amended TCSP will include graphics and data that illustrate site planning and development concepts for each of these sites based on the maximum allowable density allowed by zoning.

2.0 REGULATORY SETTING

2.1 CLIMATE CHANGE OVERVIEW

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting light in but preventing heat from escaping, thus warming the Earth's atmosphere. These gases allow solar radiation (sunlight) into the Earth's atmosphere but prevent radiative 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 the most recent ten-year period marking the warmest years on record since 1880 (National Aeronautics and Space Administration [NASA] 2024). The newest release in long-term warming trends announced 2023 ranked as the warmest year on record with an increase of 2.11 degrees Fahrenheit (°F) compared to the late 19th-century (1850-1900) preindustrial 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, as 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). Although water vapor is the most abundant and variable GHG in the atmosphere, it is not considered a pollutant; it maintains a climate necessary for life.

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 before 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 (approximately 280 ppm in 1750). As of January 2024, the CO_2 concentration was 423 ppm, a 51 percent increase since 1750 (National Oceanic and Atmospheric Administration 2024).

Methane. CH_4 is a gas and 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.

Fluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). CFCs 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 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 semiconductor 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, a gas with a GWP of 10 is 10 times more potent than CO_2 over 100 years. 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, the 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, and statewide and national GHG inventories have not yet updated their GWP values to the AR5 values. GHG emissions in this analysis are reported using the AR4 GWP values.

By applying the GWP ratios, 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 2, *Global Warming Potentials and Atmospheric Lifetimes*.

Table 2
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-134a	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 FEDERAL GREENHOUSE GAS REGULATIONS

2.3.1 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 2024a). 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 U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA).

On June 30, 2022, the U.S. Supreme Court decision published in *West Virginia v. U.S. Environmental Protection Agency* overturned the USEPA's Clean Power Plan rule which cited Section 111(d) of the CAA for authority to set limits on CO_2 emissions from existing coal- and natural-gas-fired power plants. The June 30, 2022 decision does not overturn the April 2, 2007 decision; however, it may limit the USEPA's authority to develop rules limiting GHG emissions without clear congressional authorization.

2.3.2 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 the 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 December 2021, USEPA issued a new rule formally adopting standards previously proposed in August 2021 for model years 2023 and 2024 and finalizing more stringent standards than previously proposed for model years 2025 and 2026. The rule assumes a 17 percent electric vehicle (EV) market penetration by 2026. Although this is a departure from the NHTSA CAFE standards, USEPA did coordinate with NHTSA during the development of the new standards. On April 12, 2023, USEPA announced new, more

ambitious proposed standards to further reduce harmful air pollutant emissions from light-duty and medium-duty vehicles starting with model year 2027. The proposal builds upon USEPA's final standards for federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026 and leverages advances in clean car technology to result in benefits to Americans ranging from reducing climate pollution to improving public health, to saving drivers money through reduced fuel and maintenance costs. The proposed standards would phase in over model years 2027 through 2032.

2.4 STATE GREENHOUSE GAS REGULATIONS

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, renewable energy and energy procurement, building energy, mobile sources, solid waste, water, and other state regulations and goals. The following text describes executive orders (EOs), legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

2.4.1 State Climate Change Targets

2.4.1.1 Executive Order S-3-05

On June 1, 2005, 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. EOs are not laws and can only provide the governor's direction to state agencies to act within their authority. Legislation is required to enact the goals of EO S-3-05 and establish a framework for statewide implementation. AB 32, described below, mandates the 2020 GHG emissions reduction goals of EO S-3-05. The 2050 GHG emissions reduction goal of EO S-3-05 has not been enacted by any legislation and remains only a goal of the EO.

2.4.1.2 Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599), 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. AB 32 enacts the goals of EO S-3-05.

2.4.1.3 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. The 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. Senate Bill (SB) 32, described below, mandates the 2030 GHG emission reduction goals of EO B-30-15.

2.4.1.4 Senate Bill 32

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.

2.4.1.5 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 almost complete transition away from fossil fuels.

2.4.1.6 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.

2.4.1.7 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 our society and economy to reduce emissions and reach our 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 making the case for using multiple tools to meet California's GHG emissions targets. The 2013 Scoping Plan assessed progress toward achieving the 2020 mandate and made the case for addressing short-lived climate pollutants. 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 short-lived climate

pollutants; 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).

2.4.2 Renewable Energy and Energy Procurement

2.4.2.1 Senate Bill 1078

SB 1078 (Sher) (September 2002) established the Renewable Portfolio Standard (RPS) program, which required an annual increase in renewable generation by the utilities equivalent to at least 1 percent of sales, with an aggregate goal of 20 percent by 2017. This goal was subsequently revised as described below.

2.4.2.2 Senate Bill 1368

SB 1368 (September 2006) required the California Energy Commission (CEC) to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission.

2.4.2.3 Assembly Bill 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting, to reduce electricity consumption 50 percent for indoor residential lighting and 25 percent for indoor commercial lighting.

2.4.2.4 Executive Order S-14-08

EO S-14-08 (November 2008) focused on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. This EO required that all retail suppliers of electricity in California serve 33 percent of their load with renewable energy by 2020. Furthermore, the EO directed state agencies to take appropriate actions to facilitate reaching this target. The California Natural Resources Agency (CNRA), through collaboration with the CEC and California Department of Fish and Wildlife (formerly the California Department of Fish and Game), was directed to lead this effort.

2.4.2.5 Executive Order S-21-09 and Senate Bill X1-2

EO S-21-09 (September 2009) directed CARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. CARB was further directed to work with the California Public Utilities Commission and CEC to ensure that the regulation builds upon the RPS program and was applicable to investor-owned utilities, publicly owned utilities, direct access providers, and community choice providers. Under this order, CARB was to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health and can be developed the most quickly in support of reliable, efficient, cost-effective electricity system operations. On September 23, 2010, CARB initially approved regulations to implement a Renewable Electricity Standard. However, this regulation was not finalized because of subsequent legislation (SB X1-2, Simitian, statutes of 2011) signed by Governor Brown in April 2011.

SB X1-2 expanded the RPS by establishing a renewable energy target of 20 percent of the total electricity sold to retail customers in California per year by December 31, 2013, and 33 percent by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation (30 megawatts or less), digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location.

SB X1-2 applies to all electricity retailers in the state including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must meet the renewable energy goals previously listed.

2.4.2.6 Senate Bill 350

SB 350 (October 2015, Clean Energy and Pollution Reduction Act) further expanded the RPS by establishing a goal of 50 percent of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 included the goal to double the energy efficiency savings in electricity and natural gas final end uses (e.g., heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the California Public Utilities Commission, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. Regarding mobile sources, as one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for the achievement of the state's 2030 and 2050 reduction targets (see California Public Utilities Code Section 740.12).

2.4.2.7 Senate Bill 100

SB 100 (2018) increased the standards set forth in SB 350 establishing that 44 percent of the total electricity sold to retail customers in California per year by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of the retail sales of electricity to California. This bill requires that the achievement of 100 percent zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

2.4.2.8 Senate Bill 1020

SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources:

- 90 percent by December 31, 2035;
- 95 percent by December 31, 2040; and
- 100 percent by December 31, 2045.

2.4.3 Building Energy

2.4.3.1 California Code of Regulations, Title 24, Part 6

California Code of Regulations (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 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 latest update to the Title 24 standards occurred in 2022 and went into effect on January 1, 2023. The Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. While all energy codes are moving toward a goal of net zero energy consumption buildings, California is aiming for the more aggressive target date of 2030 for commercial projects. Specifically, the Title 24 code's goal is for all new commercial construction, and 50 percent of commercial buildings retrofits, to achieve net zero energy consumption by 2030 (the state building target is 2025). To achieve incremental movement toward this goal, changes in the 2022 code are numerous and aggressive. For example, new buildings must comply with the new Solar Access Roof Area (SARA) requirements and all buildings required to have a photovoltaic system must also have a properly sized battery system. 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 a recipe or a checklist compliance approach (CEC 2022).

2.4.3.2 California Green Building Standards Code

The California Green Building Standards Code (CALGreen; CCR Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including industrial buildings) throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the CCR. The current 2022 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings went into effect 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.

2.4.4 Mobile Sources

2.4.4.1 Assembly Bill 1493 and Advanced Clean Cars

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. The amendments also prepared California to merge its rules with the federal CAFE rules for passenger vehicles (CARB 2024a).

In January 2012, CARB approved Advanced Clean Cars I, a new emissions-control program for model years 2017 through 2025 including low emissions vehicle and zero-emissions vehicle criteria. The Advanced Clean Cars II regulations were adopted in 2022, imposing the next level of low-emission and zero-emission vehicle standards for model years 2026 through 2035 that contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality targets.

By 2035 all new passenger cars, trucks, and SUVs sold in California will have zero emissions. The Advanced Clean Cars II regulations take the state's already growing zero-emission vehicle market and robust motor vehicle emission control rules and augment them to meet more aggressive tailpipe emissions standards and ramp up to 100 percent zero-emission vehicles.

2.4.4.2 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 the CARB to determine whether an 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 Court of Appeals reversed the District Court's opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB, therefore, is continuing to implement the LCFS statewide.

2.4.4.3 Senate Bill 375

SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPOs' Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy categorized as "transit priority projects" would receive incentives to streamline CEQA processing.

2.4.4.4 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.

2.4.5 Solid Waste

2.4.5.1 Assembly Bill 939

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

2.4.5.2 Assembly Bill 341

The state legislature enacted AB 341 (California Public Resource Code Section 42649.2), amending the Integrated Waste Management Act to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle conducted several general stakeholder workshops and several focused workshops and in August 2015 published a discussion document titled AB 341 Report to the Legislature, which identifies five priority strategies that CalRecycle believes would assist the state in reaching the 75 percent goal by 2020, legislative and regulatory recommendations, and an evaluation of program effectiveness (CalRecycle 2019).

2.4.5.3 Assembly Bill 1826

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape, and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

2.4.5.4 Senate Bill 1383

SB 1383 (Chapter 395, Statutes of 2016) establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. CalRecycle was granted the regulatory authority required to achieve the organic waste disposal

reduction targets and establish an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025 (CalRecycle 2019).

2.4.6 Water

2.4.6.1 Executive Order B-29-15

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

2.4.6.2 Executive Order B-37-16

Issued May 2016, EO B-37-16 directed the State Water Resources Control Board (SWRCB) to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply conditions across the state. The SWRCB also developed a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25 percent reduction called for in EO B-29-15. The SWRCB and Department of Water Resources were required to develop new, permanent water use targets that build upon the existing state law requirements that the state achieve 20 percent reduction in urban water usage by 2020. EO B-37-16 also specifies that the SWRCB permanently prohibits water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.

2.4.6.3 Executive Order N-10-21

In response to a state of emergency due to severe drought conditions, EO N-10-21 (July 2021) called on all Californians to voluntarily reduce their water use by 15 percent from their 2020 levels. Actions suggested in EO N-10-21 include reducing landscape irrigation, running dishwashers and washing machines only when full, finding and fixing leaks, installing water-efficient showerheads, taking shorter showers, using a shut-off nozzle on hoses, and taking cars to commercial car washes that use recycled water.

2.4.7 Other State Actions

2.4.7.1 Senate Bill 97

SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (Governor's Office of Planning and Research 2008). The advisory further

recommended that the lead agency determine the significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4(a)). The Guidelines require a lead agency to consider the extent to which the Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)). The Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its thresholds of significance or those developed by other agencies or experts. The CNRA also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009).

With respect to GHG emissions, the CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance-based standards" (14 CCR 15064.4(a)). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

2.4.7.2 Executive Order S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009, and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014. To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: Agriculture, Biodiversity and Habitat, Emergency Management, Energy, Forestry, Ocean and Coastal Ecosystems and Resources, Public Health, Transportation, and Water. Issuance of the Safeguarding California: Implementation Action Plans followed in March 2016. In January 2018, the CNRA released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that state government should take to build climate change resiliency.

2.5 LOCAL GREENHOUSE GAS PLANS

2.5.1 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).

2.5.2 Santee General Plan

The City's General Plan includes various goals, objectives, and policies related to GHG emissions, including the following:

Land Use Element Objective 3.0: Provide and maintain the highest level of service possible for all community public services and facilities.

> **Policy 3.2**: The City should encourage the development and use of recycled water for appropriate land uses to encourage the conservation of, and reduce demand for, potable water.
>
> **Policy 4.3**: The City should locate new neighborhood commercial uses along major roadways in consolidated centers that utilize common access and parking for commercial uses, discourage the introduction of strip commercial uses and require adequate pedestrian links to residential areas.

Mobility Element: The Mobility Element includes policies that enhance smart growth development, improve traffic flow, increase the use of public transit, encourage bicycling and walking, and increase use of alternative modes of travel, which would help to reduce GHG emissions from on-road transportation.

2.5.3 Sustainable Santee Plan

The City adopted the Sustainable Santee Plan on January 8, 2020, which, as a qualified GHG emissions reduction plan in accordance with CEQA Guidelines Section 15183.5, provides guidance for the reduction of GHG emissions within the City. The Sustainable Santee Plan provides policy direction and identifies actions the City and community will take to reduce GHG emissions consistent with State goals and targets including achieving 1990 emission levels by 2020 (which the state has achieved); 40 percent below 1990 levels by 2030; and 80 percent below 1990 levels by 2050. The Sustainable Santee Plan would also work to achieve a per-capita GHG emission level by 2030 in conformance with SB 32 and the CARB Scoping Plan.

3.0 EXISTING CONDITIONS

In an effort to evaluate and reduce the potential adverse impact of global climate change, international, state, and local organizations have conducted GHG inventories to estimate their levels of GHG emissions and removals. The following summarizes the results of these global, national, state, and local GHG inventories.

3.1 WORLDWIDE AND NATIONAL GREENHOUSE GAS INVENTORY

In 2022, total anthropogenic GHG emissions worldwide were estimated at 49,400 million metric tons (MMT) of CO_2e emissions (Climate Watch 2024). The five largest emitting countries and the European Union (EU-27), together account for about 63 percent of total global GHG emissions: China (29 percent), the United States (13 percent), the European Union (about 7 percent), India (7 percent), the Russian Federation (4.1 percent) and Japan (2.4 percent). These countries also have the highest CO_2 emission levels (Climate Watch 2024).

Per USEPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2022, total United States GHG emissions were approximately 6,341 MMT CO_2e in 2022 (USEPA 2024b). The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 79.8 percent of total GHG emissions (5,057 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil fuel combustion, which accounted for approximately 92.7 percent of CO_2 emissions in 2022 (4,690 MMT CO_2e). Relative to 1990, gross United States GHG emissions in 2022 were lower by 3.1 percent, down from a high of 15.2 percent above 1990 levels in 2007. Gross emissions increased from 2021 to 2022 by 0.3 percent (16.4 MMT CO_2e). Net emissions (i.e., including sinks) were 5,487 MMT CO_2e in 2022. Overall, net emissions increased by 1.3 percent from 2021 to 2022 and decreased by 16.6 percent from 2005 levels. Between 2021 and 2022, the increase in total greenhouse gas emissions was driven largely by an increase in CO_2 emissions from fossil fuel combustion across most end-use sectors due in part to increased energy use from the continued rebound of economic activity after the height of the COVID-19 pandemic. (USEPA 2024b).

3.2 STATE GREENHOUSE GAS INVENTORY

CARB performed statewide inventories for the years 2000 to 2020, as shown in Table 3, *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 3
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR

Sector	Emissions (MMT CO_2e)			
	1990	2000	2010	2020
Agriculture and Forestry	18.9 (4%)	30.8 (7%)	33.6 (8%)	31.6 (8%)
Commercial and Residential	44.1 (10%)	44.2 (10%)	46.0 (10%)	38.7 (11%)
Electricity Generation	110.5 (26%)	104.7 (23%)	90.3 (20%)	59.5 (16%)
Industrial	105.3 (24%)	93.0 (20%)	87.8 (20%)	73.3 (20%)
Transportation	150.6 (35%)	175.7 (38%)	162.9 (37%)	135.8 (37%)
Unspecified Remaining	1.3 (<1%)	13.4 (3%)	21.6 (5%)	30.2 (8%)
Total	**430.7**	**461.8**	**442.2**	**369.1**

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

As shown in Table 3, statewide GHG source emissions totaled 430.7 MMT CO_2e in 1990, 461.8 MMT CO_2e in 2000, 442.2 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).

3.3 LOCAL GREENHOUSE GAS INVENTORY

As part of its Sustainable Santee Plan, the City compiled a GHG inventory. The inventory is presented in Table 4, *2013 City of Santee Greenhouse Gas Inventory*. As shown in Table 4, the on-road transportation sector contributed the most to GHG emissions in the City in 2013.

Table 4
2013 CITY OF SANTEE GREENHOUSE GAS INVENTORY

Sector	Emissions (MT CO_2e)
On-Road Transportation	242,499 (60%)
Residential Energy	78,651 (20%)
Commercial Energy	48,025 (12%)
Solid Waste	11,151 (3%)
Water	6,578 (2%)
Off-Road Sources	14,699 (4%)
Wastewater	971 (<1%)
Total	**402,574**

Source: City 2019
MT = metric tons; CO_2e = carbon dioxide equivalent

4.0 METHODOLOGY AND SIGNIFICANCE CRITERIA

4.1 GREENHOUSE GAS EMISSIONS

GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod), version 2022.1. CalEEMod is a computer model used to estimate 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 pollution control districts (CAPCOA 2022).

In brief, CalEEMod is a computer model that estimates criteria air pollutant and GHG emissions from mobile (i.e., vehicular) sources, area sources (fireplaces, wood stoves, 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, solid waste disposal, and refrigerant leaks. Emissions are estimated based on land use information input to the model by the user. 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 adjusted as described below. The CalEEMod output files are included in Appendix A of this report.

4.1.1 Construction Emissions

The quantity, duration, and intensity of construction activity influence the amount of construction emissions and related emissions that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction activity is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. If construction is delayed or occurs over a longer period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

4.1.1.1 Housing Element Sites

Construction emissions for HE sites 16A, 16B, 20A, and 20B were estimated based on the timeline provided by the project applicant, which assumes construction would begin in January 2025 and last approximately 18 months. Construction activities would include site preparation, grading, building construction, architectural coatings, and paving. Construction is assumed to occur six days per week with equipment operating up to eight hours per day. Architectural coatings are assumed to occur concurrently with the last five months of building construction. The construction schedule assumed in the modeling is shown in Table 5, *Housing Element Sites Anticipated Construction Schedule.*

Table 5
HOUSING ELEMENT SITES ANTICIPATED CONSTRUCTION SCHEDULE

Construction Activity	Construction Period Start	Construction Period End	Number of Working Days
Site Preparation	1/1/2025	1/23/2025	20
Grading	1/24/2025	3/17/2025	45
Building Construction	3/18/2025	5/28/2026	375
Architectural Coatings	1/1/2026	7/8/2026	162
Paving	5/29/2026	7/8/2026	35

Construction would require the use of heavy off-road equipment. Construction equipment estimates are based on default values in CalEEMod, Version 2022.1. Table 6, *Housing Element Sites Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

Table 6
HOUSING ELEMENT SITES CONSTRUCTION EQUIPMENT ASSUMPTIONS

Equipment	Horsepower	Number	Hours/Day
Site Preparation			
Rubber Tired Dozers	367	3	8
Tractors/Loaders/Backhoes	84	4	8
Grading			
Excavators	36	2	8
Graders	148	1	8
Rubber Tired Dozers	367	1	8
Scrapers	426	2	8
Tractors/Loaders/Backhoes	84	2	8
Building Construction			
Cranes	367	2	4.4
Forklifts	82	4	7.5
Generator Sets	14	2	5
Tractors/Loaders/Backhoes	84	4	6.6
Welders	46	2	5
Architectural Coating			
Air Compressors	37	1	6
Paving			
Pavers	81	2	8
Paving Equipment	89	2	8
Rollers	36	2	8

Source: CalEEMod

Worker commute trips and vendor delivery trips were modeled based on CalEEMod defaults. Worker trips are anticipated to vary between 18 and 1,279 trips per day, depending on construction phase. The CalEEMod default worker, vendor and haul trip distances were used in the model.

4.1.1.2 Remaining Town Center Specific Plan Land Uses

Construction-related activities are temporary, short-term sources of emissions. Sources of construction-related emissions include construction equipment exhaust and construction-related trips by workers, delivery, and hauling trucks. The quantity of emissions generated by the construction of projects within the proposed TCSP would vary depending on the number of projects occurring simultaneously and the size of each project. Since the proposed TCSP is a land use plan that guides physical development through 2035, specific construction details such as the exact number and timing of all development projects are unknown. The intensity of construction activity associated with the proposed TCSP could be the same during each year. It is more likely, however, that some periods of construction (and associated emissions) would be more intense than other periods due to market conditions and population and housing demands.

While neither San Diego County Air Pollution Control District (SDAPCD) nor the City of Santee provides additional guidance on construction assumptions for plan-level analyses, some air districts such as the Sacramento Metropolitan Air Quality Management District (SMAQMD) suggest that lead agencies conservatively assume that construction-generated emissions associated with the build-out of a plan should be evaluated assuming 25 percent of the total land uses would be constructed in a single year (SMAQMD 2020). This conservative assumption was used to evaluate the potential construction-related

air quality impacts from projects that could occur under the proposed TCSP Amendment. The land uses modeled in the 25 percent scenario are listed in Table 7, *Land Use Profile – First Year of Construction*. Modeling relied upon CalEEMod default activities, fleet mixes, and vehicle trips based on land use type and size.

Table 7
LAND USE PROFILE – FIRST YEAR OF CONSTRUCTION

Lande Use	Acres	Building Size
Retail	132.89	592,258 square feet
Regional Shopping	8.81	24,625 square feet
Civic/Institutional	45.74	187,223 square feet
Office Commercial	24.76	240,206 square feet
Park	59.36	59.36 acres
Residential (TC-R-14)	42.31	793 dwelling units
Residential (TC-R-22)	23.58	867 dwelling units

Note: HE Sites excluded, as they are provided in the analysis described in Section 4.1.1.1.

Given that exhaust emissions from the construction equipment fleet are expected to decrease over time as stricter standards take effect, 25 percent of the construction emissions were conservatively modeled to occur in 2027, following delivery of the HE Sites. Additional details are available in Appendix A. As construction occurs in later years, advancements in engine technology, retrofits, and turnover in the equipment fleet are anticipated to result in lower levels of emissions.

4.1.2 Operational Emissions

Operational emissions were estimated using CalEEMod. Operational sources of emissions include area, energy, mobile (on-road vehicles), water and wastewater, solid waste, and refrigerants.

4.1.2.1 Area Source Emissions

Area sources typically include emissions from landscaping equipment, the use of consumer products, the reapplication of architectural coatings for maintenance, and hearths. Project emissions associated with area sources were estimated using the CalEEMod default values except for hearths, as the project would not include wood burning stoves or fireplaces, or natural gas fireplaces.

4.1.2.2 Energy Emissions

Development within the project would use electricity for lighting, heating, and cooling. Natural gas and electricity would be supplied by San Diego Gas and Electric (SDG&E). Direct emissions from the burning of natural gas typically results from furnaces, hot water heaters, and kitchen appliances. Electricity generation typically entails the off-site generation of electricity, such as through 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). CalEEMod conservatively assumes the use of natural gas appliances based on historical data while newer construction typically includes more electric appliances. Default natural gas and electricity demand quantities from CalEEMod were used in this analysis and the emissions factors for SDG&E provided in CalEEMod were applied to these energy demand values to calculate the resulting emissions.

4.1.2.3 Vehicular (Mobile) Sources

Operational emissions from mobile source emissions are associated with vehicle trip generation and trip length. Based on the project trip generation rate from the Local Transportation Study, the four strategic HE sites would generate 8,520 new average daily trips (ADT) while the remaining TCSP land uses would generate an additional 51,511 ADT (Intersecting Metrics 2024). Default vehicle speeds, trip purpose, and trip distances from CalEEMod were applied to these trips.

4.1.2.4 Water and Wastewater Sources

Water-related GHG emissions are from the energy use for the conveyance and treatment of water and wastewater. CalEEMod uses the Maximum Applied Water Allowance method established under the California Department of Water Resources' 2015 Model Water Efficient Landscape Ordinance and indoor residential water consumption based on per capita daily water use rates from the *Residential End Uses of Water* published by the Water Research Foundation to establish default water use (CAPCOA 2022). Modeling was conducted using these defaults.

4.1.2.5 Solid Waste Sources

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. Portions of these emissions are biogenic. CalEEMod methods for quantifying GHG emissions from solid waste are based on the IPCC method using the degradable organic content of waste. The default waste generation rate for by land use type was used in modeling.

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 were calculated using CalEEMod defaults.

4.2 GREENHOUSE GAS SIGNIFICANCE CRITERIA

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 concerning 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 to climate change. Therefore, the potential for a significant GHG impact is limited to cumulative impacts.

Thresholds used to evaluate potential GHG impacts are based on applicable criteria in the State's CEQA Guidelines Appendix G. A project would have a significant GHG 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 an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

As described in Section 2.5.2, the Sustainable Santee Plan is a qualified GHG reduction plan consistent with CEQA guidelines Section 15183.5. Development projects consistent with an applicable local qualified GHG reduction plan are eligible for streamlined GHG analysis. Development project within the City that are consistent with the Sustainable Santee Plan would be consistent with statewide GHG reduction goals for 2030 (per SB 32), thereby demonstrating progress towards the 2045 GHG reduction goal established by AB 1279 (City 2019).

5.0 IMPACT ANALYSIS

5.1 ISSUE 1: GREENHOUSE GAS EMISSIONS

The project would generate GHG emissions during construction and operation. CEQA Guidelines Section 15064.4(a) states that a lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. Therefore, GHG emissions are estimated using the methods described in Section 4.1, above, and are provided below for informational purposes.

5.1.1 Construction Emissions

Project construction GHG emissions were estimated using the CalEEMod model as described in Section 4.1.1 with emissions estimated separately for the four strategic HE sites and the rest of the TCSP. Project-specific input was based on project-specific information described in Sections 1.0 and 4.1.1 and default model settings to estimate reasonably conservative conditions. Additional details of construction activities, selection of construction equipment, and other input parameters, including CalEEMod data, are included in Appendix A.

Emissions of GHGs related to the construction of the project would be temporary. As shown in Table 8, *Construction Greenhouse Gas Emissions*, peak annual GHG emissions associated with the construction of the project are estimated at 3,130 MT CO_2e.

Table 8
CONSTRUCTION GREENHOUSE GAS EMISSIONS

Year/Activity	Emissions (MT CO_2e)
2025 Four Strategic HE Sites	2,090
2026 Four Strategic HE Sites	1,135
2027 Town Center Specific Plan – Year 1	3,130

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

5.1.2 Operation Emissions

Project operational GHG emissions were estimated using the CalEEMod model as described in Section 4.1.2 with emissions estimated separately for the four strategic HE sites and the rest of the TCSP. The calculated HE Site operational emissions for the first anticipated full year of operation (2027) and the TCSP for the horizon year (2035) are shown in Table 9, *Operational Greenhouse Gas Emissions*.

Table 9
OPERATIONAL GREENHOUSE GAS EMISSIONS

Emission Sources	MT CO_2e
Four Strategic HE Sites	
Vehicular (Mobile)	8,466
Area	18
Energy	909
Water/Wastewater	79
Solid Waste	342
Refrigerants	2
Total Annual HE Site Emissions[1]	**9,815**
Town Center Specific Plan	
Vehicular (Mobile)	52,808
Area	54
Energy	5,032
Water/Wastewater	449
Solid Waste	1,332
Refrigerants	5
Total Annual TCSP Emissions[1]	**59,680**

Source: CalEEMod (output data is provided in Appendix A)
[1] Totals may not sum due to rounding.
MT = metric tons; CO_2e = carbon dioxide equivalent

5.1.3 Greenhouse Gas Emissions Impact

The Sustainable Santee Plan, a qualified GHG emissions reduction plan in accordance with CEQA Guidelines Section 15183.5, provides policy direction and identifies actions the City and community will take to reduce GHG emissions consistent with State goals and targets including: achieving 1990 emission levels by 2020 (which the state has achieved); 40 percent below 1990 levels by 2030; and 80 percent below 1990 levels by 2050. The Sustainable Santee Plan would also work to achieve a per-capita GHG emission level by 2030 in conformance with SB 32 and the CARB Scoping Plan. Development projects within the City that are consistent with the Sustainable Santee Plan would be consistent with statewide GHG reduction goals for 2030 (per SB 32), thereby demonstrating progress towards the 2045 GHG reduction goal established by AB 1279 (City 2019). For the purposes of determining the significance of GHG emissions, the project is analyzed for consistency with the Sustainable Santee Plan.

5.1.3.1 Town Center Specific Plan and Arts and Entertainment Neighborhood

The project would result in a comprehensive update to the existing TCSP involving expanding the TCSP area by 42 acres, updating the boundaries of the TCSP districts to create five neighborhoods within the TCSP, and identifying potential future residential and non-residential development potential within the TCSP area. Future development allowed throughout the TCSP area would not be increased by the project; however, development regulations and criteria in the proposed TCSP would replace the current TCSP. As a result, the project would not increase the amount of vehicle traffic expected to be generated in the City. Similarly, the project would not increase the amount of traffic in the City and would not result in an increase in the average VMT per capita. As buildout of the project would not result in an increase in anticipated development or traffic generation over what would occur under buildout of the adopted zoning and land use designations, the project would not result in an increase in emissions that are not already accounted for in the Sustainable Santee Plan.

The Sustainable Santee Plan includes 10 goals across 5 categories. The proposed project consists of a comprehensive update to the TCSP to modify or establish new land use designations, land uses, development standards, and conceptual guidelines that would apply to future development within the TCSP area. The project is not proposing specific development that could be demonstrated as incorporating measures related to building space, energy use, or utilities; however, the project would not inhibit the City from implementing these measures or achieving these goals. The project includes several transportation projects which would be consistent with Goals 6 and 8 within the Transportation category, as detailed in Table 10, *Project Consistency with Sustainable Santee Plan Measures*.

Table 10
PROJECT CONSISTENCY WITH SUSTAINABLE SANTEE PLAN MEASURES

Measure	Project Compliance
Goal 6 – Reduction in VMT	
Measure 6.1 – Multimodal Infrastructure	The proposed TCSP includes multi-use paths and pedestrian connections. Multi-use pathways provide safe, convenient, and comfortable pedestrian access between the different land uses and neighborhoods and form the backbone of first mile and last mile connections between the transit center and proposed uses. Existing and planned multi-use pathways to be constructed are identified throughout the southern part of the TCSP, south of the San Diego River. One planned multi-use pathway, the River Bridge, is identified spanning the San Diego River along the east side of Cuyamaca Street.
Measure 6.1 – Bike Paths/Transit	The proposed TCSP updates the 1986 bicycle network to account for changes to existing and proposed development in the project area. The proposed TCSP specifies three types of bike facilities and their locations throughout the TCSP. The bicycle network would consist of the following types of facilities: Class I bike paths adjacent to but physically separated from motorists by a median; Class II bike lanes along a street or highway separated by striped lanes; and Class III bike routes, which are shared lanes for bikes and motorists indicated by road markings (i.e., sharrows).
Goal 8 – Traffic Flow	
Measure 8.1 – Traffic Flow Improvement Program	The TCSP identifies improvements along portions of existing Cuyamaca Street and Riverview Parkway, and identifies new roadways roadway connections including Riverview Parkway, Cottonwood Avenue, Main Street, and Park Center Drive. the proposed roadway connections along Riverview Parkway, Cottonwood Avenue, Main Street, and Park Center Drive would provide direct connections through the TCSP area and AEN, as well as onto major arterial roadways and would improve traffic congestion in the area.

Source: City 2019

The transportation projects identified in the TCSP meet the City's VMT Analysis Guidelines screening criteria of "closing gaps in the transportation network" and/or "adding new or enhanced bicycle or pedestrian facilities on existing streets" and are presumed not to increase vehicle travel. The transportation projects identified in the TCSP are intended to increase pedestrian and bicycle safety and connection within the TCSP area to aid in the reduction of VMT and mobile source emissions.

The majority of the TCSP area, including the AEN, is located within a designated Transit Priority Area (TPA). By placing these uses within a TPA, the project would implement the Sustainable Santee Plan strategies by focusing projected future growth into mixed-use and multiple-use activity centers that are pedestrian- and bicycle-friendly and linked to transit. Increasing residential and commercial density in

transit corridors and within a TPA would support the City in achieving the GHG emissions reduction targets of the Sustainable Santee Plan, and thus, impacts associated with GHG emissions would be less than significant.

5.1.3.2 Housing Element Sites

The Sustainable Santee Plan Project Consistency Checklist (Checklist) is intended to be a tool for development projects to demonstrate consistency with the Sustainable Santee Plan. The Checklist has been developed as part of the Sustainable Santee Plan implementation and monitoring process and supports the achievement of individual GHG reduction measures as well as the City's overall GHG reduction goals. Additionally, the Checklist supports the City's sustainability goals and policies that encourage sustainable development and aim to conserve and reduce the consumption of resources, such as energy and water, among others. Projects that meet the requirements of the Checklist are considered consistent with the Sustainable Santee Plan and would have a less than significant contribution to cumulative GHG impacts (i.e., the project's incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b).

The Checklist includes a two-step process to determine if a project would result in a GHG impact. Step 1 consists of an evaluation to determine the project's consistency with existing General Plan land use and zoning designations for the site. Step 2 consists of an evaluation of the project's design features and compliance with the Sustainable Santee Plan's GHG emission reduction measures.

A Checklist was completed for the development of HE sites 16A, 16B, 20A, and 20B (see Appendix B). These sites are designated as residential land uses in the existing TCSP and zoned for residential development in the City's Housing Element. When compared to the existing zoning and land use designations, the project would not increase the development potential allowed at the four Housing Element sites. Therefore, under Step 1 of the Checklist, the project is consistent with the land use assumptions used in the Sustainable Santee Plan.

Consistency with Step 2 of the Checklist would require the implementation of applicable strategies and actions for reducing GHG emissions. This includes strategies related to energy efficiency, tree planting, electric vehicle charging, solid waste reduction, and clean energy. Specifically, Checklist Step 2, measures 2.1 (Increase Energy Efficiency in New Residential Units), 5.1 (Shade Trees), 7.1 (Increase Use of Electric Vehicles), 9.1 (Reduce Waste at Landfills), and 10.1 (Increased Clean Energy Use) are applicable to the project; however, because there are no uniformly applicable development codes that would require these measures be implemented, the impact would be potentially significant.

5.1.4 Mitigation Framework

The following mitigation measures would be required to demonstrate consistency of the HE Sites with the Sustainable Santee Plan, and reduce impacts to less than significant:

GHG-1 **Increase Energy Efficiency in New Residential Units**. New residential construction shall meet or exceed California Green Building Standards Tier 2 Voluntary Measures, such as obtaining green building ratings including LEED, Build it Green, or Energy Star Certified building certification in scoring development and explain the measures implemented.

GHG-2 **Shade Trees.** The project shall utilize tree planting for shade and energy efficiency such as tree planting in parking lots and streetscapes.

GHG-3 **Increased Use of Electric Vehicles**. The project shall install electric vehicle chargers for 13 percent of total parking provided.

GHG-4 **Reducing Solid Waste Generation.** The project shall provide exterior recycling storage space in accordance with California Green Building Standards and the Santee Municipal Code.

GHG-5 **Increased Clean Energy Use.** The project shall install at least 1 kilowatt per unit of photovoltaic solar systems, unless the installation is infeasible due to poor solar resources established in a solar feasibility study prepared by a qualified consultant submitted with an applicant's formal project submittal to City.

5.1.5 Significance After Mitigation

With implementation of mitigation measures GHG-1 through GHG-5 the development of the four HE sites would be consistent with the Sustainable Santee Plan, and the project 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 ISSUE 2: CONFLICT WITH APPLICABLE PLANS ADOPTED FOR THE PURPOSE OF REDUCING GREENHOUSE GAS EMISSIONS

5.2.1 Impacts

There are numerous State plans, policies, and regulations adopted to reduce 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, which the State achieved. SB 32 and AB 1279 require further reductions of 40 percent below 1990 levels by 2030 and 85 percent below 1990 levels by 2045, respectively. Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the LCFS, and regulations requiring an increasing fraction 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 would not conflict with those plans and regulations.

The project must also be constructed in accordance with the energy-efficiency standards, water reduction goals, and other standards contained in the applicable Title 24 Part 6 Building Energy Efficiency Standards and Part 11 CALGreen Building Standards. As discussed in Issue 1, the project would be consistent with the Sustainable Santee Plan with the implementation of mitigation measures GHG-1 through GHG-5. The Sustainable Santee Plan was developed to ensure community-wide GHG emissions in Santee would meet the state's 2030 GHG reduction goal mandated by SB 32, thereby demonstrating progress towards achieving the 2045 reduction goal established by AB 1279. Therefore, because the project would be consistent with the Sustainable Santee Plan, as discussed in Section 5.1.3, the project would not conflict with state GHG reduction plans developed to achieve the goals, including the CARB Scoping Plan.

5.2.2 Significance of Impacts

Because there are no uniformly applicable development codes that would enforce the applicable Sustainable Santee Plan GHG reduction measures, development of the four HE sites may not be consistent with the plan and the impact would be potentially significant.

5.2.3 Mitigation Framework

Mitigation measures GHG-1 through GHG-5, described above, would ensure the project would be consistent with the Sustainable Santee Plan.

5.2.4 Significance After Mitigation

The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and the impact would be less than significant with mitigation incorporated.

6.0 LIST OF PREPARERS

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Appendix A

CalEEMod Output

Santee TCSP HE Sites Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Santee TCSP HE Sites
Construction Start Date	1/1/2025
Operational Year	2026
Lead Agency	City of Santee
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	7.60
Location	32.84193077423488, -116.9764861508951
County	San Diego
City	Santee
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6529
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.21

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

Apartments Mid Rise	988	Dwelling Unit	13.8	948,480	94,848	—	2,757	Sites 16A and 20B
Apartments Low Rise	303	Dwelling Unit	5.04	321,180	32,118	—	845	Site 20A
Condo/Townhouse	189	Dwelling Unit	5.57	200,340	20,034	—	527	Site 16B
Other Asphalt Surfaces	571	1000sqft	13.1	0.00	0.00	—	—	Paved area for all 4 site

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.																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.43	64.0	21.7	75.0	0.06	0.59	11.8	12.4	0.55	2.81	3.32	—	18,902	18,902	0.84	1.01	51.1	19,275
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.06	63.9	31.7	68.5	0.06	1.37	11.8	12.4	1.26	3.98	5.23	—	18,244	18,244	0.87	1.04	1.33	18,575
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.16	28.0	20.4	47.8	0.05	0.63	7.66	8.29	0.58	2.01	2.60	—	12,398	12,398	0.58	0.66	14.2	12,624
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.94	5.11	3.72	8.72	0.01	0.11	1.40	1.51	0.11	0.37	0.47	—	2,053	2,053	0.10	0.11	2.35	2,090

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	6.69	5.87	21.6	68.1	0.06	0.59	10.0	10.6	0.55	2.39	2.94	—	17,067	17,067	0.77	0.94	48.2	17,413
2026	7.43	64.0	21.7	75.0	0.06	0.55	11.8	12.4	0.51	2.81	3.32	—	18,902	18,902	0.84	1.01	51.1	19,275
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	6.62	5.79	31.7	62.0	0.06	1.37	10.0	10.6	1.26	3.98	5.23	—	16,506	16,506	0.81	0.96	1.25	16,813
2026	7.06	63.9	22.4	68.5	0.06	0.55	11.8	12.4	0.51	2.81	3.32	—	18,244	18,244	0.87	1.04	1.33	18,575
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	5.16	4.49	20.4	47.8	0.05	0.63	7.66	8.29	0.58	2.01	2.60	—	12,398	12,398	0.58	0.66	14.2	12,624
2026	2.62	28.0	8.59	25.9	0.02	0.22	4.28	4.50	0.21	1.02	1.22	—	6,732	6,732	0.32	0.37	7.98	6,858
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.94	0.82	3.72	8.72	0.01	0.11	1.40	1.51	0.11	0.37	0.47	—	2,053	2,053	0.10	0.11	2.35	2,090
2026	0.48	5.11	1.57	4.72	< 0.005	0.04	0.78	0.82	0.04	0.19	0.22	—	1,115	1,115	0.05	0.06	1.32	1,135

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.																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	44.1	74.8	25.9	305	0.54	0.75	44.5	45.2	0.71	11.3	12.0	689	58,024	58,713	72.7	2.38	185	61,424

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	35.5	66.7	27.2	211	0.51	0.71	44.5	45.2	0.68	11.3	12.0	689	55,488	56,177	72.9	2.50	15.1	58,760
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	39.0	69.9	27.3	252	0.52	0.73	44.3	45.0	0.70	11.2	11.9	689	55,947	56,636	72.8	2.48	85.9	59,282
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.12	12.8	4.99	46.0	0.09	0.13	8.08	8.21	0.13	2.05	2.18	114	9,263	9,377	12.1	0.41	14.2	9,815

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																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	35.8	33.1	21.3	220	0.51	0.40	44.5	44.9	0.37	11.3	11.7	—	52,308	52,308	2.59	2.06	175	53,163
Area	7.86	41.5	0.81	83.9	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	224	224	0.01	< 0.005	—	225
Energy	0.44	0.22	3.78	1.61	0.02	0.31	—	0.31	0.31	—	0.31	—	5,445	5,445	0.89	0.07	—	5,487
Water	—	—	—	—	—	—	—	—	—	—	—	99.6	45.5	145	10.3	0.25	—	475
Waste	—	—	—	—	—	—	—	—	—	—	—	590	0.00	590	58.9	0.00	—	2,063
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.5	10.5
Total	44.1	74.8	25.9	305	0.54	0.75	44.5	45.2	0.71	11.3	12.0	689	58,024	58,713	72.7	2.38	185	61,424
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	35.1	32.4	23.5	210	0.49	0.40	44.5	44.9	0.37	11.3	11.7	—	49,997	49,997	2.78	2.19	4.53	50,724
Area	0.00	34.1	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Energy	0.44	0.22	3.78	1.61	0.02	0.31	—	0.31	0.31	—	0.31	—	5,445	5,445	0.89	0.07	—	5,487
Water	—	—	—	—	—	—	—	—	—	—	—	99.6	45.5	145	10.3	0.25	—	475
Waste	—	—	—	—	—	—	—	—	—	—	—	590	0.00	590	58.9	0.00	—	2,063
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.5	10.5
Total	35.5	66.7	27.2	211	0.51	0.71	44.5	45.2	0.68	11.3	12.0	689	55,488	56,177	72.9	2.50	15.1	58,760
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	34.7	32.0	23.1	209	0.49	0.40	44.3	44.7	0.37	11.2	11.6	—	50,345	50,345	2.72	2.17	75.4	51,135
Area	3.87	37.7	0.40	41.4	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	111	111	< 0.005	< 0.005	—	111
Energy	0.44	0.22	3.78	1.61	0.02	0.31	—	0.31	0.31	—	0.31	—	5,445	5,445	0.89	0.07	—	5,487
Water	—	—	—	—	—	—	—	—	—	—	—	99.6	45.5	145	10.3	0.25	—	475
Waste	—	—	—	—	—	—	—	—	—	—	—	590	0.00	590	58.9	0.00	—	2,063
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.5	10.5
Total	39.0	69.9	27.3	252	0.52	0.73	44.3	45.0	0.70	11.2	11.9	689	55,947	56,636	72.8	2.48	85.9	59,282
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.33	5.83	4.22	38.1	0.09	0.07	8.08	8.15	0.07	2.05	2.12	—	8,335	8,335	0.45	0.36	12.5	8,466
Area	0.71	6.89	0.07	7.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	18.3	18.3	< 0.005	< 0.005	—	18.4
Energy	0.08	0.04	0.69	0.29	< 0.005	0.06	—	0.06	0.06	—	0.06	—	902	902	0.15	0.01	—	909
Water	—	—	—	—	—	—	—	—	—	—	—	16.5	7.53	24.0	1.70	0.04	—	78.6
Waste	—	—	—	—	—	—	—	—	—	—	—	97.6	0.00	97.6	9.76	0.00	—	342
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.74	1.74
Total	7.12	12.8	4.99	46.0	0.09	0.13	8.08	8.21	0.13	2.05	2.18	114	9,263	9,377	12.1	0.41	14.2	9,815

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.73	1.65	< 0.005	0.07	—	0.07	0.07	—	0.07	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.22	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.32	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.0	48.0	< 0.005	< 0.005	—	48.2
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	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	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.71	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	157	157	0.01	0.01	0.02	159
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.0	25.0	< 0.005	< 0.005	< 0.005	26.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.67	8.67	< 0.005	< 0.005	0.01	8.79
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.43
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.44	1.44	< 0.005	< 0.005	< 0.005	1.46
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

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

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

Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.39	3.66	3.49	0.01	0.15	—	0.15	0.14	—	0.14	—	814	814	0.03	0.01	—	816
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.67	0.64	< 0.005	0.03	—	0.03	0.03	—	0.03	—	135	135	0.01	< 0.005	—	135
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	0.81	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	179	179	0.01	0.01	0.02	182

Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.0	25.0	< 0.005	< 0.005	< 0.005	26.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	22.3	22.3	< 0.005	< 0.005	0.04	22.6
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.09	3.09	< 0.005	< 0.005	< 0.005	3.22
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.69	3.69	< 0.005	< 0.005	0.01	3.74
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.68	1.41	13.1	16.3	0.03	0.54	—	0.54	0.50	—	0.50	—	2,997	2,997	0.12	0.02	—	3,007
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.68	1.41	13.1	16.3	0.03	0.54	—	0.54	0.50	—	0.50	—	2,997	2,997	0.12	0.02	—	3,007
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14	0.96	8.86	11.1	0.02	0.37	—	0.37	0.34	—	0.34	—	2,034	2,034	0.08	0.02	—	2,041
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.62	2.02	< 0.005	0.07	—	0.07	0.06	—	0.06	—	337	337	0.01	< 0.005	—	338
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.67	4.30	3.26	49.3	0.00	0.00	9.01	9.01	0.00	2.11	2.11	—	10,110	10,110	0.47	0.35	37.9	10,265
Vendor	0.34	0.16	5.27	2.45	0.03	0.05	1.01	1.07	0.05	0.28	0.33	—	3,960	3,960	0.17	0.56	10.3	4,141
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.60	4.23	3.63	43.2	0.00	0.00	9.01	9.01	0.00	2.11	2.11	—	9,547	9,547	0.52	0.38	0.99	9,673
Vendor	0.33	0.15	5.47	2.52	0.03	0.05	1.01	1.07	0.05	0.28	0.33	—	3,962	3,962	0.17	0.56	0.27	4,133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.09	2.84	2.45	29.8	0.00	0.00	6.09	6.09	0.00	1.43	1.43	—	6,537	6,537	0.33	0.25	11.1	6,633
Vendor	0.23	0.11	3.68	1.68	0.02	0.04	0.68	0.72	0.04	0.19	0.23	—	2,688	2,688	0.12	0.38	3.02	2,807
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.52	0.45	5.43	0.00	0.00	1.11	1.11	0.00	0.26	0.26	—	1,082	1,082	0.06	0.04	1.84	1,098

Vendor	0.04	0.02	0.67	0.31	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	445	445	0.02	0.06	0.50	465
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.60	1.34	12.3	16.2	0.03	0.47	—	0.47	0.44	—	0.44	—	2,997	2,997	0.12	0.02	—	3,007
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.60	1.34	12.3	16.2	0.03	0.47	—	0.47	0.44	—	0.44	—	2,997	2,997	0.12	0.02	—	3,007
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.28	5.63	0.01	0.16	—	0.16	0.15	—	0.15	—	1,041	1,041	0.04	0.01	—	1,045
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.78	1.03	< 0.005	0.03	—	0.03	0.03	—	0.03	—	172	172	0.01	< 0.005	—	173
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.48	3.85	2.95	46.1	0.00	0.00	9.01	9.01	0.00	2.11	2.11	—	9,905	9,905	0.47	0.35	34.7	10,056
Vendor	0.31	0.13	5.01	2.36	0.03	0.05	1.01	1.07	0.05	0.28	0.33	—	3,886	3,886	0.15	0.56	9.48	4,067
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.18	3.80	3.33	40.6	0.00	0.00	9.01	9.01	0.00	2.11	2.11	—	9,354	9,354	0.49	0.38	0.90	9,479
Vendor	0.30	0.13	5.21	2.40	0.03	0.05	1.01	1.07	0.05	0.28	0.33	—	3,889	3,889	0.15	0.56	0.25	4,060
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.44	1.31	1.15	14.3	0.00	0.00	3.12	3.12	0.00	0.73	0.73	—	3,280	3,280	0.17	0.13	5.20	3,328
Vendor	0.11	0.05	1.80	0.82	0.01	0.02	0.35	0.37	0.02	0.10	0.12	—	1,351	1,351	0.05	0.19	1.43	1,412
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.24	0.21	2.60	0.00	0.00	0.57	0.57	0.00	0.13	0.13	—	543	543	0.03	0.02	0.86	551
Vendor	0.02	0.01	0.33	0.15	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	224	224	0.01	0.03	0.24	234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

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

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

Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.68	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	145
Paving	—	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Paving	—	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	139	139	0.01	< 0.005	0.49	142
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.1	49.1	< 0.005	0.01	0.12	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.7	12.7	< 0.005	< 0.005	0.02	12.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.71	4.71	< 0.005	< 0.005	< 0.005	4.92
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.11	2.11	< 0.005	< 0.005	< 0.005	2.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.78	0.78	< 0.005	< 0.005	< 0.005	0.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	57.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	57.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.38	0.50	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.3	59.3	< 0.005	< 0.005	—	59.5
Architectural Coatings	—	25.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.81	9.81	< 0.005	< 0.005	—	9.84
Architectural Coatings	—	4.68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.90	0.77	0.59	9.21	0.00	0.00	1.80	1.80	0.00	0.42	0.42	—	1,981	1,981	0.09	0.07	6.93	2,011
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.84	0.76	0.67	8.13	0.00	0.00	1.80	1.80	0.00	0.42	0.42	—	1,871	1,871	0.10	0.08	0.18	1,896
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.33	0.29	3.64	0.00	0.00	0.80	0.80	0.00	0.19	0.19	—	838	838	0.04	0.03	1.33	850

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.66	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	139	139	0.01	0.01	0.22	141
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00

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)

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	21.8	20.2	13.0	134	0.31	0.24	27.1	27.3	0.23	6.87	7.10	—	31,857	31,857	1.58	1.26	106	32,377
Apartments Low Rise	7.63	7.07	4.56	46.9	0.11	0.09	9.49	9.58	0.08	2.41	2.49	—	11,165	11,165	0.55	0.44	37.3	11,348
Condo/Townhouse	6.35	5.88	3.79	39.0	0.09	0.07	7.89	7.97	0.07	2.00	2.07	—	9,286	9,286	0.46	0.37	31.0	9,438
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	35.8	33.1	21.3	220	0.51	0.40	44.5	44.9	0.37	11.3	11.7	—	52,308	52,308	2.59	2.06	175	53,163

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	21.4	19.7	14.3	128	0.30	0.24	27.1	27.3	0.23	6.87	7.10	—	30,449	30,449	1.69	1.34	2.76	30,892
Apartments Low Rise	7.49	6.91	5.01	44.8	0.10	0.09	9.49	9.58	0.08	2.41	2.49	—	10,672	10,672	0.59	0.47	0.97	10,827
Condo/Townhouse	6.23	5.75	4.16	37.3	0.09	0.07	7.89	7.97	0.07	2.00	2.07	—	8,876	8,876	0.49	0.39	0.80	9,005
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	35.1	32.4	23.5	210	0.49	0.40	44.5	44.9	0.37	11.3	11.7	—	49,997	49,997	2.78	2.19	4.53	50,724
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.85	3.55	2.57	23.2	0.05	0.04	4.92	4.96	0.04	1.25	1.29	—	5,076	5,076	0.27	0.22	7.60	5,156
Apartments Low Rise	1.35	1.25	0.90	8.14	0.02	0.02	1.72	1.74	0.01	0.44	0.45	—	1,779	1,779	0.10	0.08	2.66	1,807
Condo/Townhouse	1.12	1.04	0.75	6.77	0.02	0.01	1.43	1.45	0.01	0.36	0.38	—	1,480	1,480	0.08	0.06	2.22	1,503
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.33	5.83	4.22	38.1	0.09	0.07	8.08	8.15	0.07	2.05	2.12	—	8,335	8,335	0.45	0.36	12.5	8,466

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																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	414	414	0.30	0.04	—	432
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	131	131	0.10	0.01	—	137
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	96.4	96.4	0.07	0.01	—	101
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	641	641	0.47	0.06	—	670
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	414	414	0.30	0.04	—	432
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	131	131	0.10	0.01	—	137
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	96.4	96.4	0.07	0.01	—	101
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	641	641	0.47	0.06	—	670

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	68.5	68.5	0.05	0.01	—	71.6
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	21.7	21.7	0.02	< 0.005	—	22.6
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	16.0	16.0	0.01	< 0.005	—	16.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	106	106	0.08	0.01	—	111

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.21	0.10	1.77	0.75	0.01	0.14	—	0.14	0.14	—	0.14	—	2,241	2,241	0.20	< 0.005	—	2,248
Apartments Low Rise	0.12	0.06	1.04	0.44	0.01	0.08	—	0.08	0.08	—	0.08	—	1,317	1,317	0.12	< 0.005	—	1,321
Condo/Townhouse	0.11	0.06	0.98	0.42	0.01	0.08	—	0.08	0.08	—	0.08	—	1,246	1,246	0.11	< 0.005	—	1,249
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.44	0.22	3.78	1.61	0.02	0.31	—	0.31	0.31	—	0.31	—	4,804	4,804	0.43	0.01	—	4,818
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.21	0.10	1.77	0.75	0.01	0.14	—	0.14	0.14	—	0.14	—	2,241	2,241	0.20	< 0.005	—	2,248
Apartments Low Rise	0.12	0.06	1.04	0.44	0.01	0.08	—	0.08	0.08	—	0.08	—	1,317	1,317	0.12	< 0.005	—	1,321
Condo/Townhouse	0.11	0.06	0.98	0.42	0.01	0.08	—	0.08	0.08	—	0.08	—	1,246	1,246	0.11	< 0.005	—	1,249
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.44	0.22	3.78	1.61	0.02	0.31	—	0.31	0.31	—	0.31	—	4,804	4,804	0.43	0.01	—	4,818
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.04	0.02	0.32	0.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	371	371	0.03	< 0.005	—	372
Apartments Low Rise	0.02	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	218	218	0.02	< 0.005	—	219
Condo/Townhouse	0.02	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	206	206	0.02	< 0.005	—	207
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.08	0.04	0.69	0.29	< 0.005	0.06	—	0.06	0.06	—	0.06	—	795	795	0.07	< 0.005	—	798

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																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	31.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	2.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.86	7.44	0.81	83.9	< 0.005	0.04	—	0.04	0.03	—	0.03	—	224	224	0.01	< 0.005	—	225
Total	7.86	41.5	0.81	83.9	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	224	224	0.01	< 0.005	—	225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	31.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	2.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	34.1	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consumer Products	—	5.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.71	0.67	0.07	7.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.3	18.3	< 0.005	< 0.005	—	18.4
Total	0.71	6.89	0.07	7.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	18.3	18.3	< 0.005	< 0.005	—	18.4

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																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	66.5	30.3	96.8	6.84	0.16	—	317
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	20.4	9.34	29.7	2.10	0.05	—	97.3
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.7	5.83	18.5	1.31	0.03	—	60.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	99.6	45.5	145	10.3	0.25	—	475

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	66.5	30.3	96.8	6.84	0.16	—	317
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	20.4	9.34	29.7	2.10	0.05	—	97.3
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.7	5.83	18.5	1.31	0.03	—	60.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	99.6	45.5	145	10.3	0.25	—	475
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	11.0	5.02	16.0	1.13	0.03	—	52.5
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.38	1.55	4.92	0.35	0.01	—	16.1
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	2.11	0.96	3.07	0.22	0.01	—	10.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	16.5	7.53	24.0	1.70	0.04	—	78.6

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																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	394	0.00	394	39.4	0.00	—	1,378
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	121	0.00	121	12.1	0.00	—	422
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	75.3	0.00	75.3	7.52	0.00	—	263
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	590	0.00	590	58.9	0.00	—	2,063
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	394	0.00	394	39.4	0.00	—	1,378
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	121	0.00	121	12.1	0.00	—	422
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	75.3	0.00	75.3	7.52	0.00	—	263
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	590	0.00	590	58.9	0.00	—	2,063

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	65.2	0.00	65.2	6.52	0.00	—	228
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	20.0	0.00	20.0	2.00	0.00	—	69.9
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.5	0.00	12.5	1.25	0.00	—	43.6
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	97.6	0.00	97.6	9.76	0.00	—	342

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																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79	6.79
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.30	2.30
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.43	1.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.5	10.5

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79	6.79
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.30	2.30
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.43	1.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.5	10.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.74	1.74

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

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

Site Preparation	Site Preparation	1/1/2025	1/23/2025	6.00	20.0	—
Grading	Grading	1/24/2025	3/17/2025	6.00	45.0	—
Building Construction	Building Construction	3/18/2025	5/28/2026	6.00	375	—
Paving	Paving	5/29/2026	7/8/2026	6.00	35.0	—
Architectural Coating	Architectural Coating	1/1/2026	7/8/2026	6.00	162	—

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
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	2.00	4.38	367	0.29
Building Construction	Forklifts	Diesel	Average	4.00	7.50	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	5.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	4.00	6.56	84.0	0.37
Building Construction	Welders	Diesel	Average	2.00	5.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	1.00	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	1.00	7.63	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,066	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	158	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	2.00	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—

Architectural Coating	Worker	213	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	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)
Architectural Coating	2,976,750	992,250	0.00	0.00	34,258

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	30.0	0.00	—
Grading	—	—	135	0.00	—
Paving	0.00	0.00	0.00	0.00	13.1

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Apartments Low Rise	—	0%
Condo/Townhouse	—	0%
Other Asphalt Surfaces	13.1	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	540	0.03	< 0.005
2026	0.00	45.1	0.03	< 0.005

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
Apartments Mid Rise	5,187	5,187	5,187	1,893,255	38,359	38,359	38,359	14,000,900
Apartments Low Rise	1,818	1,818	1,818	663,570	13,444	13,444	13,444	4,907,198
Condo/Townhouse	1,512	1,512	1,512	551,880	11,181	11,181	11,181	4,081,234
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	988
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	303
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0

No Fireplaces	189
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

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)
2976750	992,250	0.00	0.00	34,258

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)
Apartments Mid Rise	3,350,179	45.1	0.0330	0.0040	6,993,495
Apartments Low Rise	1,058,452	45.1	0.0330	0.0040	4,110,320
Condo/Townhouse	780,448	45.1	0.0330	0.0040	3,886,734
Other Asphalt Surfaces	0.00	45.1	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)
Apartments Mid Rise	34,711,478	1,732,407
Apartments Low Rise	10,645,322	586,638
Condo/Townhouse	6,640,151	365,923
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	731	—
Apartments Low Rise	224	—
Condo/Townhouse	140	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0

Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

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	12.4	annual days of extreme heat
Extreme Precipitation	3.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	7.98	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack 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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack 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	64.7
AQ-PM	45.1
AQ-DPM	25.7
Drinking Water	10.9
Lead Risk Housing	17.5
Pesticides	0.00
Toxic Releases	25.6
Traffic	48.6
Effect Indicators	—
CleanUp Sites	37.8
Groundwater	40.8
Haz Waste Facilities/Generators	84.7
Impaired Water Bodies	77.3

Solid Waste	9.67
Sensitive Population	—
Asthma	35.6
Cardio-vascular	30.2
Low Birth Weights	18.6
Socioeconomic Factor Indicators	—
Education	43.4
Housing	19.8
Linguistic	10.4
Poverty	16.6
Unemployment	28.2

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	66.11061209
Employed	1.296034903
Median HI	58.75785962
Education	—
Bachelor's or higher	47.36301809
High school enrollment	17.87501604
Preschool enrollment	14.26921596
Transportation	—
Auto Access	76.73553189
Active commuting	33.56858719
Social	—

2-parent households	27.65302194
Voting	75.72180162
Neighborhood	—
Alcohol availability	42.80764789
Park access	24.26536635
Retail density	59.4636212
Supermarket access	60.82381625
Tree canopy	8.135506224
Housing	—
Homeownership	43.19260875
Housing habitability	69.11330681
Low-inc homeowner severe housing cost burden	75.55498524
Low-inc renter severe housing cost burden	83.49801104
Uncrowded housing	47.26036186
Health Outcomes	—
Insured adults	74.51559091
Arthritis	0.0
Asthma ER Admissions	59.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	1.7
Cognitively Disabled	36.6
Physically Disabled	78.7

Heart Attack ER Admissions	49.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	48.8
Elderly	83.1
English Speaking	76.6
Foreign-born	6.0
Outdoor Workers	58.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.9
Traffic Density	49.3
Traffic Access	51.5
Other Indices	—
Hardship	31.7
Other Decision Support	—
2016 Voting	76.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	18.0
Healthy Places Index Score for Project Location (b)	34.0
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
Land Use	Based on acreage and total dwelling units provided in Town Center Specific Plan Buildout Summary (9-7-2023 Draft)
Construction: Construction Phases	Sites are vacant, no demo required. Building Construction phase working days reduced by 25% to achieve target buildout in 2026. Architectural coating phase adjusted to overlap second half of Building Construction and Paving.
Construction: Off-Road Equipment	Building construction equipment/hours increased by 25% due to shortened schedule.
Operations: Vehicle Data	Trip generation provided by Intersecting Metrics.
Operations: Hearths	No hearths installed.

Santee TCSP Program Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Santee TCSP Program Construction
Construction Start Date	1/1/2027
Lead Agency	City of Santee
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	7.60
Location	32.84514001277044, -116.97668753144887
County	San Diego
City	Santee
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6529
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.21

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
Strip Mall	148	1000sqft	33.2	148,060	0.00	—	—	—

Regional Shopping Center	6.16	1000sqft	2.20	6,160	0.00	—	—	—
Government (Civic Center)	46.8	1000sqft	11.4	46,810	0.00	—	—	—
Office Park	60.0	1000sqft	6.19	60,050	0.00	—	—	—
City Park	14.8	Acre	14.8	0.00	0.00	0.00	—	—
Condo/Townhouse	198	Dwelling Unit	10.6	209,880	0.00	—	552	—
Apartments Low Rise	217	Dwelling Unit	5.90	230,020	0.00	—	605	—

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.																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.2	12.0	94.8	121	0.20	3.70	16.3	20.0	3.40	6.57	9.98	—	26,438	26,438	1.09	0.65	20.6	26,679
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.2	12.0	95.2	119	0.20	3.70	16.3	20.0	3.40	6.57	9.98	—	26,172	26,172	1.12	0.66	0.53	26,397
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.1	8.56	68.1	84.9	0.14	2.64	11.6	14.3	2.43	4.70	7.13	—	18,743	18,743	0.79	0.46	6.38	18,907

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.85	1.56	12.4	15.5	0.03	0.48	2.13	2.61	0.44	0.86	1.30	—	3,103	3,103	0.13	0.08	1.06	3,130

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	14.2	12.0	94.8	121	0.20	3.70	16.3	20.0	3.40	6.57	9.98	—	26,438	26,438	1.09	0.65	20.6	26,679
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	14.2	12.0	95.2	119	0.20	3.70	16.3	20.0	3.40	6.57	9.98	—	26,172	26,172	1.12	0.66	0.53	26,397
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	10.1	8.56	68.1	84.9	0.14	2.64	11.6	14.3	2.43	4.70	7.13	—	18,743	18,743	0.79	0.46	6.38	18,907
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.85	1.56	12.4	15.5	0.03	0.48	2.13	2.61	0.44	0.86	1.30	—	3,103	3,103	0.13	0.08	1.06	3,130

3. Construction Emissions Details

3.1. Demolition (2027) - Unmitigated

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

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

Off-Road Equipment	2.64	2.21	19.9	18.6	0.03	0.80	—	0.80	0.73	—	0.73	—	3,427	3,427	0.14	0.03	—	3,439
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.64	2.21	19.9	18.6	0.03	0.80	—	0.80	0.73	—	0.73	—	3,427	3,427	0.14	0.03	—	3,439
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.89	1.58	14.2	13.3	0.02	0.57	—	0.57	0.52	—	0.52	—	2,450	2,450	0.10	0.02	—	2,459
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.60	2.43	< 0.005	0.10	—	0.10	0.10	—	0.10	—	406	406	0.02	< 0.005	—	407
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.05	0.04	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	0.01	< 0.005	0.44	139
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.1	48.1	< 0.005	0.01	0.11	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.54	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	129	129	0.01	0.01	0.01	131
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.1	48.1	< 0.005	0.01	< 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	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.39	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.4	93.4	< 0.005	< 0.005	0.14	94.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.4	34.4	< 0.005	< 0.005	0.03	35.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.5	15.5	< 0.005	< 0.005	0.02	15.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.69	5.69	< 0.005	< 0.005	0.01	5.94
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.60	2.18	20.0	20.2	0.03	0.84	—	0.84	0.77	—	0.77	—	3,788	3,788	0.15	0.03	—	3,801
Dust From Material Movement	—	—	—	—	—	—	5.48	5.48	—	2.82	2.82	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.65	3.69	0.01	0.15	—	0.15	0.14	—	0.14	—	627	627	0.03	0.01	—	629
Dust From Material Movement	—	—	—	—	—	—	1.00	1.00	—	0.51	0.51	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.72	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	160	160	0.01	0.01	0.52	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	151	151	0.01	0.01	0.01	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	109	109	0.01	< 0.005	0.16	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	0.03	18.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2027) - Unmitigated

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

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

Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.51	2.11	18.3	19.5	0.04	0.75	—	0.75	0.69	—	0.69	—	4,718	4,718	0.19	0.04	—	4,734
Dust From Material Movement	—	—	—	—	—	—	2.57	2.57	—	1.02	1.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.38	3.34	3.56	0.01	0.14	—	0.14	0.13	—	0.13	—	781	781	0.03	0.01	—	784
Dust From Material Movement	—	—	—	—	—	—	0.47	0.47	—	0.19	0.19	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	183	183	0.01	0.01	0.59	186
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	72.1	72.1	< 0.005	0.01	0.16	75.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.72	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	173	173	0.01	0.01	0.02	175
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	72.2	72.2	< 0.005	0.01	< 0.005	75.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.52	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	125	125	0.01	< 0.005	0.18	126
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	51.6	51.6	< 0.005	0.01	0.05	53.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.6	20.6	< 0.005	< 0.005	0.03	20.9
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.54	8.54	< 0.005	< 0.005	0.01	8.91
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.72	9.25	0.02	0.24	—	0.24	0.22	—	0.22	—	1,714	1,714	0.07	0.01	—	1,720
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.23	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.47	1.35	0.94	15.7	0.00	0.00	3.23	3.23	0.00	0.76	0.76	—	3,494	3,494	0.16	0.13	11.3	3,547
Vendor	0.16	0.07	2.64	1.25	0.01	0.03	0.56	0.59	0.03	0.15	0.18	—	2,095	2,095	0.08	0.29	4.68	2,190
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.45	1.31	1.18	13.8	0.00	0.00	3.23	3.23	0.00	0.76	0.76	—	3,300	3,300	0.18	0.13	0.29	3,344
Vendor	0.15	0.07	2.74	1.27	0.01	0.03	0.56	0.59	0.03	0.15	0.18	—	2,097	2,097	0.08	0.29	0.12	2,187
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.03	0.93	0.84	9.96	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	2,381	2,381	0.12	0.09	3.50	2,414
Vendor	0.11	0.05	1.94	0.90	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,499	1,499	0.06	0.21	1.45	1,564
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.15	1.82	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	394	394	0.02	0.01	0.58	400
Vendor	0.02	0.01	0.35	0.17	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	248	248	0.01	0.03	0.24	259
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	4.97	7.12	0.01	0.21	—	0.21	0.20	—	0.20	—	1,081	1,081	0.04	0.01	—	1,084
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	0.91	1.30	< 0.005	0.04	—	0.04	0.04	—	0.04	—	179	179	0.01	< 0.005	—	180
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	0.01	< 0.005	0.44	139
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.1	48.1	< 0.005	0.01	0.11	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.54	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	129	129	0.01	0.01	0.01	131

Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.1	48.1	< 0.005	0.01	< 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	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.39	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.4	93.4	< 0.005	< 0.005	0.14	94.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.4	34.4	< 0.005	< 0.005	0.03	35.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.5	15.5	< 0.005	< 0.005	0.02	15.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.69	5.69	< 0.005	< 0.005	0.01	5.94
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.59	0.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.5	95.5	< 0.005	< 0.005	—	95.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.27	0.19	3.13	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	699	699	0.03	0.03	2.27	709
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.24	2.75	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	660	660	0.04	0.03	0.06	669
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.19	0.17	1.99	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	476	476	0.02	0.02	0.70	483
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	78.8	78.8	< 0.005	< 0.005	0.12	79.9

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

Land Use																		
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																		
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
Demolition	Demolition	1/1/2027	12/31/2027	5.00	261	—
Site Preparation	Site Preparation	1/1/2027	12/31/2027	5.00	261	—
Grading	Grading	1/1/2027	12/31/2027	5.00	261	—
Building Construction	Building Construction	1/1/2027	12/31/2027	5.00	261	—
Paving	Paving	1/1/2027	12/31/2027	5.00	261	—
Architectural Coating	Architectural Coating	1/1/2027	12/31/2027	5.00	261	—

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
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	2.00	7.63	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	0.00	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	3.00	7.63	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	382	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	87.2	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	2.00	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	76.5	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	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 (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	392	0.00	—
Grading	—	—	783	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

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
Strip Mall	0.00	0%
Regional Shopping Center	0.00	0%
Government (Civic Center)	0.00	0%
Office Park	0.00	0%
City Park	0.00	0%
Condo/Townhouse	—	0%
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	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	12.4	annual days of extreme heat
Extreme Precipitation	3.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	7.98	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack 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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack 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	64.7
AQ-PM	45.1
AQ-DPM	25.7
Drinking Water	10.9
Lead Risk Housing	17.5
Pesticides	0.00
Toxic Releases	25.6
Traffic	48.6
Effect Indicators	—
CleanUp Sites	37.8
Groundwater	40.8
Haz Waste Facilities/Generators	84.7
Impaired Water Bodies	77.3
Solid Waste	9.67
Sensitive Population	—
Asthma	35.6
Cardio-vascular	30.2
Low Birth Weights	18.6
Socioeconomic Factor Indicators	—
Education	43.4
Housing	19.8

Linguistic	10.4
Poverty	16.6
Unemployment	28.2

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	66.11061209
Employed	1.296034903
Median HI	58.75785962
Education	—
Bachelor's or higher	47.36301809
High school enrollment	17.87501604
Preschool enrollment	14.26921596
Transportation	—
Auto Access	76.73553189
Active commuting	33.56858719
Social	—
2-parent households	27.65302194
Voting	75.72180162
Neighborhood	—
Alcohol availability	42.80764789
Park access	24.26536635
Retail density	59.4636212
Supermarket access	60.82381625
Tree canopy	8.135506224

Housing	—
Homeownership	43.19260875
Housing habitability	69.11330681
Low-inc homeowner severe housing cost burden	75.55498524
Low-inc renter severe housing cost burden	83.49801104
Uncrowded housing	47.26036186
Health Outcomes	—
Insured adults	74.51559091
Arthritis	0.0
Asthma ER Admissions	59.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	1.7
Cognitively Disabled	36.6
Physically Disabled	78.7
Heart Attack ER Admissions	49.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	48.8
Elderly	83.1
English Speaking	76.6
Foreign-born	6.0
Outdoor Workers	58.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.9
Traffic Density	49.3
Traffic Access	51.5
Other Indices	—
Hardship	31.7
Other Decision Support	—
2016 Voting	76.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	18.0
Healthy Places Index Score for Project Location (b)	34.0
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
Land Use	Assuming 25% of SP construction occurs in one year. Residences in Sites 16A, 16B, 20A, and 20B not included.
Construction: Construction Phases	Default construction activities assumed to occur over one year.

Santee TCSP Program 2035 Operations Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Santee TCSP Program 2035 Operations
Operational Year	2035
Lead Agency	City of Santee
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	7.60
Location	32.845263451000434, -116.97647155078744
County	San Diego
City	Santee
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6529
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.21

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
Strip Mall	592	1000sqft	133	592,258	59,225	—	—	—

Regional Shopping Center	24.6	1000sqft	8.81	24,625	2,462	—	—	—
Government (Civic Center)	187	1000sqft	45.7	187,223	18,722	—	—	—
Office Park	240	1000sqft	24.8	240,206	24,020	—	—	—
City Park	59.4	Acre	59.4	0.00	59.4	59.4	—	—
Condo/Townhouse	982	Dwelling Unit	50.9	1,040,920	104,092	—	2,740	—
Apartments Low Rise	1,170	Dwelling Unit	31.3	1,240,200	124,020	—	3,264	—
Apartments Mid Rise	988	Dwelling Unit	21.1	948,480	94,848	—	2,757	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	207	282	113	1,430	3.36	3.15	330	333	3.00	83.7	86.7	2,751	363,224	365,975	294	13.5	399	377,736
Mit.	183	259	111	1,206	3.35	2.99	330	333	2.88	83.7	86.6	2,751	362,615	365,366	294	13.5	399	377,125
% Reduced	12%	8%	2%	16%	< 0.5%	5%	—	< 0.5%	4%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	181	258	121	1,135	3.21	2.99	330	333	2.88	83.7	86.6	2,751	347,713	350,464	294	14.2	37.6	362,092
Mit.	181	258	121	1,135	3.21	2.99	330	333	2.88	83.7	86.6	2,751	347,713	350,464	294	14.2	37.6	362,092
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	189	265	119	1,232	3.19	3.05	324	327	2.91	82.2	85.1	2,751	346,040	348,791	294	13.9	186	360,470
Mit.	177	254	118	1,121	3.19	2.97	324	327	2.86	82.2	85.1	2,751	345,739	348,490	294	13.9	186	360,169
% Reduced	6%	4%	1%	9%	< 0.5%	3%	—	< 0.5%	2%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.5	48.3	21.7	225	0.58	0.56	59.2	59.7	0.53	15.0	15.5	455	57,291	57,746	48.7	2.30	30.8	59,680
Mit.	32.3	46.3	21.5	205	0.58	0.54	59.2	59.7	0.52	15.0	15.5	455	57,241	57,697	48.7	2.30	30.8	59,630
% Reduced	6%	4%	1%	9%	< 0.5%	3%	—	< 0.5%	2%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	181	167	95.9	1,197	3.26	1.78	330	332	1.66	83.7	85.4	—	331,590	331,590	13.4	12.1	371	335,895
Area	24.4	114	2.03	224	0.01	0.16	—	0.16	0.12	—	0.12	0.00	663	663	0.03	0.01	—	665
Energy	1.76	0.88	15.3	8.32	0.10	1.21	—	1.21	1.21	—	1.21	—	30,207	30,207	3.86	0.30	—	30,392
Water	—	—	—	—	—	—	—	—	—	—	—	452	765	1,217	46.5	1.12	—	2,713

Waste	—	—	—	—	—	—	—	—	—	—	—	2,299	0.00	2,299	230	0.00	—	8,043
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0
Total	207	282	113	1,430	3.36	3.15	330	333	3.00	83.7	86.7	2,751	363,224	365,975	294	13.5	399	377,736
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	180	165	106	1,127	3.11	1.78	330	332	1.66	83.7	85.4	—	316,742	316,742	14.2	12.8	9.62	320,916
Area	0.00	91.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	1.76	0.88	15.3	8.32	0.10	1.21	—	1.21	1.21	—	1.21	—	30,207	30,207	3.86	0.30	—	30,392
Water	—	—	—	—	—	—	—	—	—	—	—	452	765	1,217	46.5	1.12	—	2,713
Waste	—	—	—	—	—	—	—	—	—	—	—	2,299	0.00	2,299	230	0.00	—	8,043
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0
Total	181	258	121	1,135	3.21	2.99	330	333	2.88	83.7	86.6	2,751	347,713	350,464	294	14.2	37.6	362,092
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	175	161	103	1,113	3.09	1.76	324	326	1.64	82.2	83.9	—	314,741	314,741	13.8	12.5	158	318,966
Area	12.0	103	1.00	111	0.01	0.08	—	0.08	0.06	—	0.06	0.00	327	327	0.01	< 0.005	—	328
Energy	1.76	0.88	15.3	8.32	0.10	1.21	—	1.21	1.21	—	1.21	—	30,207	30,207	3.86	0.30	—	30,392
Water	—	—	—	—	—	—	—	—	—	—	—	452	765	1,217	46.5	1.12	—	2,713
Waste	—	—	—	—	—	—	—	—	—	—	—	2,299	0.00	2,299	230	0.00	—	8,043
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0
Total	189	265	119	1,232	3.19	3.05	324	327	2.91	82.2	85.1	2,751	346,040	348,791	294	13.9	186	360,470
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	32.0	29.4	18.7	203	0.56	0.32	59.2	59.5	0.30	15.0	15.3	—	52,109	52,109	2.28	2.07	26.2	52,808
Area	2.19	18.8	0.18	20.2	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	54.1	54.1	< 0.005	< 0.005	—	54.3
Energy	0.32	0.16	2.79	1.52	0.02	0.22	—	0.22	0.22	—	0.22	—	5,001	5,001	0.64	0.05	—	5,032
Water	—	—	—	—	—	—	—	—	—	—	—	74.8	127	201	7.70	0.19	—	449
Waste	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.0	0.00	—	1,332
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.63	4.63

Total	34.5	48.3	21.7	225	0.58	0.56	59.2	59.7	0.53	15.0	15.5	455	57,291	57,746	48.7	2.30	30.8	59,680

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	181	167	95.9	1,197	3.26	1.78	330	332	1.66	83.7	85.4	—	331,590	331,590	13.4	12.1	371	335,895
Area	0.00	91.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	1.76	0.88	15.3	8.32	0.10	1.21	—	1.21	1.21	—	1.21	—	30,260	30,260	3.87	0.30	—	30,447
Water	—	—	—	—	—	—	—	—	—	—	—	452	765	1,217	46.5	1.12	—	2,713
Waste	—	—	—	—	—	—	—	—	—	—	—	2,299	0.00	2,299	230	0.00	—	8,043
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0
Total	183	259	111	1,206	3.35	2.99	330	333	2.88	83.7	86.6	2,751	362,615	365,366	294	13.5	399	377,125
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	180	165	106	1,127	3.11	1.78	330	332	1.66	83.7	85.4	—	316,742	316,742	14.2	12.8	9.62	320,916
Area	0.00	91.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	1.76	0.88	15.3	8.32	0.10	1.21	—	1.21	1.21	—	1.21	—	30,207	30,207	3.86	0.30	—	30,392
Water	—	—	—	—	—	—	—	—	—	—	—	452	765	1,217	46.5	1.12	—	2,713
Waste	—	—	—	—	—	—	—	—	—	—	—	2,299	0.00	2,299	230	0.00	—	8,043
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0
Total	181	258	121	1,135	3.21	2.99	330	333	2.88	83.7	86.6	2,751	347,713	350,464	294	14.2	37.6	362,092
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	175	161	103	1,113	3.09	1.76	324	326	1.64	82.2	83.9	—	314,741	314,741	13.8	12.5	158	318,966
Area	0.00	91.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Energy	1.76	0.88	15.3	8.32	0.10	1.21	—	1.21	1.21	—	1.21	—	30,233	30,233	3.86	0.30	—	30,419
Water	—	—	—	—	—	—	—	—	—	—	—	452	765	1,217	46.5	1.12	—	2,713
Waste	—	—	—	—	—	—	—	—	—	—	—	2,299	0.00	2,299	230	0.00	—	8,043
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0
Total	177	254	118	1,121	3.19	2.97	324	327	2.86	82.2	85.1	2,751	345,739	348,490	294	13.9	186	360,169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	32.0	29.4	18.7	203	0.56	0.32	59.2	59.5	0.30	15.0	15.3	—	52,109	52,109	2.28	2.07	26.2	52,808
Area	0.00	16.7	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.32	0.16	2.79	1.52	0.02	0.22	—	0.22	0.22	—	0.22	—	5,005	5,005	0.64	0.05	—	5,036
Water	—	—	—	—	—	—	—	—	—	—	—	74.8	127	201	7.70	0.19	—	449
Waste	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.0	0.00	—	1,332
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.63	4.63
Total	32.3	46.3	21.5	205	0.58	0.54	59.2	59.7	0.52	15.0	15.5	455	57,241	57,697	48.7	2.30	30.8	59,630

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	90.9	83.6	49.4	621	1.71	0.93	173	174	0.87	44.0	44.9	—	173,908	173,908	6.88	6.24	195	176,133
Regional Shopping Center	7.77	7.35	3.25	37.0	0.09	0.05	8.73	8.78	0.05	2.21	2.26	—	8,965	8,965	0.48	0.40	9.80	9,104

Governm (Civic Center)	6.90	6.35	3.74	47.1	0.13	0.07	13.2	13.2	0.07	3.34	3.40	—	13,194	13,194	0.52	0.47	14.8	13,363
Office Park	14.7	13.6	8.01	101	0.28	0.15	28.1	28.3	0.14	7.14	7.28	—	28,213	28,213	1.12	1.01	31.6	28,574
City Park	1.05	0.97	0.57	7.17	0.02	0.01	2.00	2.01	0.01	0.51	0.52	—	2,008	2,008	0.08	0.07	2.25	2,034
Condo/T ownhous e	23.4	21.6	12.1	150	0.40	0.22	41.0	41.2	0.21	10.4	10.6	—	41,233	41,233	1.70	1.52	46.0	41,775
Apartme nts Low Rise	20.9	19.3	10.8	134	0.36	0.20	36.6	36.8	0.19	9.29	9.48	—	36,845	36,845	1.52	1.36	41.1	37,329
Apartme nts Mid Rise	15.4	14.3	8.00	99.2	0.27	0.15	27.1	27.2	0.14	6.86	7.00	—	27,224	27,224	1.12	1.00	30.4	27,582
Total	181	167	95.9	1,197	3.26	1.78	330	332	1.66	83.7	85.4	—	331,590	331,590	13.4	12.1	371	335,895
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	90.2	82.8	54.3	582	1.63	0.93	173	174	0.87	44.0	44.9	—	166,103	166,103	7.25	6.60	5.05	168,257
Regional Shopping Center	7.72	7.28	3.59	36.7	0.08	0.05	8.73	8.78	0.05	2.21	2.26	—	8,576	8,576	0.52	0.42	0.25	8,714
Governm ent (Civic Center)	6.84	6.29	4.12	44.2	0.12	0.07	13.2	13.2	0.07	3.34	3.40	—	12,602	12,602	0.55	0.50	0.38	12,765
Office Park	14.6	13.4	8.81	94.5	0.26	0.15	28.1	28.3	0.14	7.14	7.28	—	26,947	26,947	1.18	1.07	0.82	27,296
City Park	1.04	0.96	0.63	6.72	0.02	0.01	2.00	2.01	0.01	0.51	0.52	—	1,918	1,918	0.08	0.08	0.06	1,943
Condo/T ownhous e	23.2	21.4	13.3	142	0.39	0.22	41.0	41.2	0.21	10.4	10.6	—	39,390	39,390	1.80	1.61	1.19	39,917

Apartments Low Rise	20.7	19.1	11.9	127	0.35	0.20	36.6	36.8	0.19	9.29	9.48	—	35,198	35,198	1.61	1.44	1.07	35,669
Apartments Mid Rise	15.3	14.1	8.81	93.7	0.26	0.15	27.1	27.2	0.14	6.86	7.00	—	26,008	26,008	1.19	1.06	0.79	26,355
Total	180	165	106	1,127	3.11	1.78	330	332	1.66	83.7	85.4	—	316,742	316,742	14.2	12.8	9.62	320,916
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	16.2	14.9	9.76	106	0.30	0.17	31.5	31.7	0.16	7.99	8.15	—	27,696	27,696	1.18	1.08	13.9	28,061
Regional Shopping Center	1.37	1.29	0.62	6.30	0.01	0.01	1.47	1.47	0.01	0.37	0.38	—	1,327	1,327	0.08	0.07	0.65	1,350
Government (Civic Center)	0.88	0.81	0.53	5.77	0.02	0.01	1.71	1.72	0.01	0.43	0.44	—	1,501	1,501	0.06	0.06	0.75	1,521
Office Park	2.63	2.42	1.58	17.3	0.05	0.03	5.11	5.14	0.03	1.30	1.32	—	4,493	4,493	0.19	0.18	2.26	4,552
City Park	0.19	0.17	0.11	1.23	< 0.005	< 0.005	0.36	0.37	< 0.005	0.09	0.09	—	320	320	0.01	0.01	0.16	324
Condo/Townhouse	4.17	3.85	2.39	25.9	0.07	0.04	7.45	7.49	0.04	1.89	1.93	—	6,568	6,568	0.29	0.26	3.29	6,657
Apartments Low Rise	3.73	3.44	2.14	23.1	0.06	0.04	6.65	6.69	0.03	1.69	1.72	—	5,869	5,869	0.26	0.24	2.94	5,948
Apartments Mid Rise	2.75	2.54	1.58	17.1	0.05	0.03	4.92	4.94	0.03	1.25	1.27	—	4,336	4,336	0.19	0.17	2.17	4,395
Total	32.0	29.4	18.7	203	0.56	0.32	59.2	59.5	0.30	15.0	15.3	—	52,109	52,109	2.28	2.07	26.2	52,808

4.1.2. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	90.9	83.6	49.4	621	1.71	0.93	173	174	0.87	44.0	44.9	—	173,908	173,908	6.88	6.24	195	176,133
Regional Shopping Center	7.77	7.35	3.25	37.0	0.09	0.05	8.73	8.78	0.05	2.21	2.26	—	8,965	8,965	0.48	0.40	9.80	9,104
Government (Civic Center)	6.90	6.35	3.74	47.1	0.13	0.07	13.2	13.2	0.07	3.34	3.40	—	13,194	13,194	0.52	0.47	14.8	13,363
Office Park	14.7	13.6	8.01	101	0.28	0.15	28.1	28.3	0.14	7.14	7.28	—	28,213	28,213	1.12	1.01	31.6	28,574
City Park	1.05	0.97	0.57	7.17	0.02	0.01	2.00	2.01	0.01	0.51	0.52	—	2,008	2,008	0.08	0.07	2.25	2,034
Condo/Townhouse	23.4	21.6	12.1	150	0.40	0.22	41.0	41.2	0.21	10.4	10.6	—	41,233	41,233	1.70	1.52	46.0	41,775
Apartments Low Rise	20.9	19.3	10.8	134	0.36	0.20	36.6	36.8	0.19	9.29	9.48	—	36,845	36,845	1.52	1.36	41.1	37,329
Apartments Mid Rise	15.4	14.3	8.00	99.2	0.27	0.15	27.1	27.2	0.14	6.86	7.00	—	27,224	27,224	1.12	1.00	30.4	27,582
Total	181	167	95.9	1,197	3.26	1.78	330	332	1.66	83.7	85.4	—	331,590	331,590	13.4	12.1	371	335,895
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	90.2	82.8	54.3	582	1.63	0.93	173	174	0.87	44.0	44.9	—	166,103	166,103	7.25	6.60	5.05	168,257
Regional Shopping Center	7.72	7.28	3.59	36.7	0.08	0.05	8.73	8.78	0.05	2.21	2.26	—	8,576	8,576	0.52	0.42	0.25	8,714
Government (Civic Center)	6.84	6.29	4.12	44.2	0.12	0.07	13.2	13.2	0.07	3.34	3.40	—	12,602	12,602	0.55	0.50	0.38	12,765

Office Park	14.6	13.4	8.81	94.5	0.26	0.15	28.1	28.3	0.14	7.14	7.28	—	26,947	26,947	1.18	1.07	0.82	27,296
City Park	1.04	0.96	0.63	6.72	0.02	0.01	2.00	2.01	0.01	0.51	0.52	—	1,918	1,918	0.08	0.08	0.06	1,943
Condo/Townhouse	23.2	21.4	13.3	142	0.39	0.22	41.0	41.2	0.21	10.4	10.6	—	39,390	39,390	1.80	1.61	1.19	39,917
Apartments Low Rise	20.7	19.1	11.9	127	0.35	0.20	36.6	36.8	0.19	9.29	9.48	—	35,198	35,198	1.61	1.44	1.07	35,669
Apartments Mid Rise	15.3	14.1	8.81	93.7	0.26	0.15	27.1	27.2	0.14	6.86	7.00	—	26,008	26,008	1.19	1.06	0.79	26,355
Total	180	165	106	1,127	3.11	1.78	330	332	1.66	83.7	85.4	—	316,742	316,742	14.2	12.8	9.62	320,916
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	16.2	14.9	9.76	106	0.30	0.17	31.5	31.7	0.16	7.99	8.15	—	27,696	27,696	1.18	1.08	13.9	28,061
Regional Shopping Center	1.37	1.29	0.62	6.30	0.01	0.01	1.47	1.47	0.01	0.37	0.38	—	1,327	1,327	0.08	0.07	0.65	1,350
Government (Civic Center)	0.88	0.81	0.53	5.77	0.02	0.01	1.71	1.72	0.01	0.43	0.44	—	1,501	1,501	0.06	0.06	0.75	1,521
Office Park	2.63	2.42	1.58	17.3	0.05	0.03	5.11	5.14	0.03	1.30	1.32	—	4,493	4,493	0.19	0.18	2.26	4,552
City Park	0.19	0.17	0.11	1.23	< 0.005	< 0.005	0.36	0.37	< 0.005	0.09	0.09	—	320	320	0.01	0.01	0.16	324
Condo/Townhouse	4.17	3.85	2.39	25.9	0.07	0.04	7.45	7.49	0.04	1.89	1.93	—	6,568	6,568	0.29	0.26	3.29	6,657
Apartments Low Rise	3.73	3.44	2.14	23.1	0.06	0.04	6.65	6.69	0.03	1.69	1.72	—	5,869	5,869	0.26	0.24	2.94	5,948
Apartments Mid Rise	2.75	2.54	1.58	17.1	0.05	0.03	4.92	4.94	0.03	1.25	1.27	—	4,336	4,336	0.19	0.17	2.17	4,395
Total	32.0	29.4	18.7	203	0.56	0.32	59.2	59.5	0.30	15.0	15.3	—	52,109	52,109	2.28	2.07	26.2	52,808

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	2,426	2,426	0.47	0.06	—	2,455
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.02	< 0.005	—	102
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	1,444	1,444	0.28	0.03	—	1,461
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	1,853	1,853	0.36	0.04	—	1,875
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,885	1,885	0.37	0.04	—	1,907
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,899	1,899	0.37	0.04	—	1,922
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,557	1,557	0.30	0.04	—	1,576
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,165	11,165	2.17	0.26	—	11,298
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	2,426	2,426	0.47	0.06	—	2,455

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.02	< 0.005	—	102
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	1,444	1,444	0.28	0.03	—	1,461
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	1,853	1,853	0.36	0.04	—	1,875
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,885	1,885	0.37	0.04	—	1,907
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,899	1,899	0.37	0.04	—	1,922
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,557	1,557	0.30	0.04	—	1,576
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,165	11,165	2.17	0.26	—	11,298
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	402	402	0.08	0.01	—	406
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	16.7	16.7	< 0.005	< 0.005	—	16.9
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	239	239	0.05	0.01	—	242
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	307	307	0.06	0.01	—	310
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	312	312	0.06	0.01	—	316

Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	314	314	0.06	0.01	—	318
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	258	258	0.05	0.01	—	261
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,848	1,848	0.36	0.04	—	1,870

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	2,434	2,434	0.47	0.06	—	2,463
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.02	< 0.005	—	102
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	1,446	1,446	0.28	0.03	—	1,464
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	1,856	1,856	0.36	0.04	—	1,878
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,897	1,897	0.37	0.04	—	1,920
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,914	1,914	0.37	0.05	—	1,937
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,570	1,570	0.31	0.04	—	1,588

Total	—	—	—	—	—	—	—	—	—	—	—	—	11,218	11,218	2.18	0.26	—	11,352
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	2,426	2,426	0.47	0.06	—	2,455
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.02	< 0.005	—	102
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	1,444	1,444	0.28	0.03	—	1,461
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	1,853	1,853	0.36	0.04	—	1,875
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,885	1,885	0.37	0.04	—	1,907
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,899	1,899	0.37	0.04	—	1,922
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,557	1,557	0.30	0.04	—	1,576
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,165	11,165	2.17	0.26	—	11,298
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	402	402	0.08	0.01	—	407
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	16.7	16.7	< 0.005	< 0.005	—	16.9
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	239	239	0.05	0.01	—	242

Office Park	—	—	—	—	—	—	—	—	—	—	—	—	307	307	0.06	0.01	—	311
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	313	313	0.06	0.01	—	317
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	316	316	0.06	0.01	—	319
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	259	259	0.05	0.01	—	262
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,853	1,853	0.36	0.04	—	1,875

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																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.08	0.04	0.69	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	821	821	0.07	< 0.005	—	824
Regional Shopping Center	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.2	34.2	< 0.005	< 0.005	—	34.2
Government (Civic Center)	0.18	0.09	1.61	1.35	0.01	0.12	—	0.12	0.12	—	0.12	—	1,921	1,921	0.17	< 0.005	—	1,927
Office Park	0.23	0.11	2.07	1.74	0.01	0.16	—	0.16	0.16	—	0.16	—	2,465	2,465	0.22	< 0.005	—	2,472
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Condo/Townhouse	0.60	0.30	5.10	2.17	0.03	0.41	—	0.41	0.41	—	0.41	—	6,472	6,472	0.57	0.01	—	6,490
Apartments Low Rise	0.47	0.23	4.01	1.71	0.03	0.32	—	0.32	0.32	—	0.32	—	5,087	5,087	0.45	0.01	—	5,101
Apartments Mid Rise	0.21	0.10	1.77	0.75	0.01	0.14	—	0.14	0.14	—	0.14	—	2,241	2,241	0.20	< 0.005	—	2,248
Total	1.76	0.88	15.3	8.32	0.10	1.21	—	1.21	1.21	—	1.21	—	19,042	19,042	1.69	0.04	—	19,095
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.08	0.04	0.69	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	821	821	0.07	< 0.005	—	824
Regional Shopping Center	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.2	34.2	< 0.005	< 0.005	—	34.2
Government (Civic Center)	0.18	0.09	1.61	1.35	0.01	0.12	—	0.12	0.12	—	0.12	—	1,921	1,921	0.17	< 0.005	—	1,927
Office Park	0.23	0.11	2.07	1.74	0.01	0.16	—	0.16	0.16	—	0.16	—	2,465	2,465	0.22	< 0.005	—	2,472
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.60	0.30	5.10	2.17	0.03	0.41	—	0.41	0.41	—	0.41	—	6,472	6,472	0.57	0.01	—	6,490
Apartments Low Rise	0.47	0.23	4.01	1.71	0.03	0.32	—	0.32	0.32	—	0.32	—	5,087	5,087	0.45	0.01	—	5,101
Apartments Mid Rise	0.21	0.10	1.77	0.75	0.01	0.14	—	0.14	0.14	—	0.14	—	2,241	2,241	0.20	< 0.005	—	2,248
Total	1.76	0.88	15.3	8.32	0.10	1.21	—	1.21	1.21	—	1.21	—	19,042	19,042	1.69	0.04	—	19,095
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Strip Mall	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	136	136	0.01	< 0.005	—	136
Regional Shopping Center	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.65	5.65	< 0.005	< 0.005	—	5.67
Government (Civic Center)	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	318	318	0.03	< 0.005	—	319
Office Park	0.04	0.02	0.38	0.32	< 0.005	0.03	—	0.03	0.03	—	0.03	—	408	408	0.04	< 0.005	—	409
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.11	0.05	0.93	0.40	0.01	0.08	—	0.08	0.08	—	0.08	—	1,072	1,072	0.09	< 0.005	—	1,074
Apartments Low Rise	0.09	0.04	0.73	0.31	< 0.005	0.06	—	0.06	0.06	—	0.06	—	842	842	0.07	< 0.005	—	844
Apartments Mid Rise	0.04	0.02	0.32	0.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	371	371	0.03	< 0.005	—	372
Total	0.32	0.16	2.79	1.52	0.02	0.22	—	0.22	0.22	—	0.22	—	3,153	3,153	0.28	0.01	—	3,161

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.08	0.04	0.69	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	821	821	0.07	< 0.005	—	824
Regional Shopping Center	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.2	34.2	< 0.005	< 0.005	—	34.2

Government	0.18	0.09	1.61	1.35	0.01	0.12	—	0.12	0.12	—	0.12	—	1,921	1,921	0.17	< 0.005	—	1,927
Office Park	0.23	0.11	2.07	1.74	0.01	0.16	—	0.16	0.16	—	0.16	—	2,465	2,465	0.22	< 0.005	—	2,472
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.60	0.30	5.10	2.17	0.03	0.41	—	0.41	0.41	—	0.41	—	6,472	6,472	0.57	0.01	—	6,490
Apartments Low Rise	0.47	0.23	4.01	1.71	0.03	0.32	—	0.32	0.32	—	0.32	—	5,087	5,087	0.45	0.01	—	5,101
Apartments Mid Rise	0.21	0.10	1.77	0.75	0.01	0.14	—	0.14	0.14	—	0.14	—	2,241	2,241	0.20	< 0.005	—	2,248
Total	1.76	0.88	15.3	8.32	0.10	1.21	—	1.21	1.21	—	1.21	—	19,042	19,042	1.69	0.04	—	19,095
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.08	0.04	0.69	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	821	821	0.07	< 0.005	—	824
Regional Shopping Center	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.2	34.2	< 0.005	< 0.005	—	34.2
Government (Civic Center)	0.18	0.09	1.61	1.35	0.01	0.12	—	0.12	0.12	—	0.12	—	1,921	1,921	0.17	< 0.005	—	1,927
Office Park	0.23	0.11	2.07	1.74	0.01	0.16	—	0.16	0.16	—	0.16	—	2,465	2,465	0.22	< 0.005	—	2,472
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.60	0.30	5.10	2.17	0.03	0.41	—	0.41	0.41	—	0.41	—	6,472	6,472	0.57	0.01	—	6,490
Apartments Low Rise	0.47	0.23	4.01	1.71	0.03	0.32	—	0.32	0.32	—	0.32	—	5,087	5,087	0.45	0.01	—	5,101

Apartme Mid Rise	0.21	0.10	1.77	0.75	0.01	0.14	—	0.14	0.14	—	0.14	—	2,241	2,241	0.20	< 0.005	—	2,248
Total	1.76	0.88	15.3	8.32	0.10	1.21	—	1.21	1.21	—	1.21	—	19,042	19,042	1.69	0.04	—	19,095
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	136	136	0.01	< 0.005	—	136
Regional Shopping Center	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.65	5.65	< 0.005	< 0.005	—	5.67
Governm ent (Civic Center)	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	318	318	0.03	< 0.005	—	319
Office Park	0.04	0.02	0.38	0.32	< 0.005	0.03	—	0.03	0.03	—	0.03	—	408	408	0.04	< 0.005	—	409
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/T ownhous e	0.11	0.05	0.93	0.40	0.01	0.08	—	0.08	0.08	—	0.08	—	1,072	1,072	0.09	< 0.005	—	1,074
Apartme nts Low Rise	0.09	0.04	0.73	0.31	< 0.005	0.06	—	0.06	0.06	—	0.06	—	842	842	0.07	< 0.005	—	844
Apartme nts Mid Rise	0.04	0.02	0.32	0.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	371	371	0.03	< 0.005	—	372
Total	0.32	0.16	2.79	1.52	0.02	0.22	—	0.22	0.22	—	0.22	—	3,153	3,153	0.28	0.01	—	3,161

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	91.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	24.4	22.9	2.03	224	0.01	0.16	—	0.16	0.12	—	0.12	—	663	663	0.03	0.01	—	665
Total	24.4	114	2.03	224	0.01	0.16	—	0.16	0.12	—	0.12	0.00	663	663	0.03	0.01	—	665
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	91.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	91.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	16.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.19	2.06	0.18	20.2	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.1	54.1	< 0.005	< 0.005	—	54.3
Total	2.19	18.8	0.18	20.2	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	54.1	54.1	< 0.005	< 0.005	—	54.3

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	91.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	91.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	91.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	91.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	16.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	16.7	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	84.1	141	225	8.65	0.21	—	503
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	3.50	5.86	9.36	0.36	0.01	—	20.9
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	71.3	118	190	7.33	0.18	—	425
Office Park	—	—	—	—	—	—	—	—	—	—	—	81.8	136	218	8.42	0.20	—	488
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	66.1	114	180	6.80	0.16	—	399
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	78.8	136	214	8.10	0.20	—	475
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	66.5	114	181	6.84	0.16	—	401
Total	—	—	—	—	—	—	—	—	—	—	—	452	765	1,217	46.5	1.12	—	2,713
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	84.1	141	225	8.65	0.21	—	503
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	3.50	5.86	9.36	0.36	0.01	—	20.9
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	71.3	118	190	7.33	0.18	—	425

Office Park	—	—	—	—	—	—	—	—	—	—	—	81.8	136	218	8.42	0.20	—	488
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	66.1	114	180	6.80	0.16	—	399
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	78.8	136	214	8.10	0.20	—	475
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	66.5	114	181	6.84	0.16	—	401
Total	—	—	—	—	—	—	—	—	—	—	—	452	765	1,217	46.5	1.12	—	2,713
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	13.9	23.3	37.3	1.43	0.03	—	83.3
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.58	0.97	1.55	0.06	< 0.005	—	3.46
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	11.8	19.6	31.4	1.21	0.03	—	70.4
Office Park	—	—	—	—	—	—	—	—	—	—	—	13.5	22.5	36.1	1.39	0.03	—	80.9
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	10.9	18.8	29.8	1.13	0.03	—	66.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	13.0	22.5	35.5	1.34	0.03	—	78.7
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	11.0	18.9	29.9	1.13	0.03	—	66.4
Total	—	—	—	—	—	—	—	—	—	—	—	74.8	127	201	7.70	0.19	—	449

4.4.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	84.1	141	225	8.65	0.21	—	503
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	3.50	5.86	9.36	0.36	0.01	—	20.9
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	71.3	118	190	7.33	0.18	—	425
Office Park	—	—	—	—	—	—	—	—	—	—	—	81.8	136	218	8.42	0.20	—	488
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	66.1	114	180	6.80	0.16	—	399
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	78.8	136	214	8.10	0.20	—	475
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	66.5	114	181	6.84	0.16	—	401
Total	—	—	—	—	—	—	—	—	—	—	—	452	765	1,217	46.5	1.12	—	2,713
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	84.1	141	225	8.65	0.21	—	503

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	3.50	5.86	9.36	0.36	0.01	—	20.9
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	71.3	118	190	7.33	0.18	—	425
Office Park	—	—	—	—	—	—	—	—	—	—	—	81.8	136	218	8.42	0.20	—	488
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	66.1	114	180	6.80	0.16	—	399
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	78.8	136	214	8.10	0.20	—	475
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	66.5	114	181	6.84	0.16	—	401
Total	—	—	—	—	—	—	—	—	—	—	—	452	765	1,217	46.5	1.12	—	2,713
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	13.9	23.3	37.3	1.43	0.03	—	83.3
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.58	0.97	1.55	0.06	< 0.005	—	3.46
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	11.8	19.6	31.4	1.21	0.03	—	70.4
Office Park	—	—	—	—	—	—	—	—	—	—	—	13.5	22.5	36.1	1.39	0.03	—	80.9
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	10.9	18.8	29.8	1.13	0.03	—	66.0

Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	13.0	22.5	35.5	1.34	0.03	—	78.7
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	11.0	18.9	29.9	1.13	0.03	—	66.4
Total	—	—	—	—	—	—	—	—	—	—	—	74.8	127	201	7.70	0.19	—	449

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	335	0.00	335	33.5	0.00	—	1,173
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.8
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	575	0.00	575	57.5	0.00	—	2,012
Office Park	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	12.0	0.00	—	421
City Park	—	—	—	—	—	—	—	—	—	—	—	2.75	0.00	2.75	0.27	0.00	—	9.63
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	391	0.00	391	39.1	0.00	—	1,369
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	466	0.00	466	46.6	0.00	—	1,631

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	394	0.00	394	39.4	0.00	—	1,378
Total	—	—	—	—	—	—	—	—	—	—	—	2,299	0.00	2,299	230	0.00	—	8,043
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	335	0.00	335	33.5	0.00	—	1,173
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.8
Governm ent (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	575	0.00	575	57.5	0.00	—	2,012
Office Park	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	12.0	0.00	—	421
City Park	—	—	—	—	—	—	—	—	—	—	—	2.75	0.00	2.75	0.27	0.00	—	9.63
Condo/T ownhous e	—	—	—	—	—	—	—	—	—	—	—	391	0.00	391	39.1	0.00	—	1,369
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	466	0.00	466	46.6	0.00	—	1,631
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	394	0.00	394	39.4	0.00	—	1,378
Total	—	—	—	—	—	—	—	—	—	—	—	2,299	0.00	2,299	230	0.00	—	8,043
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	55.5	0.00	55.5	5.55	0.00	—	194
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	2.31	0.00	2.31	0.23	0.00	—	8.07

Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	95.2	0.00	95.2	9.52	0.00	—	333
Office Park	—	—	—	—	—	—	—	—	—	—	—	19.9	0.00	19.9	1.99	0.00	—	69.7
City Park	—	—	—	—	—	—	—	—	—	—	—	0.46	0.00	0.46	0.05	0.00	—	1.59
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	64.8	0.00	64.8	6.48	0.00	—	227
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	77.2	0.00	77.2	7.71	0.00	—	270
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	65.2	0.00	65.2	6.52	0.00	—	228
Total	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.0	0.00	—	1,332

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	335	0.00	335	33.5	0.00	—	1,173
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.8
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	575	0.00	575	57.5	0.00	—	2,012

Office Park	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	12.0	0.00	—	421
City Park	—	—	—	—	—	—	—	—	—	—	—	2.75	0.00	2.75	0.27	0.00	—	9.63
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	391	0.00	391	39.1	0.00	—	1,369
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	466	0.00	466	46.6	0.00	—	1,631
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	394	0.00	394	39.4	0.00	—	1,378
Total	—	—	—	—	—	—	—	—	—	—	—	2,299	0.00	2,299	230	0.00	—	8,043
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	335	0.00	335	33.5	0.00	—	1,173
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.8
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	575	0.00	575	57.5	0.00	—	2,012
Office Park	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	12.0	0.00	—	421
City Park	—	—	—	—	—	—	—	—	—	—	—	2.75	0.00	2.75	0.27	0.00	—	9.63
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	391	0.00	391	39.1	0.00	—	1,369
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	466	0.00	466	46.6	0.00	—	1,631

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	394	0.00	394	39.4	0.00	—	1,378
Total	—	—	—	—	—	—	—	—	—	—	—	2,299	0.00	2,299	230	0.00	—	8,043
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	55.5	0.00	55.5	5.55	0.00	—	194
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	2.31	0.00	2.31	0.23	0.00	—	8.07
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	95.2	0.00	95.2	9.52	0.00	—	333
Office Park	—	—	—	—	—	—	—	—	—	—	—	19.9	0.00	19.9	1.99	0.00	—	69.7
City Park	—	—	—	—	—	—	—	—	—	—	—	0.46	0.00	0.46	0.05	0.00	—	1.59
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	64.8	0.00	64.8	6.48	0.00	—	227
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	77.2	0.00	77.2	7.71	0.00	—	270
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	65.2	0.00	65.2	6.52	0.00	—	228
Total	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.0	0.00	—	1,332

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.69	3.69
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.46	0.46
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.58	0.58
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.46	7.46
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.88	8.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79	6.79
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.69	3.69
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.46	0.46

Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.58	0.58
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.46	7.46
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.88	8.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79	6.79
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.23	1.23
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.47	1.47
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.63	4.63

4.6.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.69	3.69
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.46	0.46
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.58	0.58
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.46	7.46
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.88	8.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79	6.79
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.69	3.69

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.46	0.46
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.58	0.58
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.46	7.46
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.88	8.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79	6.79
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.23	1.23

Apartment Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.47	1.47
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.63	4.63

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.7.2. Mitigated

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

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

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

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Strip Mall	29,613	29,613	29,613	10,808,709	245,789	245,789	245,789	89,712,877
Regional Shopping Center	2,955	2,955	2,955	1,078,575	11,061	12,364	12,364	4,173,039
Government (Civic Center)	2,247	0.00	0.00	585,742	18,648	0.00	0.00	4,861,689
Office Park	4,804	4,804	4,804	1,753,504	39,874	39,874	39,874	14,554,178
City Park	342	342	342	124,798	2,838	2,838	2,838	1,035,834
Condo/Townhouse	7,856	7,856	7,856	2,867,440	58,096	58,096	58,096	21,205,141
Apartments Low Rise	7,020	7,020	7,020	2,562,300	51,914	51,914	51,914	18,948,586
Apartments Mid Rise	5,187	5,187	5,187	1,893,255	38,359	38,359	38,359	14,000,900

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Strip Mall	29,613	29,613	29,613	10,808,709	245,789	245,789	245,789	89,712,877
Regional Shopping Center	2,955	2,955	2,955	1,078,575	11,061	12,364	12,364	4,173,039

Government (Civic Center)	2,247	0.00	0.00	585,742	18,648	0.00	0.00	4,861,689
Office Park	4,804	4,804	4,804	1,753,504	39,874	39,874	39,874	14,554,178
City Park	342	342	342	124,798	2,838	2,838	2,838	1,035,834
Condo/Townhouse	7,856	7,856	7,856	2,867,440	58,096	58,096	58,096	21,205,141
Apartments Low Rise	7,020	7,020	7,020	2,562,300	51,914	51,914	51,914	18,948,586
Apartments Mid Rise	5,187	5,187	5,187	1,893,255	38,359	38,359	38,359	14,000,900

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	982
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	1170
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	988
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	982
Conventional Wood Stoves	0

Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	1170
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	988
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

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)

—	—	—	—	—

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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)
Strip Mall	5,220,493	170	0.0330	0.0040	2,562,947
Regional Shopping Center	217,059	170	0.0330	0.0040	106,563
Government (Civic Center)	3,106,885	170	0.0330	0.0040	5,995,447
Office Park	3,986,114	170	0.0330	0.0040	7,692,123
City Park	0.00	170	0.0330	0.0040	0.00
Condo/Townhouse	4,055,026	170	0.0330	0.0040	20,194,567
Apartments Low Rise	4,087,093	170	0.0330	0.0040	15,871,531
Apartments Mid Rise	3,350,179	170	0.0330	0.0040	6,993,495

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Strip Mall	5,220,493	170	0.0330	0.0040	2,562,947
Regional Shopping Center	217,059	170	0.0330	0.0040	106,563
Government (Civic Center)	3,106,885	170	0.0330	0.0040	5,995,447
Office Park	3,986,114	170	0.0330	0.0040	7,692,123
City Park	0.00	170	0.0330	0.0040	0.00
Condo/Townhouse	4,055,026	170	0.0330	0.0040	20,194,567
Apartments Low Rise	4,087,093	170	0.0330	0.0040	15,871,531
Apartments Mid Rise	3,350,179	170	0.0330	0.0040	6,993,495

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	43,870,043	885,068
Regional Shopping Center	1,824,036	36,793
Government (Civic Center)	37,193,742	279,785
Office Park	42,692,713	358,959
City Park	0.00	1,971
Condo/Townhouse	34,500,680	1,901,250
Apartments Low Rise	41,105,698	2,265,236
Apartments Mid Rise	34,711,478	1,732,407

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	43,870,043	885,068
Regional Shopping Center	1,824,036	36,793
Government (Civic Center)	37,193,742	279,785
Office Park	42,692,713	358,959
City Park	0.00	1,971
Condo/Townhouse	34,500,680	1,901,250
Apartments Low Rise	41,105,698	2,265,236
Apartments Mid Rise	34,711,478	1,732,407

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	622	—
Regional Shopping Center	25.9	—
Government (Civic Center)	1,067	—
Office Park	223	—
City Park	5.10	—
Condo/Townhouse	726	—
Apartments Low Rise	865	—
Apartments Mid Rise	731	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	622	—
Regional Shopping Center	25.9	—

Government (Civic Center)	1,067	—
Office Park	223	—
City Park	5.10	—
Condo/Townhouse	726	—
Apartments Low Rise	865	—
Apartments Mid Rise	731	—

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
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Government (Civic Center)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government (Civic Center)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Government (Civic Center)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government (Civic Center)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.4	annual days of extreme heat
Extreme Precipitation	3.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth

Wildfire	7.98	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack 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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack 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	64.7
AQ-PM	45.1
AQ-DPM	25.7
Drinking Water	10.9
Lead Risk Housing	17.5
Pesticides	0.00
Toxic Releases	25.6
Traffic	48.6

Effect Indicators	—
CleanUp Sites	37.8
Groundwater	40.8
Haz Waste Facilities/Generators	84.7
Impaired Water Bodies	77.3
Solid Waste	9.67
Sensitive Population	—
Asthma	35.6
Cardio-vascular	30.2
Low Birth Weights	18.6
Socioeconomic Factor Indicators	—
Education	43.4
Housing	19.8
Linguistic	10.4
Poverty	16.6
Unemployment	28.2

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	66.11061209
Employed	1.296034903
Median HI	58.75785962
Education	—
Bachelor's or higher	47.36301809
High school enrollment	17.87501604

Preschool enrollment	14.26921596
Transportation	—
Auto Access	76.73553189
Active commuting	33.56858719
Social	—
2-parent households	27.65302194
Voting	75.72180162
Neighborhood	—
Alcohol availability	42.80764789
Park access	24.26536635
Retail density	59.4636212
Supermarket access	60.82381625
Tree canopy	8.135506224
Housing	—
Homeownership	43.19260875
Housing habitability	69.11330681
Low-inc homeowner severe housing cost burden	75.55498524
Low-inc renter severe housing cost burden	83.49801104
Uncrowded housing	47.26036186
Health Outcomes	—
Insured adults	74.51559091
Arthritis	0.0
Asthma ER Admissions	59.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0

Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	1.7
Cognitively Disabled	36.6
Physically Disabled	78.7
Heart Attack ER Admissions	49.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	48.8
Elderly	83.1
English Speaking	76.6
Foreign-born	6.0
Outdoor Workers	58.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.9
Traffic Density	49.3

Traffic Access	51.5
Other Indices	—
Hardship	31.7
Other Decision Support	—
2016 Voting	76.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	18.0
Healthy Places Index Score for Project Location (b)	34.0
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
Land Use	Land Uses and acreages based on Town Center Specific Plan Buildout Summary (9-7-2023 Draft).
Operations: Vehicle Data	Trip generation rates provided by Intersecting Metrics

Operations: Hearths	No hearths

Appendix B

Sustainable Santee Plan Checklist

Sustainable Santee Action Plan Consistency and Implementation Tracking Checklist

The Sustainable Santee Action Plan Project Consistency Checklist (Checklist) is intended to be a tool for development projects to demonstrate consistency with Santee's (City's) Sustainable Santee Action Plan, which is a qualified greenhouse gas (GHG) emissions reduction plan in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. This Checklist has been developed as part of the Sustainable Santee Action Plan implementation and monitoring process and will support the achievement of individual GHG reduction measures as well as the City's overall GHG reduction goals. In addition, this Checklist will further the City's sustainability goals and policies that encourage sustainable development and aim to conserve and reduce the consumption of resources, such as energy and water, among others.

CEQA Guidelines Section 15183.5 allows lead agencies to analyze the impacts associated with GHG emissions at a programmatic level in plan-level documents such as Climate Action Plans or sustainability plans, so that project-level environmental documents may tier from the programmatic review. Projects that meet the requirements of this Checklist will be deemed to be consistent with the Sustainable Santee Action Plan and will be found to have a less than significant contribution to cumulative GHG (i.e., the project's incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b). Projects that do not meet the requirements in this Checklist will be deemed to be inconsistent with the Sustainable Santee Action Plan and must prepare a project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. This GHG Checklist can be updated to reflect adoption of new GHG reduction strategies or to comply with any changes and updates in the Plan or local, State or federal regulations.

1. Project Information	
Contact Information	
Project No./Name:	Santee Town Center Specific Plan (TCSP) Sites 16A, 16B, 20A, & 20B
Address:	Civic Center Site I, Civic Center Site II, 9200 Magnolia Ave.
Applicant Name:	City of Santee
Contact Information:	Michael Coyne, Principal Planner
	10601 Magnolia Ave., Bldg 3, Santee, CA 92071
	619-258-4100 x160 / mcoyne@cityofsanteeca.gov
Project Description Characteristics	
1. What is the size of the Project (acres)?	37.47 acres total
2. Identify all Applicable Proposed Land uses:	
a. Residential-Single Family (Indicate number of single-family units)	
b. Residential-Multifamily (Indicate number of multifamily units)	1,480 dwelling units
c. Commercial (total square footage)	
d. Industrial (total square footage)	
e. Other (describe)	
3. Provide a brief description of the project proposed:	See below

The City Council adopted the Housing Element (2021-2029 Sixth Cycle) on May 11, 2022. The HE was prepared in compliance with State housing law as determined by the California Department of Housing and Community Development on December 6, 2022. The HE included a Sites Inventory map and table (Figure C-1 and Table C-1 of the HE), that included a series of sites that are currently undeveloped or underutilized. The identified sites provide an opportunity for the City to meet its Regional Housing Needs Allocation housing production goals. Four of the strategic undeveloped housing sites are identified as 16A, 16B, 20A, and 20B. Sites 16A and 16B are located just north of Mission Gorge Road and east of Riverview Parkway in the Santee Town Center. The area surrounding the sites is primarily developed with Santee Trolley Square immediately west of the site, the Las Colinas Detention Facility to the east, and open space associated with the San Diego River to the north. A portion of Site 16A is located within the Airport Safety Zone 4 as designated in the Gillespie Field Airport Land Use Compatibility Plan (ALUCP). Sites 20A and 20B are located just west of Magnolia Avenue, south of Riverview Parkway, and east of Edgemoor Drive. Sites 20A and 20B surround the Historic Edgemoor Polo or Dairy Barn. To the west of Site 20A is the Las Colinas Detention Facility, to the east is a gated 55+ manufactured home community. Site 20B is bordered by single-family residential homes to the south, multifamily residential to the east, and Las Colinas and Riverview Office Park to the west. A portion of the site is located within the Gillespie Field ALUCP Airport Safety Zone 4. The sites are proposed to be developed with residential uses.

The HE Implementation Program identified specific sites that would require rezoning to allow for residential uses, and/or to allow for the estimated housing capacity included in the HE. The HE proposed zoning changes for sites 16A, 16B, 20A, and 20B. As part of the realization of the Housing Element Implementation Program, the City analyzed and approved the re-zone of the four above-mentioned sites and adopted the rezoning on October 26, 2022.

To further advance the housing production in Santee, City staff applied for a Housing Acceleration Program grant from the San Diego Association of Governments, which was awarded. The grant provides funding for project-level analysis of HE sites 16A, 16B, 20A, and 20B. The amended TCSP will include graphics and data that illustrate site planning and development concepts for each of these sites based on the maximum allowable density allowed by zoning.

2. Determining Land Use Consistency		
Checklist Item		
As the first step in determining the consistency with the Sustainable Santee Action Plan for the discretionary development projects, this section allows the City to determine the project's consistency with the land use assumptions used in the Plan.		
	Yes	**No**
1. Is the proposed project consistent with the existing General Plan and land use zoning designations? OR	✓	
2. If the proposed project is not consistent with the existing land use plan and zoning designations, does the project include a land use plan and/or zoning designation amendment that is identified in the Sustainable Santee Action Plan Land Use Buffer (see Appendix A, Table 11)?		
3. If the proposed project is not consistent with the existing land use plan, zoning designations, or Land Use Buffer, does the project include a land use plan and/or zoning designation ammendment that will result in an equivalent or less GHG-intensive project when compared to the existing designations?		

Notes:

For questions 1, if the answer is **Yes**, proceed to the Sustainable Santee Action Plan Consistency Checklist. If the answer is **No**, procced to question 2.

For question 2, if the answer is **Yes**, proceed to the Sustainable Santee Action Plan Consistency Checklist. If the answer is **No**, proceed to question 3.

For question 3, if the answer is **Yes** provide estimated project emissions under both existing and proposed designation (s) for comparison. Compare the maximum buildout of the existing designation and the maximum buildout of the proposed designation. If the answer of question 3 is **No** then, in accordance with the City's Significance Determination Thresholds, the project's GHG impact may be significant. The project must nonetheless incorporate each of the applicable measures identified in the Checklist to mitigate cumulative GHG emissions impacts unless the decision maker finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091.

Sustainable Santee Action Plan CEQA Project Consistency Checklist					Notes
Greenhouse Gas Reduction Measure	**Measure Applicability**				This checklist is to be filled out by the applicant
	Yes	**No**	**N/A**	**Description**	
Emissions Measures Category: Energy Efficiency					
Land Use Sector-Residential					Measure 1.1 is not on checklist because it focuses on minor residental alterations not subject to CEQA
Goal 1. Increase Energy Efficiency in Existing Residential Units					
Measure 1.2. For existing Residential Unit Permit for Major Modifications (more than 30% of dwelling unit size, including bathroom and kitchen) that is considered a Project under CEQA must implement energy efficiency retrofits recommended from City Energy Audit and explain the energy efficiency retrofits implemented.			✔	The project does not include existing residential uses.	Measure 1.2 only applies if alteration is subject to CEQA
Goal 2. Increase Energy Efficiency in the New Residential Units					
Measure 2.1. New residential construction meet or exceed California Green Building Standards Tier 2 Voluntary Measures, such as obtaining green building ratings including LEED, Build it Green, or Energy Star Certified building certifications in scoring development and explain the measures implemented.	✔			Draft Environmental Impact Report (DEIR) Mitigation Measure (MM) GHG-1 requires implementation of this measure	
Land Use Sector-Commercial					Measure 3.1 is not on checklist because it focuses on minor alterations which are not subject to CEQA
Goal 3. Increase Energy Efficiency in Existing Commercial Units					
Measure 3.2. For existing commercial units of 10,000 sq. ft. or more seeking building permits for modifications representing 30% or more sq. ft, and considered a Project under CEQA must implement energy efficiency retrofits recommended by the City to meet California Green Building Standards Tier 1 Voluntary Measures and explain the retrofits implemented.			✔	The project does not include existing commercial or industrial uses.	Measure 3.2 only applies if alteration is subject to CEQA
Goal 4. Increase Energy Efficiency in New Commercial Units					
Measure 4.1. New commercial units meet or exceed California Green Building Standards Tier 2 Voluntary Measures such as obtain green building ratings including: LEED, Build it Green, or Energy Star Certified buildings certifications in scoring development and explain the measures implemented.			✔	The project does not include new commercial or industrial uses.	
Emissions Measures Category: Advanced Goals Measures					
Land Use Sector-Commercial					
Goal 5. Decrease Energy Demand through Reducing Urban Heat Island Effect					
Measure 5.1. Project utilizes tree planting for shade and energy efficiency such as tree planting in parking lots and streetscapes.	✔			DEIR MM GHG-2 requires implementation of this measure.	
Measure 5.2. Project uses light-reflecting surfaces such as enhanced cool roofs on commercial buildings.			✓	The project does not include new commercial buildings.	
Emissions Measures Category: Transportation					
Land Use Sector-Residential and Commercial					
Goal 6. Decrease GHG Emissions through a Reduction in VMT					
Measure 6.1. Proposed project streets include sidewalks, crosswalks, and other infrastructure that promotes non-motorized transportation options.			✓	The project would not include street work.	
Measure 6.2. Proposed project installs bike paths to improve bike transit.			✓	The project would not include street work.	

Land Use Sector-Residential and Commercial **Goal 7: Increase Use of Electric Vehicles**					
Measure 7.1. Install electric vehicle chargers in all new residential and commercial developments.					
a. For new Single-Family Residential, install complete 40 Amp electrical service and one e-charger.			✓	The project does not include single-family residential uses.	
b. For new Multifamily Residential, install e-chargers for 13 percent of total parking.	✔			DEIR MM GHG-3 requires implementation of this measure.	
c. For new Office Space, Regional Shopping Centers, and Movie Theaters, install e-chargers for 5 percent of total parking spaces.			✓	The project does not include office uses, regional shopping centers, or movie theaters.	
d. For new Industrial and other Land Uses employing 200 or more employees, install e-charges for 5 percent of total parking spaces.			✓	The project does not include new industrial or other land uses employing 200 or more employees.	
Land Use Sector-Residential and Commercial **Goal 8. Improve Traffic Flow**					
Measure 8.1. Implement traffic flow improvement program.					Projects that include traffic controls need to show consistency with one of these
a. Install smart traffic signals at intersections warranting a traffic signal, OR			✓	The project would not require the installation of new traffic signals.	
b. Install roundabout.			✓	The project would not require the installation of a roundabout.	
Emissions Measures Category: Solid Waste **Land Use Sector-Residential and Commercial** **Goal 9: Decrease GHG Emissions through Reducing Solid Waste Generation**					
Measure 9.1. Reduce waste at landfills.	✔			DEIR MM GHG-4 requires implementation of this measure.	
waste.					
Emissions Measures Category: Clean Energy **Land Use Sector-Residential and Commercial** **Goal 10. Decrease GHG Emissions through Increased Clean Energy Use**					
Measure 10.1. Increase distributed energy generation within City of Santee by implementing the following applicable photovoltaic solar systems:					
a. Single-family residential to install at least 2kW per unit of PV solar systems, unless the installation is infeasible due to poor solar resources established in a solar feasibility study prepared by a qualified solar consultant submitted with an application			✓	The project does not include single-family residential uses.	
b. Multifamily residential to install at least 1kW per unit of PV solar systems, unless the installation is infeasible due to poor solar resources established in a solar feasibility study prepared by a qualified solar consultant submitted with an applicant's formal project submittal to City.	✓			DEIR MM GHG-5 requires implementation of this measure.	
c. On commercial buildings, install at least 2 kW per square foot of building area (e.g., 2,000 sq. ft. = 3 kW) unless the installation is infeasible due to poor solar resources.			✓	The project does not include commercial buildings.	