



Appendix D

GREENHOUSE GAS EMISSIONS TECHNICAL REPORT



San Ysidro Community Plan Update and San Ysidro Historic Village Specific Plan

Greenhouse Gas Emissions Technical Report

March 2016
(Revised July 2016)

Prepared for:
City of San Diego
Planning Department
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San Diego, CA 92101

Prepared by:
HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

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LIST OF ACRONYMS

AB	Assembly Bill
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emission Estimator Model
CALGreen	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
CEUS	California Commercial End Use Survey
CFCs	chlorofluorocarbons
CH ₄	methane
CO ₂	carbon dioxide
CO ₂ e	CO ₂ -equivalent
EO	Executive Order
EPIC	University of San Diego School of Law, Energy Policy Initiative Center
°F	Fahrenheit
GHG	greenhouse gas
GWP	Global Warming Potential
HFCs	hydrofluorocarbons
HVAC	heating, ventilation, and air conditioning
IPCC	United Nations Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
MMT	million metric tons
mpg	miles per gallon
MPOs	Metropolitan Planning Organizations
MT	metric tons
N ₂ O	nitrous oxide
NASA	National Aeronautics and Space Administration
NHTSA	National Highway Traffic Safety Administration
NOAA	National Oceanic and Atmospheric Administration
NO _x	nitrogen oxides

LIST OF ACRONYMS (cont.)

PFCs	perfluorocarbons
ppm	parts per million
RASS	Residential Appliance Saturation Survey
RCP	Regional Comprehensive Plan
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SDG&E	San Diego Gas and Electric
SF	square feet
SF ₆	sulfur hexaflouride
SYCPU	San Ysidro Community Plan Update
SYHVSP	San Ysidro Historic Village Specific Plan
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled
VOC	volatile organic compound

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EXECUTIVE SUMMARY

This report evaluates the potential greenhouse gas (GHG) emission impacts associated with the San Ysidro Community Plan Update (SYCPU or “Project”) and the San Ysidro Historic Village Specific Plan (SYHVP) which is included within the SYCPU area. An assessment was made to estimate the total GHG emissions that would be emitted as a result of full development of the SYCPU inclusive of the SYHVP. Operational sources of GHG emissions include area, energy, transportation, water use, and solid waste.

For the purposes of determining significance associated with GHG emissions, an inventory was developed based on the land use designations associated with the adopted community plan using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2. Emissions from the proposed SYCPU were then compared with those associated with the adopted community plan. Emissions associated with full buildout of the adopted community plan were estimated to be 444,390462,352 metric tons (MT) of carbon dioxide equivalent (CO₂e) per year.

SYCPU

Using CalEEMod, the SYCPU emissions would total 395,942447,248 MT CO₂e. This represents a reduction of 48,44815,105 MT CO₂e per year when compared to the inventory prepared for the adopted community plan.

By achieving a reduction over the adopted community plan, the SYCPU would help reduce the City’s overall GHG emissions. While subsequent projects under the SYCPU would be required to implement GHG-reducing features to achieve GHG emissions below threshold levels, based either on individual project-level GHG analyses or demonstrated compliance with measures in the City’s adopted Climate Action Plan, at the plan level GHG emission impacts would be less than significant.

With regard to the Project’s consistency with local and state plans and policies aimed at reducing GHG emissions, new development proposed under the SYCPU would be required to comply with the 2013–2016 Title 24 Energy Code; Assembly Bill (AB) 341, which requires 75 percent diversion of on-going operational waste through reuse and recycling; and the 2013 California Green Building Standards Code (CALGreen), which requires the reduction of potable water use and wastewater generation by 20 percent. The SYCPU would be consistent with the California Air Resources Board (CARB) Climate Change Scoping Plan measures through incorporation of these stricter building and appliance standards. The proposed SYCPU would be consistent with the goals of the Regional Comprehensive Plan (RCP) developed by the San Diego Association of Governments (SANDAG) to develop compact, walkable communities close to transit connections and consistent with smart growth principles. The proposed SYCPU is intended to further express City of San Diego’s General Plan policies in the proposed SYCPU area through the provision of site-specific recommendations that implement city-wide goals and policies, address community needs, and guide zoning. The two documents work together to establish the framework for growth and development in the proposed SYCPU area. The proposed SYCPU contains eight elements, each providing neighborhood-specific goals and recommendations. These goals and recommendations are consistent with development design guidelines, other mobility and civic guidelines, incentives, and programs in accordance with the general goals

stated in the General Plan. The Project would also support the applicable policies included in the City of San Diego's Climate Action Plan. The level of impacts associated with potential plan conflict would, therefore, be less than significant.

SYHVSP

As the land uses which would occur within the SYHVSP would reflect the land use designations applied to the Specific Plan area by the SYCPU, the GHG emissions generated by future development of the SYHVSP are accounted for in the emissions evaluate for the SYCPU. As with general development within the SYCPU, new development within the SYHVSP would comply with the 2013–2016 Title 24 Energy Code; AB 341; and the 2013 CALGreen Code. Furthermore, the emphasis of the SYCPU on encouraging walking and biking are some of the fundamental principles of the SYHVSP. Thus, GHG emissions related to future development of the SYHVSP would be less than significant.

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report analyzes potential greenhouse gas (GHG) impacts associated with the San Ysidro Community Plan Update (SYCPU), and includes an evaluation of existing conditions in the Project vicinity and an evaluation of Project operational impacts. The analysis of impacts and report is prepared in accordance with the requirements of the California Environmental Quality Act (CEQA).

1.2 PROJECT DESCRIPTION

The proposed Project consists of two components: (1) the SYCPU, and (2) the San Ysidro Historic Village Specific Plan (SYHVP).

1.2.1 SYCPU

The SYCPU is a comprehensive update to the current community plan, which was adopted in 1990. The San Ysidro Community Plan covers a total of 1,863 acres within the southern tip of the City of San Diego, adjacent to Otay Mesa-Nestor, Otay Mesa, the Tijuana River Valley, and the international border with Mexico (see Figures 1, *Site Vicinity Map*, and 2, *Project Vicinity Map [Aerial Photograph]*, respectively).

The SYCPU includes the following eight individual elements intended to guide development: Land Use; Mobility; Urban Design; Economic Prosperity; Public Facilities, Services & Safety; Recreation; Conservation; and Historic Preservation. Each element would be updated to bring the community plan into conformance with the City of San Diego's General Plan as well as embrace current urban planning and sustainability concepts.

The **Land Use Element** is designed to guide future development within the community. It establishes land use designations for each portion of the community (see Figure 3, *Land Use Plan*). The majority of the plan area (~~41–34~~ percent) would be designated for residential uses. Commercial uses would comprise ~~18–14~~ percent. Industrial development would comprise 2 percent of the community plan area. A total of ~~41–9~~ percent of the plan area would be designated for institutional uses. Parks and Open Space would cover ~~5–4~~ and ~~43–9~~ percent of the area, respectively. The balance would be occupied by transportation facilities.

The **Mobility Element** is intended to improve mobility throughout the community through the development of a balanced multi-modal transportation network. The Element recommends future improvements to specific roadway segments ranging from restriping to new roadway connections. The Element also contains a number of policies designed to encourage the use of public transit including promoting pedestrian movement in the vicinity of transit and by enhancing existing bus and trolley stops.

The **Urban Design Element** establishes goals and policies that enhance the urban fabric of San Ysidro while retaining the historic elements that contribute to the overall character of the community.

The **Economic Prosperity Element** envisions a strategic approach that is focused on increasing opportunities for densification of residential and commercial development in selected parts of the community, while protecting the existing strong neighborhoods through enhancement of neighborhood villages.

The **Public Facilities, Services & Safety Element** identifies existing facilities and services, and addresses the capacity and needs for future services including potential sites and desired characteristics for future facilities.

The **Recreation Element** is intended to assure that the recreational needs of the community are met. The Element establishes goals and policies for population-based parks and recreation facilities within the community. In addition, the Element establishes goals and policies related to open space and resource-based parks.

The **Conservation Element** contains policies designed to meet the City's sustainable development goals in areas that have been identified as suitable for development. The Conservation Element also addresses open space and habitat protection.

The **Historic Preservation Element** contains specific recommendations to address the history and cultural resources, unique to San Ysidro, in order to encourage protection and appreciation of these resources.

1.2.2 SYHVSP

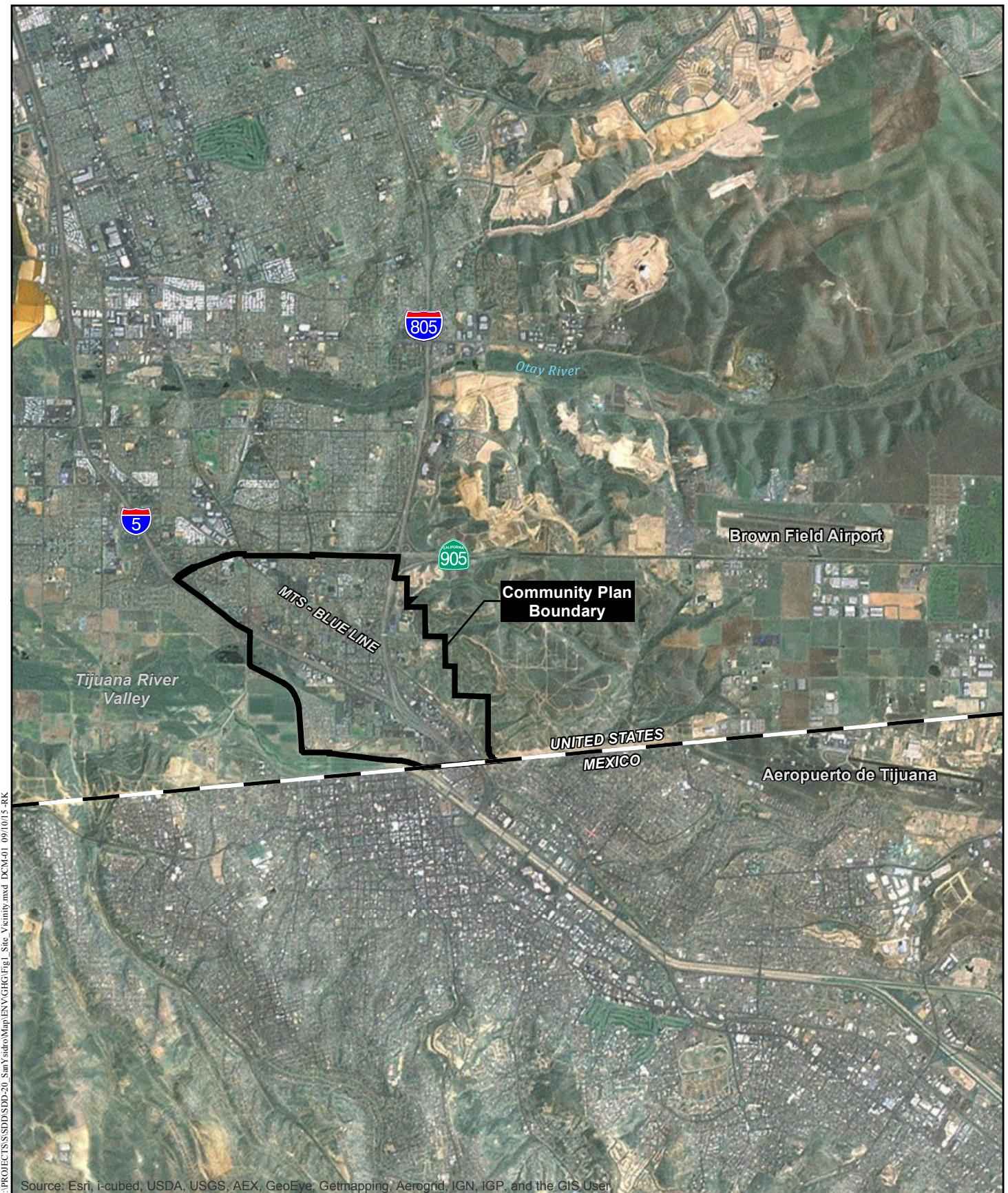
The SYHVSP, and identified on Figure 3, is a comprehensive planning document that will implement the vision for the SYCPU for this Specific Plan Area. The SYHVSP covers approximately 112 acres, and is bounded by Beyer Boulevard to the north, Interstate (I-) 5 to the south, I-805 to the east, and Smythe Avenue to the west.

The overall goal of the Specific Plan is to create an attractive, intensified urban environment with a mix of land uses surrounding the Beyer Trolley Station and along San Ysidro Boulevard, while preserving the low-scale single- and multi-family character of the residential areas.

The **Land Use Component** of the Specific Plan includes guidelines intended to: (1) preserve the historic character of the area, (2) attract community-oriented development, (3) promote alternate forms of transportation (e.g. walking and biking), and (4) focus increased residential density on major transportation corridors and near transit. The Specific Plan Area includes the following five land use designations, as specified by the SYCPU: Low-Medium Density Residential, Medium Density Residential, Community Commercial (Residential Permitted), Institutional, and Park.

The **Mobility Component** of the Specific Plan sets forth a number of policies and guidelines to promote mobility including (1) install new, and widen existing, sidewalks, (2) improve lighting and landscaping along sidewalks, (3) improve street crossings, and (4) incorporate bikeway facilities on select roadways.

The **Urban Design Component** of the Specific Plan identifies policies intended to enhance public spaces, including parks, public plazas, and roadways. The Specific Plan encourages the



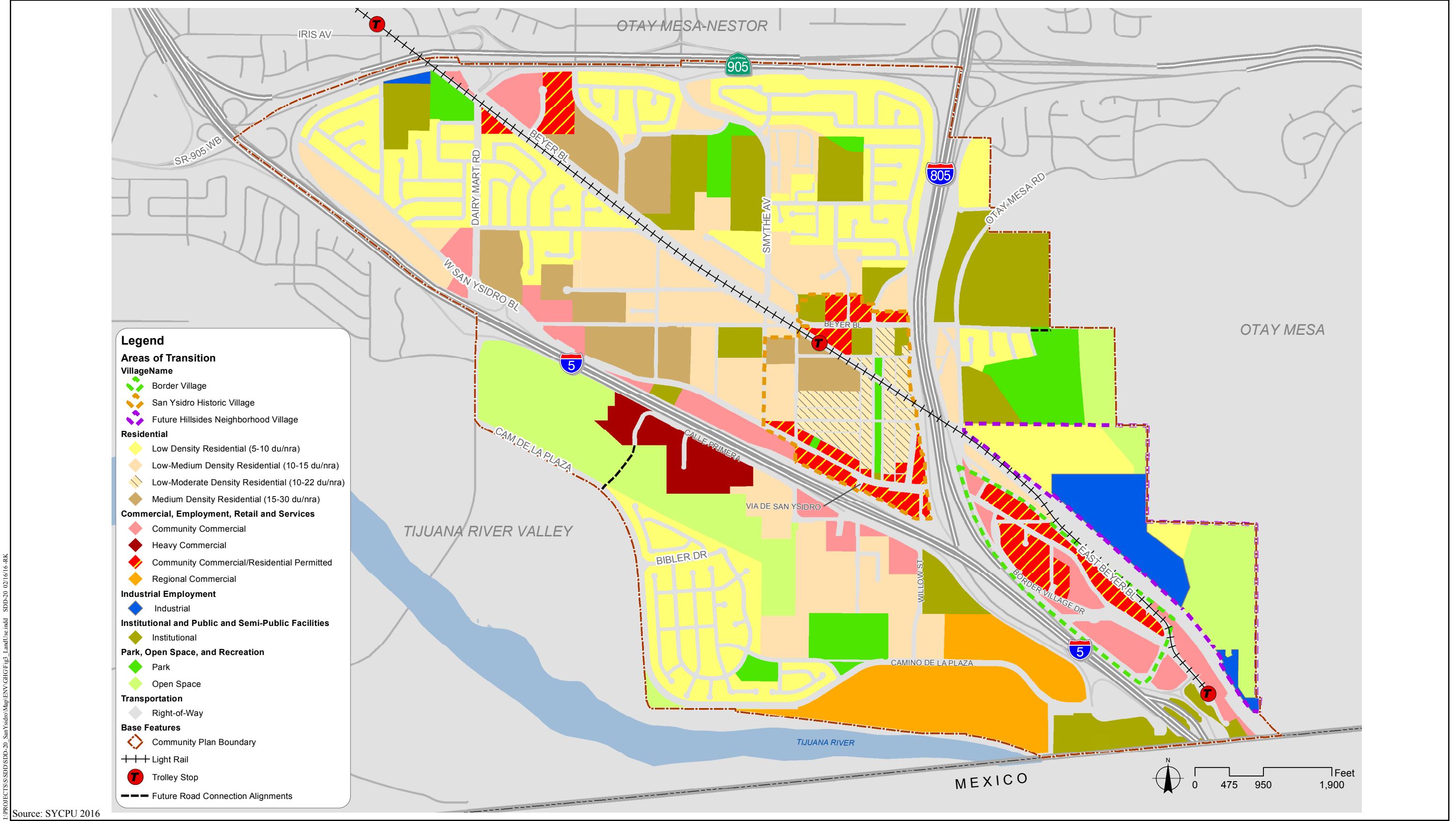
Site Vicinity Map

SAN YSIDRO COMMUNITY PLAN UPDATE



Project Vicinity Map (Aerial Photograph)

SAN YSIDRO COMMUNITY PLAN UPDATE



Land Use Plan

SAN YSIDRO COMMUNITY PLAN UPDATE

creation of pocket parks and neighborhood plazas. Enhanced streetscape is encouraged including benches, bicycle parking, and improved landscaping and lighting. Bioswales and pervious pavement are encouraged to reduce stormwater runoff and pollutants. Signage improvements are recommended to increase transit usage, and facilitate movement within the community. Lastly, the inclusion of public art is encouraged.

The **Infrastructure and Public Facilities Component** of the Specific Plan establishes policies and describes improvements necessary for the upgrading and expansion of public facilities, including water, wastewater, solid waste, stormwater, natural gas, police and fire protection, schools, libraries, parks, and other public services. Water conservation measures are identified to help assure a reliable water supply. Stormwater facilities are encouraged to convey runoff through the Specific Plan Area, and reduce water pollution. Adequate staffing and equipment are identified as important to assuring adequate police and fire protection. A new location for the community library in the Specific Plan Area is proposed. Mini and pocket park locations are identified in the Specific Plan area to enhance recreational opportunities within the Specific Plan Area as well as the overall Community Plan Area.

1.3 REGULATORY REQUIREMENTS APPLICABLE TO NEW BUILDING CONSTRUCTION

1.3.1 Energy Efficiencies

- New development under the Project would be designed to meet current 2013–2016 Title 24 energy efficiency standards. In accordance with the requirements of Title 24, new development under the Project would:
 - Install enhanced ceiling, attic, and wall insulation,
 - Install high efficiency window glazing,
 - Have the installation of all heating, ventilation, and air conditioning (HVAC) units verified by a third party, and
 - Include roof anchors and pre-wiring to allow for the installation of photovoltaic systems.

1.3.2 Water Conservation

- In accordance with 2013 California Green Building Standards Code (CALGreen) mandatory measures new development under the Project would:
 - Reduce potable water use by 20 percent,
 - Install low-flow water fixtures,
 - Reduce wastewater generation by 20 percent,
 - Install low-flow bathroom fixtures, and
 - Install weather-based smart irrigation control systems.

1.3.3 Solid Waste Reduction

- In accordance with Assembly Bill (AB) 341, at least 75 percent of operational waste would be diverted from landfills through reuse and recycling.
- Provide areas for storage and collection of recyclables and yard waste in accordance with 2013 CALGreen.

2.0 ENVIRONMENTAL 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. Historical records show that global temperature changes have occurred naturally in the past, such as during previous ice ages. To measure climate change, scientists look at long-term trends. The temperature trend, including data through 2010, shows the climate has warmed by approximately 0.36 degrees Fahrenheit (°F) per decade since the late 1970s (National Aeronautics and Space Administration [NASA] 2011).

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. These gases allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. The resulting balance between incoming solar radiation and outgoing radiation from both the Earth's surface and the atmosphere maintains the planet's habitability. The Earth's surface temperature averages about 58°F because of the greenhouse effect. Without it, the Earth's average surface temperature would be somewhere around an uninhabitable 0°F.

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 United Nations Intergovernmental Panel on Climate Change (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 (CO₂e) by the year 2100 (IPCC 2014).

2.2 GREENHOUSE GASES

The GHGs, as defined under California's AB 32, include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). 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.

CO_2 is the most important and common anthropogenic GHG. CO_2 is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO_2 include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO_2 concentrations remained steady prior to the current period for approximately 10,000 years. The atmospheric CO_2 concentration in 2010 was 390 ppm, 39 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). As of July 2015, the CO_2 concentration exceeded 398 ppm (National Oceanic and Atmospheric Administration [NOAA] 2015).

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.

N_2O is produced by both natural and human-related sources. N_2O is emitted during agricultural and industrial activities, as well as during 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 are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). Chlorofluorocarbons were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol.

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 GHGs to disperse around the globe. Because GHGs vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2 . For example, because methane and N_2O are approximately 25 and 298 times more powerful than CO_2 , respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). CO_{2e} is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_{2e} . The atmospheric lifetime and GWP of selected GHGs are summarized in Table 1, *Global Warming Potentials and Atmospheric Lifetimes*. As shown in the table, the GWP for common GHGs ranges from 1 (CO_2) to 22,800 (SF_6).

Table 1
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO ₂)	50-200	1
Methane (CH ₄)	12	25
Nitrous Oxide (N ₂ O)	114	298
HFC-134a	14	1,430
PFC: Tetrafluromethane (CF ₄)	50,000	7,390
PFC: Hexafluoroethane (C ₂ F ₆)	10,000	12,200
Sulfur Hexafluoride (SF ₆)	3,200	22,800

Source: IPCC 2007

HFC: hydrofluorocarbon; PFC: perfluorocarbon

2.3 REGULATORY FRAMEWORK

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

2.3.1 Federal

Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* (USEPA) that CO₂ 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 CO₂, CH₄, N₂O, HFC, PFC, and SF₆) threaten the public health and welfare of the American people. This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA). The standards were established on April 1, 2010 for 2012 through 2016 model year vehicles and on October 15, 2012 for 2017 through 2025 model year vehicles (USEPA 2011; USEPA and NHTSA 2012).

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

The USEPA and the Department of Transportation's NHTSA have been working together on developing a national program of regulations to reduce GHG emissions and to improve fuel economy of light-duty vehicles. The USEPA is finalizing the first-ever national GHG emissions standards under the CAA, and the NHTSA is finalizing 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 establishing 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. The rules require these vehicles to meet an estimated combined average emissions level of 250 grams per mile by 2016,

decreasing to an average industry fleet-wide level of 163 grams per mile in model year 2025. The 2016 standard is equivalent to 35.5 miles per gallon (mpg), and the 2025 standard is equivalent to 54.5 mpg if the levels were achieved solely through improvements in fuel efficiency. The agencies expect, however, that a portion of these improvements will be made through improvements in air conditioning leakage and the use of alternative refrigerants that would not contribute to fuel economy. These standards would cut GHG emissions by an estimated 2 billion metric tons and 4 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2017–2025). The combined USEPA GHG standards and NHTSA CAFE standards resolve previously conflicting requirements under both federal programs and the standards of the State of California and other states that have adopted the California standards (USEPA 2011; USEPA and NHTSA 2012).

2.3.2 State

California Code of Regulations, Title 24, Part 6

California Code of Regulations 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 2013 and went into effect July 2014. This update increases energy efficiency requirements by 25 to 30 percent compared to the 2008 Title 24 standards. The next scheduled update in 2016 will continue to improve upon the current 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2016 Standards will go into effect on January 1, 2017 (CEC 2015).

California Green Building Standards Code

The California Green Building Standards Code (24 California Code of Regulations [CCR], Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California. The current version of the code went into effect on July 1, 2014, and includes energy efficiency updates resulting in energy usage reductions of 25 percent for residential buildings and 30 percent for nonresidential building (CEC 2012). The code is Part 11 of the California Building Standards Code in Title 24 of the *California Code of Regulations* and is also known as the CALGreen Building Standards Code (CBSC 2014a). The next update of the CALGreen Building Code (2016) is scheduled to go into effect on January 1, 2017 (CBSC 2014b).

The development of the CALGreen Code 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.

The CALGreen Code 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.

Executive Order S-3-05

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. In an effort 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.

Assembly Bill 32 – Global Warming Solution Act of 2006

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

Executive Order B-30-15

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

Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State". On September 24, 2009, CARB adopted amendments to the Pavley regulations that intend to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. The amendments also

prepare California to merge its rules with the federal CAFE rules for passenger vehicles (CARB 2013). In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single packet of standards called Advanced Clean Cars (CARB 2013).

Assembly Bill 341

In 2011, the State legislature enacted AB 341 (California Public Resource Code section 42649.2), increasing the diversion target to 75 percent statewide. AB 341 also requires the provision of recycling service to commercial and residential facilities that generate four cubic yards or more of solid waste per week.

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 a LCFS can be adopted as a discrete early action measure pursuant to AB 32. CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in April 2010. Although challenged in 2011, the Ninth Circuit reversed the District Court's opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB is therefore continuing to implement the LCFS statewide.

Senate Bill 375

Senate Bill (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 MPO's 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 California Environmental Quality Act (CEQA) processing.

California Air Resources Board: Scoping Plan

On December 11, 2008, the CARB adopted the Scoping Plan (CARB 2008) as directed by AB 32. The Scoping Plan proposes a set of actions designed to reduce overall GHG emissions in California to the levels required by AB 32. Measures applicable to development projects include those related to energy-efficiency building and appliance standards, the use of renewable sources for electricity generation, regional transportation targets, and green building strategy. Relative to transportation, the Scoping Plan includes nine measures or recommended actions related to reducing vehicle miles traveled and vehicle GHGs through fuel and efficiency measures. These measures would be implemented statewide rather than on a project-by-project basis.

The CARB released the First Update to the Climate Change Scoping Plan in May 2014 to provide information on the development of measure-specific regulations and to adjust projections in consideration of the economic recession (CARB 2014a). To determine the amount

of GHG emission reductions needed to achieve the goal of AB 32 (i.e., 1990 levels by 2020) CARB developed a forecast of the AB 32 Baseline 2020 emissions, which is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. CARB estimated the AB 32 Baseline 2020 to be 509 million metric tons (MMT) of CO₂e. The Scoping Plan's current estimate of the necessary GHG emission reductions is 78 MMT CO₂e (CARB 2014b). This represents an approximately 15.32 percent reduction. The CARB is forecasting that this would be achieved through the following reductions by sector: 25 MMT CO₂e for energy, 23 MMT CO₂e for transportation, 5 MMT CO₂e for high-GWP GHGs, and 2 MMT CO₂e for waste. The remaining 23 MMT CO₂e would be achieved through Cap-and-Trade Program reductions. This reduction is flexible—if CARB receives new information and changes the other sectors' reductions to be less than expected, the agency can increase the Cap-and-Trade reduction (and vice versa).

2.3.3 Local

San Diego Association of Government's Regional Plan

The Regional Plan (SANDAG 2015) is the long-range planning document developed to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The Regional Plan establishes a planning framework and implementation actions that increase the region's sustainability and encourage "smart growth while preserving natural resources and limiting urban sprawl." The Regional Plan encourages the regions and the County to increase residential and employment concentrations in areas with the best existing and future transit connections, and to preserve important open spaces. The focus is on implementation of basic smart growth principles designed to strengthen the integration of land use and transportation. General urban form goals, policies, and objectives are summarized as follows:

- Mix compatible uses.
- Take advantage of compact building design.
- Create a range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Preserve open space, natural beauty, and critical environmental areas.
- Strengthen and direct development towards existing communities.
- Provide a variety of transportation choices.
- Make development decisions predictable, fair, and cost-effective.
- Encourage community and stakeholder collaboration in development decisions.

The Regional Plan also addresses border issues, providing an important guideline for communities that have borders with Mexico. In this case, the goal is to create a regional community where San Diego, its neighboring counties, tribal governments, and northern Baja California mutually benefit from San Diego's varied resources and international location.

City of San Diego General Plan

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

City of San Diego Climate Action Plan

In October 2010, the City Council established the Environmental and Economic Sustainability Task Force as an independent advisory body to work with City staff on the development of a plan for both city operations and the community to reduce GHG emissions and to begin to evaluate vulnerabilities in the community and outline adaptation strategies. On December 15, 2015, the City Council unanimously approved adoption of the Climate Action Plan (CAP).

3.0 EXISTING CONDITIONS

3.1 STATE AND REGIONAL GHG INVENTORIES

The California Air Resources Board (CARB) performs statewide GHG inventories. “The inventory is divided into six broad sectors; agriculture and forestry, commercial, electricity generation, industrial, residential, and transportation. Emissions are quantified in MMT of CO₂e. Table 2, *California Greenhouse Gas Emissions by Sector*, shows the estimated statewide GHG emissions for the years 1990, 2000, 2010, and 2013.

Table 2
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR (MMT CO₂e)

Sector	1990	2000	2010	2013
Agriculture and Forestry	23.6 (5%)	32.1 (7%)	34.5 (8%)	36.2 (8%)
Commercial	14.4 (3%)	15.0 (3%)	21.6 (5%)	22.6 (5%)
Electricity Generation	110.6 (26%)	105.2 (22%)	90.5 (20%)	90.6 (20%)
Industrial	103.0 (24%)	105.4 (22%)	102.7 (23%)	104.2 (23%)
Residential	29.7 (7%)	31.8 (7%)	32.2 (7%)	32.3 (7%)
Transportation	150.7 (35%)	178.1 (38%)	173.7 (38%)	172.5 (38%)
Unspecified Remaining	1.3 (<1%)	1.2 (<1%)	0.8 (<1%)	0.8 (<1%)
TOTAL	433.3	468.8	456.0	459.3

Source: CARB 2007 and CARB 2015

As shown in Table 2, statewide GHG emissions totaled 433 MMT CO₂e in 1990, 469 MMT CO₂e in 2000, 456 MMT CO₂e in 2010, and 459 MMT CO₂e in 2013. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions.

A San Diego regional emissions inventory was prepared by the University of San Diego School of Law, Energy Policy Initiative Center (EPIC) that took into account the unique characteristics of the region. Their 2010 emissions inventory for San Diego is duplicated below in Table 3, *San Diego County Greenhouse Gas Emissions by Sector*. The sectors included in this inventory are somewhat different from those in the statewide inventory.

Table 3
**SAN DIEGO COUNTY GREENHOUSE GAS EMISSIONS
BY SECTOR (MMT CO₂e)**

Sector	2010
On-road Transportation	14.4 (43%)
Electricity	8.3 (25%)
Natural Gas Consumption	2.9 (9%)
Off-Road Equipment and Vehicles	1.4 (4%)
Civil Aviation	1.9 (6%)
Waste	0.6 (2%)
Industrial	1.8 (5%)
Water-Borne Navigation	0.1 (<1%)
Rail	0.3 (1%)
Agriculture/Forestry/Land Use	0.5 (2%)
Other	1.6 (5%)
Sequestration	-0.7 (-2%)
TOTAL	33.2

Source: University of San Diego 2013

Similar to the statewide emissions, transportation-related GHG emissions contributed the most countywide, followed by emissions associated with energy use.

3.2 SYCPU AREA GHG INVENTORY

A baseline analysis of the existing GHG emissions from the SYCPU area land uses and associated traffic was performed using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2. Both land use and traffic assumptions were adapted from the Traffic Impact Analysis prepared for the Project (Kimley-Horn 2015). This is the same methodology as that used for estimating GHG emissions resulting from the adopted community plan and proposed SYCPU buildout described below (refer to Section 4.2). In brief, CalEEMod is a computer model that estimates GHG emissions from mobile (i.e. vehicular) sources, area sources (fireplaces, woodstoves, and landscape maintenance equipment), energy use (electricity and natural gas used in space heating and cooling, ventilation and lighting, and plug-in appliances), water use, and solid waste disposal based on land use categories.

Table 4, *Existing San Ysidro Community Plan Update Land Uses*, lists the existing land use quantities that were input to CalEEMod to estimate existing area GHG emissions.

Table 4 EXISTING SAN YSIDRO COMMUNITY PLAN UPDATE LAND USES	
Land Use	Existing (Year 2010)
Financial Institution (square feet)	17,700
City Park (acres)	35.8
Multi-Family Residential (dwelling units)	4,476
Convenience Market (square feet)	2,700
Convenience Market with Gas Pumps (pumps)	84
Elementary School (students)	4,108
Transportation (acre)	9.8
Fast Food Restaurant (square feet)	45,400
General Light Industry (square feet)	1,309,800
General Office Building (square feet)	7,000
Government (Civic Center) (square feet)	12,900
Government Office Building (square feet)	317,500
High School (square feet)	37,600
High Turnover Restaurant (square feet)	40,000
Hotel (rooms)	756
Industrial Park (square feet)	46,900
Junior College (students)	2,300
Junior High School (students)	993
Library (square feet)	4,300
Medical Office Building (square feet)	48,300
Mobile Home Park (dwelling units)	532
Motel (rooms)	35
Park and Ride Lot (spaces)	7,987

Table 4 (cont.)
EXISTING SAN YSIDRO COMMUNITY PLAN UPDATE LAND USES

Land Use	Existing (Year 2010)
Place of Worship (square feet)	175,500
Regional Shopping Center (square feet)	1,443,400
Single Family Residential (dwelling units)	2,339
Strip Mall (square feet)	507,200
Supermarket (square feet)	23,000
Warehouse (square feet)	11,500

Source: Kimley-Horn 2015

The complete calculations of existing GHG emissions, including the CalEEMod input parameters and reported results, are included in Appendix A and summarized below.

3.2.1 Vehicle Emissions

The analysis utilized trip generation rates by land use as developed for the SYCPU by Kimley-Horn and Associates, and CalEEMod defaults for trip length, distribution, and purpose. Based on these inputs, the total annual vehicle miles traveled (VMT) was estimated to be 491 million miles, and vehicle-related GHG emissions were estimated to be 227,454 MT CO₂e per year.

3.2.2 Energy Use Emissions

As discussed in greater detail in Section 4.2.4, CalEEMod default energy consumption values assume compliance with the 2008 Title 24 energy code. Adjustments to simulate the 2005 Title 24 energy code are available in the model by selecting the “use historical data” box. The CalEEMod User’s Guide states that “a user should select the use historical box if they only want an adjustment to the 2005 standard which were in effect when CARB developed its Scoping Plan 2020 No Action Taken predictions” (ENVIRON 2013). Therefore, for the existing conditions energy emissions estimate the historical data box was selected in order to reflect GHG emissions from energy use as associated with a building built to the 2005 Title 24 energy code. Based on the existing land use inputs identified in Table 4 and average electricity and natural gas consumption rates adjusted to 2005 Title 24 Energy Efficiency Standards in CalEEMod, the proposed SYCPU area’s existing buildings are estimated to emit approximately 54,779 MT CO₂e per year.

3.2.3 Area Sources

CalEEMod estimates that existing area sources (fireplaces, woodstoves, and landscape maintenance equipment), determined from the land use inputs identified in Table 4, emit approximately 11,196 MT CO₂e per year.

3.2.4 Water Use Emissions

Water-related GHG emissions are from the conveyance and treatment of water. The California Energy Commission’s 2006 Refining Estimates of Water-Related Energy Use in California defines average energy values for water in Southern California. These values are used in

CalEEMod to establish default water-related emission factors. Using these defaults, the existing estimated GHG emissions related to water treatment and conveyance is 7,928 MT CO₂e per year.

3.2.5 Solid Waste Emissions

Existing solid waste generation within the SYCPU area was estimated by CalEEMod by multiplying the land use inputs identified in Table 4 with average waste generation rates obtained from the California Department of Resources Recycling and Recovery (CalRecycle). Using these defaults, the existing estimated GHG emissions related to solid waste is 6,222 MT CO₂e per year.

3.2.6 Total Existing SYCPU Area GHG Emissions

The results of the analysis described above indicate that the existing SYCPU area uses are currently generating approximately 307,579 MT CO₂e annually as shown in Table 5, *Existing San Ysidro Community Plan Update Area Greenhouse Gas Emissions in 2010*, below.

Table 5 EXISTING SAN YSIDRO COMMUNITY PLAN UPDATE AREA GREENHOUSE GAS EMISSIONS IN 2010	
Source	MT CO₂e per year
Area	11,196
Energy	54,779
Mobile	227,454
Waste	6,222
Water	7,928
TOTAL	307,579

CalEEMod outputs provided in Appendix A

4.0 METHODOLOGY AND THRESHOLDS OF SIGNIFICANCE

4.1 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 with respect to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from new development could result in significant, cumulative impacts with respect to climate change. Thus, the potential for a significant GHG impact is limited to cumulative impacts.

According to Appendix G of the CEQA Guidelines, the following criteria may be considered in evaluating the significance of GHG emissions:

Would the project:

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

For the purposes of determining significance associated with GHG emissions, an inventory was developed based on the land use designations associated with the adopted community plan using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2. Emissions from the proposed SYCPU were then compared with those associated with the adopted community plan. If emissions from buildup of the SYCPU are shown to be less than those that would be generated by buildup of the adopted community plan, impact related to GHG emissions would be considered less than significant.

4.2 METHODOLOGY AND ASSUMPTIONS

GHG emissions were estimated using CalEEMod Version 2013.2.2 for full buildup of both the adopted community plan and the proposed SYCPU. The model estimates criteria air pollutants and GHG emissions by multiplying emission source intensity factors by estimated quantities of emission sources based on the land use information entered by the user in the first module of the model. In the first module, the user defines the specific land uses that will occur at the project site. The user also selects the appropriate land use setting (urban or rural), operational year, location, and utility provider. The input land uses, size features, and population are used throughout CalEEMod in determining default variables and calculations in each of the subsequent modules. In various places, the user can input additional information and/or override the default assumptions to account for project- or location-specific parameters. The subsequent modules include construction (including off-road vehicle emissions), mobile (on-road vehicle emissions, area sources (woodstoves, fireplaces, consumer products, landscape maintenance equipment, and architectural coatings), water and wastewater, and solid waste. Each module comprises multiple components including an associated mitigation module to account for further reductions in the reported baseline calculations. These reductions are linked to several of the quantifiable mitigation measures identified in the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* August 2010 report (CAPCOA 2010)

Each of the modules' methodology and input data are described below. The reported GHG estimates based on these inputs are provided in Section 5.1. All CalEEMod inputs and detailed results are provided in Appendix A.

4.2.1 Defining Project Characteristics and Land Use

In this module the user is prompted to enter the project's location, setting, climate zone, utility provider, and the specific land uses that will occur. For this analysis, the location was selected as San Diego County with an urban setting, in climate zone 13, served by San Diego Gas and Electric (SDG&E). By identifying the utility provider, its specific energy intensity factors are loaded into the model's calculations.

Based on data available in the Traffic Impact Analysis prepared for the Project, Table 6, *Adopted and Proposed Community Plan Land Uses*, lists the buildout land use quantities that were input to CalEEMod to estimate future SYCPU area GHG emissions for both the adopted and proposed community plans (Kimley-Horn 2015). As shown in Table 6, the buildout totals include several existing land uses that would remain and not be redeveloped as part of the community plan, as well as anticipated new/redeveloped land uses. These are distinguished in Table 6 as “Existing to Remain” and “New Development”, and were subject to different model assumptions as described below.

Table 6
ADOPTED AND PROPOSED COMMUNITY PLAN LAND USES

Land Use	Adopted Community Plan			Proposed San Ysidro Community Plan Update		
	Existing to Remain	New Development	Plan Totals	Existing to Remain	New Development	Plan Totals
Financial Institution (square feet)	11,500	-	11,500	11,500	-	11,500
City Park (acres)	35.8	44.0	79.8	35.8	<u>46.1</u> <u>46.4</u>	<u>81,992.2</u>
Multi-Family Residential (dwelling units)	4,476	717	5,193	4,476	<u>2,930</u> <u>4,418</u>	<u>7,4068,894</u>
Convenience Market (square feet)	2,700	-	2,700	-	-	-
Convenience Market with Gas Pumps (pumps)	84	-	84	84	<u>-4</u>	<u>8488</u>
Elementary School (students)	4,108	-	4,108	4,108	<u>6351,029</u>	<u>4,7435,137</u>
Transportation (acre)	7.9	-	7.9	<u>6.77.3</u>	-	<u>6.77.3</u>
Fast Food Restaurant (square feet)	45,400	3,500	48,900	44,900	-	44,900
General Light Industry (square feet)	1,309,800	2,800	1,312,600	<u>1,281,500</u> <u>1,023,000</u>	-	<u>1,281,500</u> <u>1,023,000</u>
General Office Building (square feet)	7,000	-	7,000	7,000	-	7,000
Government (Civic Center) (square feet)	-	-	-	6,000	-	6,000
Government Office Building (square feet)	317,500	20,800	338,300	317,500	48,700	366,200
High School (square feet)	37,600	-	37,600	37,600	96,700	134,300
High Turnover Restaurant (square feet)	36,500	-	36,500	22,400	-	22,400
Hotel (rooms)	726	-	726	756	-	756
Industrial Park (square feet)	46,900	-	46,900	46,900	-	46,900
Junior College (students)	2,300	-	2,300	2,300	-	2,300
Junior High School (students)	993	-	993	993	<u>1411,759</u>	<u>1,1342,752</u>
Library (square feet)	4,300	10,700	15,000	4,300	10,700	15,000
Medical Office Building (square feet)	48,300	-	48,300	48,300	-	48,300
Mobile Home Park (dwelling units)	242	-	242	<u>419532</u>	<u>-110</u>	<u>419642</u>
Motel (rooms)	25	-	25	35	-	35
Park and Ride Lot (spaces)	6,634	-	6,634	7,987	3,057	11,044,000
Place of Worship (square feet)	175,500	-	175,500	175,500	-	175,500
Regional Shopping Center (square feet)	1,443,400	686,600	2,130,000	1,443,400	909,800	2,353,200
Single Family Residential (dwelling units)	2,267	-	2,267	<u>2,1832,339</u>	<u>-2,069</u>	<u>2,1834,408</u>
Strip Mall (square feet)	507,200	471,100	978,300	507,200	518,100	1,025,300
Supermarket (square feet)	23,000	400	23,400	<u>-4,600</u>	-	<u>-4,600</u>
Warehouse (square feet)	11,500	22,800	34,300	11,500	22,800	34,300

Source: Kimley-Horn 2015

Emission estimates were calculated for the three GHGs of primary concern (CO₂, CH₄, and N₂O) that would be emitted from construction and the five primary operational sources that would be associated with the Plan buildup: on-road vehicular traffic, use of fireplaces and consumer products, energy use (composed of electricity use and natural gas consumption), water use, and solid waste disposal.

4.2.2 Estimating Construction Emissions

Construction emissions were estimated only for the new development land uses. Though this assumption does not account for typical turnover wherein an existing land use would be redeveloped, due to the amortization of construction emissions described below, it is decidedly more conservative to include the assumed continued operation of less efficient buildings in the operational emissions than the temporary construction emissions associated with a building's redevelopment. Construction activities emit GHGs primarily through combustion of fuels (mostly diesel) in the engines of off-road construction equipment, and through combustion of diesel and gasoline in on-road construction vehicles and in the commute vehicles of the construction workers. Smaller amounts of GHGs are also emitted through the energy use embodied in any water use (for fugitive dust control) and lighting for the construction activity. Every phase of the construction process, including demolition, grading, paving, and building, emits GHG emissions in volumes proportional to the quantity and type of construction equipment used. The heavier equipment typically emits more GHGs per hour of use than lighter equipment because of their greater fuel consumption and engine design.

GHG emissions associated with each phase of construction are calculated in CalEEMod by multiplying the total fuel consumed by the construction equipment and worker trips by applicable emission factors. CalEEMod forecasts the number and type of construction equipment that would be used given project-specific design. In the absence of project-specific construction information, needed equipment for all phases of construction are estimated by CalEEMod based on the size and subtypes of the land uses entered in the land use module.

CalEEMod estimates construction emissions for each year of construction activity based on the annual construction equipment profile and other factors determined as needed to complete all phases of construction by the target completion year. As such, each year of construction activity has varying quantities of GHG emissions. Per City Guidance, total construction GHG emissions are amortized over 30 years and added to operational GHG emissions.

4.2.3 Estimating Vehicle Emissions

CalEEMod defaults for trip length, distribution, and purpose were utilized along with Project specific trip generation rates, as determined by Kimley-Horn and Associates. Based on these inputs, the total annual VMT under the adopted community plan was estimated to be 930–978 million miles and the total annual VMT for the SYCPU was estimated to be 767–856 million miles. All modeling output files are provided in Appendix A of this report.

4.2.4 Estimating Energy Use Emissions

GHGs are emitted as a result of activities in buildings for which electricity and natural gas are used as energy sources. GHGs are generated during the generation of electricity from fossil fuels

off-site in power plants. These emissions are considered indirect and are calculated in CalEEMod as associated with a building's operation.

CalEEMod default energy values are based on the CEC-sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies, which identify energy use by building type and climate zone. Each land use type input to the land use module is mapped in the energy module to the appropriate CEUS and RASS building type. Because these studies are based on older buildings, adjustments have been made in CalEEMod to account for changes to Title 24 building codes. The default adjustment is to the 2008 Title 24 energy code (part 6 of the building code). Adjustments to simulate the 2005 Title 24 energy code are available in the model by selecting the “use historical data” box. The CalEEMod User’s Guide states that “a user should select the use historical box if they only want an adjustment to the 2005 standard which were in effect when CARB developed its Scoping Plan 2020 No Action Taken predictions” (ENVIRON 2013). Therefore, for the existing conditions energy emissions estimate, the historical data box was selected in order to reflect GHG emissions from energy use as associated with a building built to the 2005 Title 24 energy code.

The current ~~2013–2016~~ Title 24 energy code results in a ~~25 to 30–46~~ percent reduction in ~~Title 24 regulated~~ energy use over the 2008 Title 24 standards. For the estimates of the adopted community plan and SYCPU, energy emissions were estimated using two runs of the model each plan. One run assumed a ~~25–46~~ percent reduction over the default 2008 Title 24 energy code for the portion of the total buildout land use quantities that would be new (i.e., the New Development land uses), and therefore constructed in accordance with the ~~2013–2016~~ Title 24 energy code. The second model run selected the historical data box for the portion of the total buildout land use quantities that comprise existing land uses that would not change (i.e., the Existing to Remain land uses). The two model runs were then added together to obtain the total projected energy emissions associated with either the adopted community plan or SYCPU buildout. Table 6 lists the buildout land use quantities that were input to the Existing to Remain and New Development CalEEMod energy module runs.

4.2.5 Estimating Area Source Emissions

This CalEEMod module estimates the GHG emissions that would occur from the use of hearths, woodstoves, and landscaping equipment. This module also estimates emissions due to use of consumer products and architectural coatings that have volatile organic compounds (VOCs); however, these sources do not emit GHGs. The use of hearths and woodstoves directly emits CO₂ from the combustion of natural gas, wood, or biomass, some of which are thus classified as biogenic. CalEEMod estimates emissions from hearths and woodstoves only for residential uses based on the type and size of features of the residential land use inputs.

The use of landscape equipment emits GHGs associated with the equipment’s fuel combustion. CalEEMod estimates the number and type of equipment needed based on the number of summer days given the project’s location as entered in the project characteristics module. The model defaults for hearths, woodstoves, and landscaping equipment were assumed.

4.2.6 Estimating Water and Wastewater Emissions

The amount of water used and wastewater generated by a project has indirect GHG emissions associated with it. These emissions are a result of the energy used to supply, distribute, and treat the water and wastewater. In addition to the indirect GHG emissions associated with energy use, wastewater treatment can directly emit both methane and nitrous oxide.

CalEEMod uses default electricity intensity values for various phases of supplying and treating water from CEC's *Refining Estimates of Water-Related Energy Use in California*. The model estimates water/wastewater emissions by multiplying the total projected water/wastewater demand by the applicable water electricity intensities and by the utility intensity GHG factors.

The default water module assumptions were used for the estimates of existing conditions, including the existing land uses that would remain and not change. However, for the future/new land uses, the water mitigation module was used to account for an overall 20 percent reduction in water use for new development that would have to comply with recent requirements of CALGreen. Similar to energy use, recent updates to the water conservation element of Title 24 have resulted in increased water conservation for development subsequent to 2010. New construction and redevelopment that would occur under the SYCPU would be constructed in accordance with the current CALGreen water conservation requirements. Because CALGreen requires a minimum 20 percent reduction in water use, a 20 percent reduction in water use was factored into the emissions calculations for new development by using the mitigation module. As with the energy efficiency improvements due to Title 24 updates, the improvements in water conservation were only applied to the new land use buildout quantities expected (i.e., the New Development quantities), not the whole buildout quantity.

4.2.7 Estimating Solid Waste Emissions

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. CalEEMod determines the GHG emissions associated with disposal of solid waste into landfills. Portions of these emissions are biogenic. To estimate the GHG emissions that would be generated by disposing of the solid waste associated with the SYCPU buildout, the total volume of solid waste associated with the SYCPU was first estimated in the model using waste disposal rates identified by CalRecycle. CalEEMod methods for quantifying GHG emissions from solid waste are based on the IPPC method using the degradable organic content of waste. Existing, adopted community plan, and SYCPU GHG emissions associated with waste disposal were all calculated using CalEEMod's default parameters. Though the City of San Diego currently diverts approximately 67 percent of its solid waste through the City Recycling Ordinance, a conservative 50 percent solid waste diversion rate was applied to the new construction and redevelopment that would occur to account for mandatory compliance with AB 341.

5.0 PROJECT IMPACTS

This section evaluates potential impacts of the proposed Project related to the generation of GHG emissions.

5.1 SYCPU

For the purposes of determining significance associated with GHG emissions, an inventory was developed based on the land use designations associated with the adopted community plan using CalEEMod, as described in Section 4.2. Emissions from the proposed SYCPU were then compared with those associated with the adopted community plan.

5.1.1 Adopted Community Plan Emissions

The projected GHG emissions that would be generated from buildup of the adopted community plan were estimated using the methodology described in Section 4.2. The complete calculations including the input parameters are included in Appendix A.

Construction Emissions

GHG emissions would be associated with the construction of new development under the adopted community plan through use of heavy equipment and vehicle trips by the construction crew commuting to the construction sites. Emissions of GHGs related to the construction of new development would be temporary. The method for calculating these emissions is described in Section 4.2.2. Based on the adopted community plan, new development buildup land use quantities listed in Table 6, CalEEMod estimates that construction activities would generate a total of 52,485 MT CO₂e. While CalEEMod distributes construction activity emissions over each year at varying quantities depending on various model assumptions, for the purpose of this analysis, total construction GHG emissions were divided by 30 years in order to identify annual construction GHG emissions in accordance with City Guidance. Thus, annual construction GHG emissions associated with buildup of new land uses under the adopted community plan would be approximately 1,750 MT CO₂e per year.

Operational Emissions

Operational sources of GHG emissions include: (1) vehicle use; (2) energy use (electricity and natural gas); (3) area sources (landscaping equipment); (4) water conveyance and treatment; and (5) solid waste generation.

Vehicular (Mobile) Sources

Greenhouse gas emissions would be emitted from vehicles associated with adopted plan buildup and would come from the combustion of fossil fuels in vehicle engines. The quantity and type of transportation fuel consumed, and the number of miles driven determines the amount of GHGs emitted from a vehicle. The method for calculating these emissions is described in Section 4.2.3. As described therein, CalEEMod defaults for trip length, distribution, and purpose were utilized along with Project specific trip generation rates, as determined by Kimley-Horn and Associates.

The traffic impact analysis determined that 472,023 total vehicle trips would occur daily in association with buildout of the adopted community plan (Kimley-Horn 2015). Based on this quantity of trips, the trip rates for each land use subtype identified in the traffic analysis, and the default CalEEMod trip lengths, an estimated total ~~356,376~~374,782 MT CO₂e would be emitted annually by vehicles associated with buildout of the adopted community plan. Of this total, approximately ~~304,849~~323,261 MT CO₂e would be emitted annually by vehicles associated with the existing/not changing land uses, and ~~51,527~~51,521 MT CO₂e would be emitted by vehicles associated with new/changing land uses.

Energy Use

GHG emissions would be generated by the adopted community plan buildout use of electricity and combustion of natural gas. As explained in Section 4.2.4, 2005 statewide average annual energy consumption rates were used to estimate emissions that would occur from the existing land uses that would remain. The new/redeveloped land uses would incorporate energy-efficiency features that would exceed 2008 California Title 24 Energy Efficiency Standards by ~~25-46~~ percent through mandatory compliance with ~~2013-2016~~ Title 24 standards. According to CAPCOA Guidance, the reduction in energy use associated with this efficiency is based on building type, size, and climate zone. The adopted community plan's annual GHG emissions from energy use are estimated to be ~~59,368~~58,924 MT CO₂e per year. Of this total, approximately 52,580 MT CO₂e would be associated with existing land uses, and ~~6,788~~6,344 MT CO₂e would be associated with new/changing land uses.

Area Sources

Buildout of adopted community plan land uses would emit GHGs from area sources, including landscape maintenance equipment and fireplaces. The method for calculating these emissions is described in Section 4.2.5.

CalEEMod estimates that approximately 11,736 MT CO₂e would be emitted annually given buildout land use projections of the adopted community plan. Of this total, approximately 10,644 MT CO₂e would be associated with existing land uses and 1,093 MT CO₂e would be associated with new/changing land uses.

Water Sources

The supply and treatment of water to adopted community plan end users would consume large amounts of energy, known as embodied energy. GHGs would be emitted from the generation of this embodied energy. The method for calculating these emissions is described in Section 4.2.6. As explained therein, pre-2010 water consumption rates were used to estimate the emissions from the SYCPU area's existing land uses that would remain. The SYCPU area's new/redeveloped land uses would incorporate water-reduction features that would reduce water consumption and wastewater generation by 20 percent through mandatory compliance with CALGreen requirements. The adopted community plan's annual GHG emissions from water use are estimated to be 8,728 MT CO₂e per year. Of this total, approximately 7,710 MT CO₂e would be associated with existing land uses to remain, and 1,018 MT CO₂e would be associated with new development land uses.

Solid Waste Sources

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. The method for calculating these emissions is described in Section 4.2.7.

CalEEMod estimates that buildout of the adopted community plan would generate approximately 6,433 MT CO₂e. Of this total, approximately 6,058 MT CO₂e would be associated with existing land uses to remain, and 374 MT CO₂e would be associated with new development land uses.

Other GHG Emission Sources

Ozone is also a GHG; however, unlike other GHGs, ozone in the troposphere is relatively short lived and therefore is not global in nature. According to CARB, it is difficult to make an accurate determination of the contribution of ozone precursors (nitrogen oxides [NO_x] and VOCs) to global warming (CARB 2004). Therefore, it is assumed that emission of ozone precursors associated with the Project would not significantly contribute to climate change.

At present, there is a federal ban on chlorofluorocarbons (CFCs); therefore, it is assumed that the Project would not generate emissions of this GHG. Buildout of the adopted community plan may emit a small amount of HFC emissions from leakage, service of, and from disposal at the end of the life of refrigeration and air conditioning equipment. However, these emissions are not quantifiable and are assumed to be negligible. PFCs and sulfur hexafluoride are typically used in heavy-duty industrial applications. The adopted community plan does not include heavy-duty industrial applications. Therefore, it is not anticipated that the plan would contribute significant emissions of these GHGs.

Summary

As illustrated in Table 7, *Adopted Community Plan Annual Greenhouse Gas Emissions*, buildout of the adopted community plan would result in 444,390 MT CO₂e per year.

**Table 7
ADOPTED COMMUNITY PLAN ANNUAL
GREENHOUSE GAS EMISSIONS**

Emission Sources	Emissions (MT CO ₂ e/year)
Area Sources	11,736
Energy Sources	59,368 <u>58,924</u>
Vehicular (Mobile) Sources	356,376 <u>374,782</u>
Solid Waste Sources	6,433
Water Sources	8,728
Construction (Annualized over 30 years)	1,750
TOTAL	444,390<u>462,352</u>

Source: CalEEMod output data is provided in Appendix A

Note: Totals may not add up exactly due to rounding.

5.1.2 SYCPU Emissions

The projected GHG emissions that would be generated from buildout of the SYCPU were estimated using the methodology described in Section 4.2. The complete calculations including the input parameters are included in Appendix A.

Construction Emissions

Based on the SYCPU new development buildout land use quantities in Table 6, CalEEMod estimates that construction activities would generate a total of 106,709 MT CO₂e. While CalEEMod distributes construction activity emissions over each year at varying quantities depending on various model assumptions, for the purpose of this analysis, total construction GHG emissions were divided by 30 years in order to identify annual construction GHG emissions in accordance with City Guidance. Thus, annual construction GHG emissions associated with buildout of new land uses would be approximately 3,557 MT CO₂e per year.

Operational Emissions

The projected GHG emissions that would be generated from the SYCPU were estimated using the methodology described in Section 4.2. The complete calculations, including the CalEEMod input files are included in Appendix A. The results are summarized below.

Vehicular (Mobile) Sources

The traffic impact analysis determined that 407,233441,147 total vehicle trips would occur daily in association with buildout of the SYCPU (Kimley-Horn 2015). Based on this quantity of trips, the trip rates for each land use subtype identified in the traffic analysis, and the default CalEEMod trip lengths, an estimated total 294,926328,829 MT CO₂e would be emitted annually by vehicles associated with buildout of the SYCPU. Of this total, approximately 206,829205,943 MT CO₂e would be emitted annually by vehicles associated with the existing/not changing land uses, and 88,097122,886 MT CO₂e would be emitted by vehicles associated with new/changing land uses.

Energy Use

The SYCPU's annual GHG emissions from energy use are estimated to be 65,75475,099 MT CO₂e per year. Of this total, approximately 52,60052,713 MT CO₂e would be associated with existing land uses, and 13,15422,386 MT CO₂e would be associated with new/changing land uses.

Area Sources

CalEEMod estimates that approximately 15,25021,248 MT CO₂e would be emitted annually, given buildout land use projections of the SYCPU. Of this total, approximately 10,78511,195 MT CO₂e would be associated with existing land uses and 4,46510,052 MT CO₂e would be associated with new/changing land uses.

Water Sources

The SYCPU's annual GHG emissions from water use are estimated to be 9,81011,178 MT CO₂e per year. Of this total, approximately 7,6937,504 MT CO₂e would be associated with existing land uses to remain, and 2,1173,674 MT CO₂e would be associated with new development land uses.

Solid Waste Sources

CalEEMod estimates that buildout of the SYCPU would generate approximately 6,6457,337 MT CO₂e from solid waste sources. Of this total, approximately 5,9185,808 MT CO₂e would be associated with existing land uses to remain, and 727-1,529 MT CO₂e would be associated with new development land uses.

Other GHG Emission Sources

Other GHG emissions such as HFCs, PFCs and sulfur hexaflouride would be the same for the adopted community plan. Emissions of these GHGs would be negligible.

Summary

As shown in Table 8, *SYCPU Annual Greenhouse Gas Emissions*, buildout of the SYCPU would result in GHG emissions of 395,942447,248 MT CO₂e per year.

Table 8 SYCPU ANNUAL GREENHOUSE GAS EMISSIONS	
Emission Sources	Emissions (MT CO₂e/year)
Area Sources	<u>15,25021,248</u>
Energy Sources	<u>65,75475,099</u>
Vehicular (Mobile) Sources	<u>294,926328,829</u>
Solid Waste Sources	<u>6,6457,337</u>
Water Sources	<u>9,81011,178</u>
Construction (Annualized over 30 years)	3,557
TOTAL PROJECT	<u>395,942447,248</u>

Source: CalEEMod output data is provided in Appendix A

Note: Totals may not add up exactly due to rounding.

5.1.3 Comparison of SYCPU and Adopted Community Plan GHG Emissions

For the purposes of determining significance, GHG emissions attributable to the SYCPU at full buildout are compared to adopted community plan GHG emissions. As illustrated in Table 9, *Comparison of Adopted Community Plan vs Proposed SYCPU Emissions*, the total GHG emission attributable to the adopted community plan are 444,390462,352 MT CO₂e per year. Total GHG emissions attributable to the SYCPU are 395,942447,248 MT CO₂e per year. As such, the SYCPU would result in a reduction of 48,44815,105 MT CO₂e per year when compared to the adopted community plan.

Table 9
COMPARISON OF ADOPTED COMMUNITY PLAN VS
PROPOSED SYCPU EMISSIONS

Emission Sources	Annual Emissions (MT CO ₂ e)		
	Adopted Community Plan	SYCPU	Difference
Area Sources	11,736	15,25021,248	3,5149,511
Energy Sources	59,36858,924	65,75475,099	6,38616,175
Mobile Sources	356,376374,782	394294,926328.82 9	(61,450)(45,953)
Waste Sources	6,433	6,6457,337	212905
Water Sources	8,728	9,81011,178	1,0822,450
Construction (Annualized over 30 years)	1,750	3,557	1,807
TOTAL	444,390462,352	395,942447,248	(48,448)(15,105)

Source: CalEEMod (output data is provided in Appendix A)

Note: Totals may not add up exactly due to rounding.

Table 9 shows that the SYCPU would result in a GHG emissions reduction of 48,44815,105 MT CO₂e per year when compared to the adopted community plan. Because the SYCPU would result in a reduction to GHG emissions when compared with land uses currently approved, impacts would be less than significant and no mitigation measures are required. While subsequent projects under the SYCPU would be required to implement GHG-reducing features to achieve GHG emissions below threshold levels, based either on individual project-level GHG analyses or demonstrated compliance with measures in the City's adopted Climate Action Plan, at the plan level GHG emission impacts would be less than significant.

5.1.4 Consistency With Adopted Plans, Policies, and Regulations for the Purpose of Reducing GHG Emissions

The regulatory plans and policies discussed in Section 2.3 above aim to reduce national, state, and local GHG emissions by primarily targeting the largest emitters of GHGs: the transportation and energy sectors. Plan goals and regulatory standards are, thus, largely focused on the automobile industry and public utilities. For the transportation sector, the reduction strategy is generally three-pronged: to reduce GHG emissions from vehicles by improving engine design; to reduce the carbon content of transportation fuels through research, funding and incentives to fuel suppliers; and to reduce the miles these vehicles travel through land use change and infrastructure investments.

For the energy sector, the reduction strategies aim to reduce energy demand; impose emission caps on energy providers; establish minimum building energy and green building standards; transition to renewable non-fossil fuels; incentivize homeowners and builders; fully recover landfill gas for energy; expand research and development; and so forth.

Consistency with State Plans

EO S-3-05 established GHG emission reduction targets for the state, and AB 32 launched the Climate Change Scoping Plan that outlined the reduction measures needed to reach these targets. The Scoping Plan and its implementing and complementary regulations are discussed in Section 2.3. Out of the Recommended Actions contained in CARB's Scoping Plan, the actions that are most applicable to the project would be Actions E-1 and GB-1. CARB Scoping Plan Action E-1, together with Action GB-1 (Green Building), aims to reduce electricity demand by increased efficiency of Utility Energy Programs and adoption of more stringent building and appliance standards. The new construction associated with the SYCPU would be required to include all mandatory green building measures under the CALGreen Code. Therefore, the SYCPU would be consistent with the Scoping Plan measures through incorporation of stricter building and appliance standards.

Consistency with Regional Plans

San Diego Association of Government's Regional Plan

The proposed SYCPU would be consistent with the goals of the Regional Plan to develop compact, walkable communities close to transit connections and consistent with smart growth principles. The SYCPU proposes to establish two pedestrian-oriented, urban, and mixed-use community villages that would reduce reliance on the automobile, and promote walking and use of alternative transportation. The SYCPU supports the multi-modal strategy of the Regional Plan through the designation of two villages along a trolley corridor, as well as a planned Intermodal Transit Center that would accommodate several transportation modes. Policies contained within the proposed SYCPU Land Use and Mobility Elements serve to promote bus transit use as well as other forms of mobility, including walking and bicycling. These measures are consistent with the RP's smart growth strategies. No significant adverse environmental effects would result from the adoption of the proposed SYCPU in terms of consistency or conflict with the RP.

Consistency with Local Plans

City of San Diego General Plan

The proposed SYCPU is intended to further express General Plan policies in the proposed SYCPU area through the provision of site-specific recommendations that implement city-wide goals and policies, address community needs, and guide zoning. The two documents work together to establish the framework for growth and development in the proposed SYCPU area. The proposed SYCPU contains eight elements, each providing neighborhood-specific goals and recommendations. These goals and recommendations are consistent with development design guidelines, other mobility and civic guidelines, incentives, and programs in accordance with the general goals stated in the General Plan.

The SYCPU Conservation Element builds on the General Plan Conservation Element with policies tailored to conditions in San Ysidro. The SYCPU Conservation Element addresses open space and habitat protection, and contains policies on how to meet the sustainability goals of the General Plan in areas that have been identified as suitable for development. SYCPU policies to help reduce GHG emissions that are also consistent with the General Plan include:

- 8.1.1 Implement applicable General Plan sustainable development resource management goals and policies, as discussed in its Conservation Element and the Urban Design Element.
- 8.1.4 Encourage the use of solar energy systems to supplement or replace traditional building energy systems.
- 8.3.2 Implement a pattern of land uses that can be served efficiently by a multimodal transportation system that directly and indirectly minimizes air pollutants.
- 8.3.4 Educate businesses and residents on the benefits of alternative modes of transportation, including public transit, walking, bicycling, car and van pooling, and teleworking.
- 8.3.5 Encourage street tree and private tree planting programs throughout the community to increase absorption of carbon dioxide and pollutants.

The SYCPU Conservation Element is also responsive to state legislation calling for GHG emissions reductions to be achieved in part through coordinated land use and transportation planning, and more sustainable development practices. Therefore, the SYCPU is consistent with the conservation policies of the General Plan.

The proposed SYCPU contains eight plan elements, each providing community specific goals and recommendations, along with an implementation element. Overall the proposed SYCPU incorporates goals and policies intended to support the General Plan policies. Therefore, GHG impacts related to consistency with the General Plan would be less than significant.

City of San Diego Climate Action Plan

The City of San Diego has adopted a Climate Action Plan for reducing GHG emissions. As discussed in Section 2.3.3, the City's CAP was developed for both city operations and the community to reduce GHG emissions and to evaluate vulnerabilities in the community and outline adaptation strategies. The Project would support the applicable policies included in the City of San Diego's Climate Action Plan. The Project's consistency with these strategies is analyzed in Table 10, *City Climate Action Plan Implementation Strategies*.

Table 10
CITY CLIMATE ACTION PLAN IMPLEMENTATION STRATEGIES

Strategy	Project Consistency
<i>Strategy 1 – Energy & Water Efficient Buildings</i>	<i>Consistent.</i> All new development under the Project would be built in accordance with the latest Title 24 energy efficiency standards.
<i>Strategy 2 – Clean & Renewable Energy</i>	<i>Consistent.</i> In accordance with the requirements of CALGreen, all new development proposed under the Project would include anchors and wiring for roof mounted solar panels.
<i>Strategy 3 – Bicycling, Walking, Transit & Land Use</i>	<i>Consistent.</i> Policies contained within the proposed SYCPU Land Use and Mobility Elements serve to promote bus transit use as well as other forms of mobility, including walking and bicycling.
<i>Strategy 4 – Zero Waste</i>	<i>Consistent.</i> The Project would meet the goals of AB 341 along with any City ordinances developed in support of the ultimate goal of zero waste by 2040.

5.2 SYHVSP

As the land uses which would occur within the SYHVSP would reflect the land use designations applied to the Specific Plan area by the SYCPU, the GHG emissions generated by future development of the SYCPU are accounted for in the emissions evaluate for the SYCPU. As with general development within the SYCPU, new development within the SYHVSP would comply with the 2013–2016 Title 24 Energy Code; AB 341; and the 2013 CALGreen Code. Furthermore, the emphasis of the SYCPU on encouraging walking and biking are some of the fundamental principles of the SYHVSP. Thus, GHG emissions related to future development of the SYHVSP would be less than significant. Furthermore, future development within the SYHVSP would not conflict with regulations and policies aimed at reducing GHG emissions.

6.0 CUMULATIVE IMPACTS

6.1 SYCPU

Table 9 shows that the SYCPU would result in a GHG emissions reduction of 48,44815,105 MT CO₂e per year when compared to the adopted community plan. Because the SYCPU would result in a reduction to GHG emissions when compared with land uses currently approved, the GHG emissions related to the proposed SYCPU would not have a significant cumulative impact with respect to climate change.

6.2 SYHVSP

As with the SYCPU, GHG emissions associated with the SYHVSP would be less than those associated with the adopted community plan. Thus, GHG emissions related to the SYHVSP would not have a significant cumulative impact with respect to climate change.

7.0 REFERENCES

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Appendix A

CALEEMOD EMISSION CALCULATIONS

SYCPU - Changed Approved (2020)
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	0.00	1000sqft	0.00	0.00	0
General Office Building	0.00	1000sqft	0.00	0.00	0
Government (Civic Center)	0.00	1000sqft	0.00	0.00	0
Government Office Building	20.80	1000sqft	0.48	20,800.00	0
Medical Office Building	0.00	1000sqft	0.00	0.00	0
Elementary School	0.00	Student	0.00	0.00	0
High School	0.00	1000sqft	0.00	0.00	0
Junior College (2Yr)	0.00	Student	0.00	0.00	0
Junior High School	0.00	Student	0.00	0.00	0
Library	10.70	1000sqft	0.25	10,700.00	0
Place of Worship	0.00	1000sqft	0.00	0.00	0
General Light Industry	2.80	1000sqft	0.06	2,800.00	0
Industrial Park	0.00	1000sqft	0.00	0.00	0
Unrefrigerated Warehouse-No Rail	22.80	1000sqft	0.52	22,800.00	0
Enclosed Parking Structure	0.00	Acre	0.00	0.00	0
Parking Lot	0.00	Space	0.00	0.00	0
City Park	44.00	Acre	44.00	1,916,640.00	0
Fast Food Restaurant with Drive Thru	3.50	1000sqft	0.08	3,500.00	0
High Turnover (Sit Down Restaurant)	0.00	1000sqft	0.00	0.00	0
Hotel	0.00	Room	0.00	0.00	0
Motel	0.00	Room	0.00	0.00	0

Condo/Townhouse	717.00	Dwelling Unit	44.81	717,000.00	2051
Mobile Home Park	0.00	Dwelling Unit	0.00	0.00	0
Single Family Housing	0.00	Dwelling Unit	0.00	0.00	0
Convenience Market (24 Hour)	0.00	1000sqft	0.00	0.00	0
Convenience Market With Gas Pumps	0.00	Pump	0.00	0.00	0
Regional Shopping Center	686.60	1000sqft	15.76	686,600.00	0
Strip Mall	471.10	1000sqft	10.81	471,100.00	0
Supermarket	0.40	1000sqft	0.01	400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No Change from public review analysis

Trips and VMT -

Architectural Coating -

Vehicle Trips - Kimley Horn 2015

Area Coating -

Water And Wastewater -

Solid Waste -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	4703010	5007582
tblConstructionPhase	NumDays	200.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	0.80
tblVehicleTrips	CW_TTP	0.00	0.80
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	86.32	200.26
tblVehicleTrips	ST_TR	1.59	50.49
tblVehicleTrips	ST_TR	7.16	6.69

tblVehicleTrips	ST_TR	863.10	706.30
tblVehicleTrips	ST_TR	204.47	150.23
tblVehicleTrips	ST_TR	0.00	136.20
tblVehicleTrips	ST_TR	722.03	698.06
tblVehicleTrips	ST_TR	1.32	93.37
tblVehicleTrips	ST_TR	2.37	25.14
tblVehicleTrips	ST_TR	158.37	128.44
tblVehicleTrips	ST_TR	8.19	10.03
tblVehicleTrips	ST_TR	2.49	16.20
tblVehicleTrips	ST_TR	46.55	49.87
tblVehicleTrips	ST_TR	8.96	49.96
tblVehicleTrips	ST_TR	5.00	4.98
tblVehicleTrips	ST_TR	5.63	9.00
tblVehicleTrips	ST_TR	0.00	2.58
tblVehicleTrips	ST_TR	10.37	12.21
tblVehicleTrips	ST_TR	49.97	43.52
tblVehicleTrips	ST_TR	10.08	9.01
tblVehicleTrips	ST_TR	42.04	79.05
tblVehicleTrips	ST_TR	177.59	149.83
tblVehicleTrips	ST_TR	2.59	5.10
tblVehicleTrips	SU_TR	31.90	200.26
tblVehicleTrips	SU_TR	1.59	50.49
tblVehicleTrips	SU_TR	6.07	6.69
tblVehicleTrips	SU_TR	758.45	706.30
tblVehicleTrips	SU_TR	166.88	150.23
tblVehicleTrips	SU_TR	0.00	136.20
tblVehicleTrips	SU_TR	542.72	698.06
tblVehicleTrips	SU_TR	0.68	93.37

tblVehicleTrips	SU_TR	0.98	25.14
tblVehicleTrips	SU_TR	131.84	128.44
tblVehicleTrips	SU_TR	5.95	10.03
tblVehicleTrips	SU_TR	0.73	16.20
tblVehicleTrips	SU_TR	25.49	49.87
tblVehicleTrips	SU_TR	1.55	49.96
tblVehicleTrips	SU_TR	4.36	4.98
tblVehicleTrips	SU_TR	5.63	9.00
tblVehicleTrips	SU_TR	0.00	2.58
tblVehicleTrips	SU_TR	36.63	12.21
tblVehicleTrips	SU_TR	25.24	43.52
tblVehicleTrips	SU_TR	8.77	9.01
tblVehicleTrips	SU_TR	20.43	79.05
tblVehicleTrips	SU_TR	166.44	149.83
tblVehicleTrips	SU_TR	2.59	5.10
tblVehicleTrips	WD_TR	148.15	200.26
tblVehicleTrips	WD_TR	1.59	50.49
tblVehicleTrips	WD_TR	6.59	6.69
tblVehicleTrips	WD_TR	737.99	706.30
tblVehicleTrips	WD_TR	542.60	150.23
tblVehicleTrips	WD_TR	1.29	2.91
tblVehicleTrips	WD_TR	0.00	136.20
tblVehicleTrips	WD_TR	496.12	698.06
tblVehicleTrips	WD_TR	6.97	93.37
tblVehicleTrips	WD_TR	11.01	25.14
tblVehicleTrips	WD_TR	27.92	29.83
tblVehicleTrips	WD_TR	68.93	29.28
tblVehicleTrips	WD_TR	12.89	17.98

tblVehicleTrips	WD_TR	127.15	128.44
tblVehicleTrips	WD_TR	8.17	10.03
tblVehicleTrips	WD_TR	6.96	16.20
tblVehicleTrips	WD_TR	1.20	1.66
tblVehicleTrips	WD_TR	1.62	1.41
tblVehicleTrips	WD_TR	56.24	49.87
tblVehicleTrips	WD_TR	36.13	49.96
tblVehicleTrips	WD_TR	4.99	4.98
tblVehicleTrips	WD_TR	5.63	9.00
tblVehicleTrips	WD_TR	0.00	2.58
tblVehicleTrips	WD_TR	9.11	12.21
tblVehicleTrips	WD_TR	42.94	43.52
tblVehicleTrips	WD_TR	9.57	9.01
tblVehicleTrips	WD_TR	44.32	79.05
tblVehicleTrips	WD_TR	102.24	149.83
tblVehicleTrips	WD_TR	2.59	5.10

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Area	65.1292	0.6723	60.7748	0.0219		7.8158	7.8158		7.8156	7.8156	740.6307	319.3286	1,059.9593	0.6920	0.0583	1,092.5511	
Energy	0.0744	0.6475	0.3551	4.0600e-003		0.0514	0.0514		0.0514	0.0514	0.0000	7,288.7239	7,288.7239	0.2778	0.0681	7,315.6597	
Mobile	36.7000	62.5711	318.3621	0.7420	50.1180	0.8808	50.9988	13.4041	0.8128	14.2169	0.0000	51,477.4163	51,477.4163	2.0763	0.0000	51,521.0183	
Waste						0.0000	0.0000		0.0000	0.0000	334.0947	0.0000	334.0947	19.7444	0.0000	748.7278	
Water						0.0000	0.0000		0.0000	0.0000	45.6743	1,112.0983	1,157.7726	4.7360	0.1200	1,294.4371	
Total	101.9037	63.8909	379.4920	0.7680	50.1180	8.7480	58.8660	13.4041	8.6798	22.0839	1,120.3997	60,197.5670	61,317.9667	27.5265	0.2464	61,972.3939	

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	65.1292	0.6723	60.7748	0.0219		7.8158	7.8158		7.8156	7.8156	740.6307	319.3286	1,059.959	0.6920	0.0583	1,092.551	
Energy	0.0503	0.4390	0.2479	2.7500e-003		0.0348	0.0348		0.0348	0.0348	0.0000	6,321.071	6,321.071	0.2439	0.0576	6,344.057	
Mobile	36.7000	62.5711	318.3621	0.7420	50.1180	0.8808	50.9988	13.4041	0.8128	14.2169	0.0000	51,477.41	51,477.41	2.0763	0.0000	51,521.01	
Waste						0.0000	0.0000		0.0000	0.0000	167.0474	0.0000	167.0474	9.8722	0.0000	374.3639	
Water						0.0000	0.0000		0.0000	0.0000	36.5395	872.6677	909.2072	3.7881	0.0959	1,018.480	
Total	101.8796	63.6824	379.3849	0.7667	50.1180	8.7314	58.8494	13.4041	8.6632	22.0673	944.2175	58,990.48	59,934.70	16.6725	0.2118	60,350.47	
												41	16			13	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.02	0.33	0.03	0.17	0.00	0.19	0.03	0.00	0.19	0.08	15.72	2.01	2.26	39.43	14.04	2.62

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	36.7000	62.5711	318.3621	0.7420	50.1180	0.8808	50.9988	13.4041	0.8128	14.2169	0.0000	51,477.41 63	51,477.41 63	2.0763	0.0000	51,521.01 83	
Unmitigated	36.7000	62.5711	318.3621	0.7420	50.1180	0.8808	50.9988	13.4041	0.8128	14.2169	0.0000	51,477.41 63	51,477.41 63	2.0763	0.0000	51,521.01 83	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Bank (with Drive-Through)	0.00	0.00	0.00		
City Park	2,221.56	2,221.56	2221.56	4,742,703	4,742,703
Condo/Townhouse	4,796.73	4,796.73	4796.73	13,696,119	13,696,119
Convenience Market (24 Hour)	0.00	0.00	0.00		
Convenience Market With Gas Pumps	0.00	0.00	0.00		
Elementary School	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	2,443.21	2,443.21	2443.21	2,282,752	2,282,752
General Light Industry	261.44	261.44	261.44	763,265	763,265
General Office Building	0.00	0.00	0.00		
Government (Civic Center)	0.00	0.00	0.00		
Government Office Building	609.02	0.00	0.00	746,002	746,002
High School	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Junior High School	0.00	0.00	0.00		
Library	533.61	533.61	533.61	904,391	904,391
Medical Office Building	0.00	0.00	0.00		
Mobile Home Park	0.00	0.00	0.00		
Motel	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Place of Worship	0.00	0.00	0.00		
Regional Shopping Center	29,880.83	29,880.83	29880.83	52,390,207	52,390,207
Single Family Housing	0.00	0.00	0.00		
Strip Mall	37,240.46	37,240.46	37240.46	57,351,531	57,351,531
Supermarket	59.93	59.93	59.93	68,169	68,169
Unrefrigerated Warehouse-No Rail	116.28	116.28	116.28	339,481	339,481
Total	78,163.07	77,554.04	77,554.04	133,284,622	133,284,622

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Bank (with Drive-Through)	9.50	7.30	7.30	6.60	74.40	19.00	27	26	47
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Enclosed Parking Structure	9.50	7.30	7.30	0.80	80.20	19.00	100	0	0
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
High Turnover (Sit Down)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Junior High School	9.50	7.30	7.30	72.80	22.20	5.00	63	25	12
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Mobile Home Park	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Motel	9.50	7.30	7.30	19.00	62.00	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.80	80.20	19.00	100	0	0
Place of Worship	9.50	7.30	7.30	0.00	95.00	5.00	64	25	11
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated	0.0503	0.4390	0.2479	2.7500e-003		0.0348	0.0348		0.0348	0.0348	0.0000	498.2136	498.2136	9.5500e-003	9.1300e-003	501.2457
NaturalGas Unmitigated	0.0744	0.6475	0.3551	4.0600e-003		0.0514	0.0514		0.0514	0.0514	0.0000	736.5789	736.5789	0.0141	0.0135	741.0616
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,822.8579	5,822.8579	0.2344	0.0485	5,842.8118
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,552.1450	6,552.1450	0.2637	0.0546	6,574.5981

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Land Use	kBTU/yr	tons/yr												MT/yr					
Library	126153	6.8000e-004	6.1800e-003	5.1900e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7320	6.7320	1.3000e-004	1.2000e-004	6.7730		
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Mobile Home Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Motel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Place of Worship	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Regional Shopping Center	1.57231e+006	8.4800e-003	0.0771	0.0647	4.6000e-004		5.8600e-003	5.8600e-003		5.8600e-003	5.8600e-003	0.0000	83.9047	83.9047	1.6100e-003	1.5400e-003	84.4153		
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Strip Mall	1.07882e+006	5.8200e-003	0.0529	0.0444	3.2000e-004		4.0200e-003	4.0200e-003		4.0200e-003	4.0200e-003	0.0000	57.5699	57.5699	1.1000e-003	1.0600e-003	57.9203		
Supermarket	10252	6.0000e-005	5.0000e-004	4.2000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5471	0.5471	1.0000e-005	1.0000e-005	0.5504		
Unrefrigerated Warehouse-No Rail	39900	2.2000e-004	1.9600e-003	1.6400e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.1292	2.1292	4.0000e-005	4.0000e-005	2.1422		
Total		0.0745	0.6475	0.3551	4.0600e-003		0.0514	0.0514		0.0514	0.0514	0.0000	736.5789	736.5789	0.0141	0.0135	741.0616		

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	6.3296e+006	0.0341	0.2917	0.1241	1.8600e-003		0.0236	0.0236		0.0236	0.0236	0.0000	337.7714	337.7714	6.4700e-003	6.1900e-003	339.8270
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Elementary School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	556052	3.0000e-003	0.0273	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	29.6731	29.6731	5.7000e-004	5.4000e-004	29.8536
General Light Industry	27164.5	1.5000e-004	1.3300e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4496	1.4496	3.0000e-005	3.0000e-005	1.4584
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	276395	1.4900e-003	0.0136	0.0114	8.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	14.7495	14.7495	2.8000e-004	2.7000e-004	14.8392
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Library	103807	5.6000e-004	5.0900e-003	4.2700e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5395	5.5395	1.1000e-004	1.0000e-004	5.5733

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Motel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Place of Worship	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.19331e+006	6.4300e-003	0.0585	0.0491	3.5000e-004		4.4500e-003	4.4500e-003		4.4500e-003	4.4500e-003	0.0000	63.6796	63.6796	1.2200e-003	1.1700e-003	64.0672
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	818772	4.4100e-003	0.0401	0.0337	2.4000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	43.6928	43.6928	8.4000e-004	8.0000e-004	43.9587
Supermarket	8373.36	5.0000e-005	4.1000e-004	3.4000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4468	0.4468	1.0000e-005	1.0000e-005	0.4496
Unrefrigerated Warehouse-No Rail	22699.7	1.2000e-004	1.1100e-003	9.3000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.2113	1.2113	2.0000e-005	2.0000e-005	1.2187
Total		0.0503	0.4391	0.2479	2.7400e-003		0.0348	0.0348		0.0348	0.0348	0.0000	498.2136	498.2136	9.5500e-003	9.1300e-003	501.2457

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	3.10762e+006	1,015.597	0.0409	8.4600e-003	1,019.078
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	0	0.0000	0.0000	0.0000	0.0000
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	144760	47.3088	1.9000e-003	3.9000e-004	47.4710
General Light Industry	25200	8.2356	3.3000e-004	7.0000e-005	8.2638
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	311792	101.8964	4.1000e-003	8.5000e-004	102.2455
High School	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Junior High School	0	0.0000	0.0000	0.0000	0.0000
Library	96300	31.4717	1.2700e-003	2.6000e-004	31.5795
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Mobile Home Park	0	0.0000	0.0000	0.0000	0.0000
Motel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	9.63986e+006	3,150.3921	0.1268	0.0262	3,161.1879
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	6.61424e+006	2,161.5929	0.0870	0.0180	2,169.0004
Supermarket	14920	4.8760	2.0000e-004	4.0000e-005	4.8927
Unrefrigerated Warehouse-No Rail	94164	30.7736	1.2400e-003	2.6000e-004	30.8791
Total		6,552.1450	0.2637	0.0546	6,574.5981

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	3.03945e+006	993.3192	0.0400	8.2700e-003	996.7231

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	0	0.0000	0.0000	0.0000	0.0000
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive_Thru	128563	42.0157	1.6900e-003	3.5000e-004	42.1596
General Light Industry	23293.8	7.6126	3.1000e-004	6.0000e-005	7.6387
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	257350	84.1043	3.3900e-003	7.0000e-004	84.3925
High School	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Junior High School	0	0.0000	0.0000	0.0000	0.0000
Library	89015.4	29.0910	1.1700e-003	2.4000e-004	29.1907
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	0	0.0000	0.0000	0.0000	0.0000

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Motel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	8.41126e+006	2,748.8742	0.1106	0.0229	2,758.2941
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	5.77126e+006	1,886.0976	0.0759	0.0157	1,892.5609
Supermarket	14189.5	4.6373	1.9000e-004	4.0000e-005	4.6532
Unrefrigerated Warehouse-No Rail	82941.8	27.1061	1.0900e-003	2.3000e-004	27.1990
Total		5,822.8579	0.2344	0.0485	5,842.8118

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	65.1292	0.6723	60.7748	0.0219		7.8158	7.8158		7.8156	7.8156	740.6307	319.3286	1,059.959 3	0.6920	0.0583	1,092.551 1	
Unmitigated	65.1292	0.6723	60.7748	0.0219		7.8158	7.8158		7.8156	7.8156	740.6307	319.3286	1,059.959 3	0.6920	0.0583	1,092.551 1	

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	4.9312					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	15.0453					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	44.9890	0.6104	55.4216	0.0217		7.7864	7.7864		7.7862	7.7862	740.6307	310.6097	1,051.240 4	0.6835	0.0583	1,083.652 9	
Landscaping	0.1638	0.0619	5.3532	2.8000e-004		0.0294	0.0294		0.0294	0.0294	0.0000	8.7189	8.7189	8.5400e-003	0.0000	8.8983	
Total	65.1292	0.6723	60.7748	0.0219		7.8158	7.8158		7.8156	7.8156	740.6307	319.3286	1,059.959 3	0.6920	0.0583	1,092.551 1	

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.9312					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	15.0453					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	44.9890	0.6104	55.4216	0.0217		7.7864	7.7864		7.7862	7.7862	740.6307	310.6097	1,051.2404	0.6835	0.0583	1,083.6529
Landscaping	0.1638	0.0619	5.3532	2.8000e-004		0.0294	0.0294		0.0294	0.0294	0.0000	8.7189	8.7189	8.5400e-003	0.0000	8.8983
Total	65.1292	0.6723	60.7748	0.0219		7.8158	7.8158		7.8156	7.8156	740.6307	319.3286	1,059.9593	0.6920	0.0583	1,092.5511

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	1,157.772 6	4.7360	0.1200	1,294.437 1
Mitigated	909.2072 5	3.7881	0.0959	1,018.480 5

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive-Through)	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 52.4252	190.3477	7.6600e-003	1.5900e-003	191.0000
Condo/Townhouse	46.7154 / 29.451	320.5446	1.5345	0.0385	364.7013
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	0 / 0	0.0000	0.0000	0.0000	0.0000
Elementary School	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	1.06237 / 0.0678107	5.1040	0.0348	8.6000e-004	6.1007

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.6475 / 0	2.9608	0.0212	5.2000e-004	3.5677
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	4.13212 / 2.53259	28.0901	0.1357	3.4000e-003	31.9950
High School	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior High School	0 / 0	0.0000	0.0000	0.0000	0.0000
Library	0.334791 / 0.523648	3.4322	0.0110	2.9000e-004	3.7525
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Motel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	50.8582 / 31.1712	345.7334	1.6705	0.0419	393.7948
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	34.8956 / 21.3876	237.2196	1.1462	0.0287	270.1962
Supermarket	0.0493073 / 0.0015249	0.2310	1.6200e-003	4.0000e-005	0.2772
Unrefrigerated Warehouse-No Rail	5.2725 / 0	24.1092	0.1727	4.2400e-003	29.0516
Total		1,157.772 6	4.7360	0.1200	1,294.437 1

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive- Through)	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 41.9401	152.2782	6.1300e-003	1.2700e-003	152.8000
Condo/Townhous e	37.3723 / 23.5608	250.9159	1.2274	0.0308	286.2223
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	0 / 0	0.0000	0.0000	0.0000	0.0000
Elementary School	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0.849894 / 0.0542486	3.9577	0.0278	6.8000e-004	4.7546
General Light Industry	0.518 / 0	2.2921	0.0170	4.2000e-004	2.7774

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	3.3057 / 2.02607	21.9839	0.1086	2.7200e-003	25.1061
High School	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior High School	0 / 0	0.0000	0.0000	0.0000	0.0000
Library	0.267833 / 0.418918	2.7062	8.8300e-003	2.3000e-004	2.9623
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Motel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40.6866 / 24.9369	270.5774	1.3361	0.0335	309.0060
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	27.9165 / 17.1101	185.6525	0.9168	0.0230	212.0197

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Supermarket	0.0394458 / 0.0012100	0.1790	1.2900e-003	3.0000e-005	0.2160
Unrefrigerated Warehouse-No Rail	4.218 / 0	18.6644	0.1381	3.3900e-003	22.6161
Total		909.2072	3.7881	0.0959	1,018.4805

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	167.0474	9.8722	0.0000	374.3639
Unmitigated	334.0947	19.7444	0.0000	748.7278

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	0	0.0000	0.0000	0.0000	0.0000
City Park	3.78	0.7673	0.0454	0.0000	1.7196
Condo/Townhouse	329.82	66.9505	3.9567	0.0000	150.0403
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive-Thru	40.32	8.1846	0.4837	0.0000	18.3422
General Light Industry	3.47	0.7044	0.0416	0.0000	1.5786
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	19.34	3.9259	0.2320	0.0000	8.7981
High School	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Junior High School	0	0.0000	0.0000	0.0000	0.0000
Library	9.85	1.9995	0.1182	0.0000	4.4809

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	0	0.0000	0.0000	0.0000	0.0000
Motel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	720.93	146.3423	8.6486	0.0000	327.9625
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	494.66	100.4115	5.9342	0.0000	225.0287
Supermarket	2.26	0.4588	0.0271	0.0000	1.0281
Unrefrigerated Warehouse-No Rail	21.43	4.3501	0.2571	0.0000	9.7489
Total		334.0947	19.7444	0.0000	748.7278

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	0	0.0000	0.0000	0.0000	0.0000
City Park	1.89	0.3837	0.0227	0.0000	0.8598

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	164.91	33.4752	1.9783	0.0000	75.0202
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	20.16	4.0923	0.2419	0.0000	9.1711
General Light Industry	1.735	0.3522	0.0208	0.0000	0.7893
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	9.67	1.9629	0.1160	0.0000	4.3990
High School	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Junior High School	0	0.0000	0.0000	0.0000	0.0000
Library	4.925	0.9997	0.0591	0.0000	2.2405
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	0	0.0000	0.0000	0.0000	0.0000

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Motel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	360.465	73.1711	4.3243	0.0000	163.9812
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	247.33	50.2058	2.9671	0.0000	112.5143
Supermarket	1.13	0.2294	0.0136	0.0000	0.5141
Unrefrigerated Warehouse-No Rail	10.715	2.1751	0.1285	0.0000	4.8744
Total		167.0474	9.8722	0.0000	374.3639

9.0 Operational Offroad

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

SYCPU - No Change Approved (2020)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	11.50	1000sqft	0.26	11,500.00	0
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Government (Civic Center)	0.00	1000sqft	0.00	0.00	0
Government Office Building	317.50	1000sqft	7.29	317,500.00	0
Medical Office Building	48.30	1000sqft	1.11	48,300.00	0
Elementary School	4,108.00	Student	7.88	343,442.64	0
High School	37.60	1000sqft	0.86	37,600.00	0
Junior College (2Yr)	2,300.00	Student	2.30	100,400.15	0
Junior High School	993.00	Student	2.68	116,738.75	0
Library	4.30	1000sqft	0.10	4,300.00	0
Place of Worship	175.50	1000sqft	4.03	175,500.00	0
General Light Industry	1,309.80	1000sqft	30.07	1,309,800.00	0
Industrial Park	46.90	1000sqft	1.08	46,900.00	0
Unrefrigerated Warehouse-No Rail	11.50	1000sqft	0.26	11,500.00	0
Enclosed Parking Structure	7.90	Acre	7.90	344,124.00	0
Parking Lot	6,634.00	Space	59.71	2,653,600.00	0
City Park	35.80	Acre	35.80	1,559,448.00	0
Fast Food Restaurant with Drive Thru	45.40	1000sqft	1.04	45,400.00	0
High Turnover (Sit Down Restaurant)	36.50	1000sqft	0.84	36,500.00	0
Hotel	726.00	Room	24.20	1,054,152.00	0
Motel	25.00	Room	1.13	49,005.00	0

Condo/Townhouse	4,476.00	Dwelling Unit	279.75	4,476,000.00	12801
Mobile Home Park	242.00	Dwelling Unit	30.49	290,400.00	692
Single Family Housing	2,267.00	Dwelling Unit	736.04	4,080,600.00	6484
Convenience Market (24 Hour)	2.70	1000sqft	0.06	2,700.00	0
Convenience Market With Gas Pumps	84.00	Pump	0.27	11,858.69	0
Regional Shopping Center	1,443.40	1000sqft	33.14	1,443,400.00	0
Strip Mall	507.20	1000sqft	11.64	507,200.00	0
Supermarket	23.00	1000sqft	0.53	23,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction for existing

Vehicle Trips - Kimley Horn 2015

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Energy Use -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	11530317	11539317
tblConstructionPhase	NumDays	10,000.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	0.80
tblVehicleTrips	CW_TTP	0.00	0.80
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	86.32	200.26
tblVehicleTrips	ST_TR	1.59	50.49
tblVehicleTrips	ST_TR	7.16	6.69
tblVehicleTrips	ST_TR	863.10	706.30

tblVehicleTrips	ST_TR	204.47	150.23
tblVehicleTrips	ST_TR	0.00	136.20
tblVehicleTrips	ST_TR	722.03	698.06
tblVehicleTrips	ST_TR	1.32	93.37
tblVehicleTrips	ST_TR	2.37	25.14
tblVehicleTrips	ST_TR	158.37	128.44
tblVehicleTrips	ST_TR	8.19	10.03
tblVehicleTrips	ST_TR	2.49	16.20
tblVehicleTrips	ST_TR	46.55	49.87
tblVehicleTrips	ST_TR	8.96	49.96
tblVehicleTrips	ST_TR	5.00	4.98
tblVehicleTrips	ST_TR	5.63	9.00
tblVehicleTrips	ST_TR	0.00	2.58
tblVehicleTrips	ST_TR	10.37	12.21
tblVehicleTrips	ST_TR	49.97	43.52
tblVehicleTrips	ST_TR	10.08	9.01
tblVehicleTrips	ST_TR	42.04	79.05
tblVehicleTrips	ST_TR	177.59	149.83
tblVehicleTrips	ST_TR	2.59	5.10
tblVehicleTrips	SU_TR	31.90	200.26
tblVehicleTrips	SU_TR	1.59	50.49
tblVehicleTrips	SU_TR	6.07	6.69
tblVehicleTrips	SU_TR	758.45	706.30
tblVehicleTrips	SU_TR	166.88	150.23
tblVehicleTrips	SU_TR	0.00	136.20
tblVehicleTrips	SU_TR	542.72	698.06
tblVehicleTrips	SU_TR	0.68	93.37
tblVehicleTrips	SU_TR	0.98	25.14

tblVehicleTrips	SU_TR	131.84	128.44
tblVehicleTrips	SU_TR	5.95	10.03
tblVehicleTrips	SU_TR	0.73	16.20
tblVehicleTrips	SU_TR	25.49	49.87
tblVehicleTrips	SU_TR	1.55	49.96
tblVehicleTrips	SU_TR	4.36	4.98
tblVehicleTrips	SU_TR	5.63	9.00
tblVehicleTrips	SU_TR	0.00	2.58
tblVehicleTrips	SU_TR	36.63	12.21
tblVehicleTrips	SU_TR	25.24	43.52
tblVehicleTrips	SU_TR	8.77	9.01
tblVehicleTrips	SU_TR	20.43	79.05
tblVehicleTrips	SU_TR	166.44	149.83
tblVehicleTrips	SU_TR	2.59	5.10
tblVehicleTrips	WD_TR	148.15	200.26
tblVehicleTrips	WD_TR	1.59	50.49
tblVehicleTrips	WD_TR	6.59	6.69
tblVehicleTrips	WD_TR	737.99	706.30
tblVehicleTrips	WD_TR	542.60	150.23
tblVehicleTrips	WD_TR	1.29	2.91
tblVehicleTrips	WD_TR	0.00	136.20
tblVehicleTrips	WD_TR	496.12	698.06
tblVehicleTrips	WD_TR	6.97	93.37
tblVehicleTrips	WD_TR	11.01	25.14
tblVehicleTrips	WD_TR	27.92	29.83
tblVehicleTrips	WD_TR	68.93	29.28
tblVehicleTrips	WD_TR	12.89	17.98
tblVehicleTrips	WD_TR	127.15	128.44

tblVehicleTrips	WD_TR	8.17	10.03
tblVehicleTrips	WD_TR	6.96	16.20
tblVehicleTrips	WD_TR	1.20	1.66
tblVehicleTrips	WD_TR	1.62	1.41
tblVehicleTrips	WD_TR	56.24	49.87
tblVehicleTrips	WD_TR	36.13	49.96
tblVehicleTrips	WD_TR	4.99	4.98
tblVehicleTrips	WD_TR	5.63	9.00
tblVehicleTrips	WD_TR	0.00	2.58
tblVehicleTrips	WD_TR	9.11	12.21
tblVehicleTrips	WD_TR	42.94	43.52
tblVehicleTrips	WD_TR	9.57	9.01
tblVehicleTrips	WD_TR	44.32	79.05
tblVehicleTrips	WD_TR	102.24	149.83
tblVehicleTrips	WD_TR	2.59	5.10

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	537.2609	6.5498	592.1286	0.2136		76.1418	76.1418		76.1395	76.1395	7,215.209 6	3,111.011 8	10,326.22 13	6.7420	0.5675	10,643.73 70	
Energy	1.4180	12.4812	7.8241	0.0774		0.9797	0.9797		0.9797	0.9797	0.0000	52,363.23 85	52,363.23 85	1.8118	0.5765	52,579.99 30	
Mobile	193.7917	375.0546	1,828.825 9	4.6543	317.6979	5.4216	323.1196	84.9685	5.0030	89.9716	0.0000	322,993.6 387	322,993.6 387	12.7246	0.0000	323,260.8 541	
Waste						0.0000	0.0000		0.0000	0.0000	2,703.311 9	0.0000	2,703.311 9	159.7612	0.0000	6,058.296 1	
Water						0.0000	0.0000		0.0000	0.0000	335.9104	6,375.286 0	6,711.196 3	34.7578	0.8677	7,710.109 9	
Total	732.4705	394.0856	2,428.778 5	4.9453	317.6979	82.5431	400.2410	84.9685	82.1223	167.0908	10,254.43 18	384,843.1 749	395,097.6 066	215.7973	2.0118	400,252.9 901	

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	537.2609	6.5498	592.1286	0.2136		76.1418	76.1418		76.1395	76.1395	7,215.2096	3,111.0118	10,326.2213	6.7420	0.5675	10,643.7370	
Energy	1.4180	12.4812	7.8241	0.0774		0.9797	0.9797		0.9797	0.9797	0.0000	52,363.2385	52,363.2385	1.8118	0.5765	52,579.9930	
Mobile	193.7917	375.0546	1,828.8259	4.6543	317.6979	5.4216	323.1196	84.9685	5.0030	89.9716	0.0000	322,993.6387	322,993.6387	12.7246	0.0000	323,260.8541	
Waste						0.0000	0.0000		0.0000	0.0000	2,703.3119	0.0000	2,703.3119	159.7612	0.0000	6,058.2961	
Water						0.0000	0.0000		0.0000	0.0000	335.9104	6,375.2860	6,711.1963	34.7515	0.8664	7,709.5740	
Total	732.4705	394.0856	2,428.7785	4.9453	317.6979	82.5431	400.2410	84.9685	82.1223	167.0908	10,254.4318	384,843.1749	395,097.6066	215.7910	2.0105	400,252.4542	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	193.7917	375.0546	1,828.8259	4.6543	317.6979	5.4216	323.1196	84.9685	5.0030	89.9716	0.0000	322,993.6387	322,993.6387	12.7246	0.0000	323,260.8541	
Unmitigated	193.7917	375.0546	1,828.8259	4.6543	317.6979	5.4216	323.1196	84.9685	5.0030	89.9716	0.0000	322,993.6387	322,993.6387	12.7246	0.0000	323,260.8541	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Bank (with Drive-Through)	2,302.99	2,302.99	2302.99	2,130,210	2,130,210
City Park	1,807.54	1,807.54	1807.54	3,858,836	3,858,836
Condo/Townhouse	29,944.44	29,944.44	29944.44	85,500,460	85,500,460
Convenience Market (24 Hour)	1,907.01	1,907.01	1907.01	1,452,335	1,452,335
Convenience Market With Gas Pumps	12,619.32	12,619.32	12619.32	6,769,057	6,769,057
Elementary School	11,954.28	0.00	0.00	18,827,471	18,827,471
Enclosed Parking Structure	1,075.98	1,075.98	1075.98	2,865,987	2,865,987
Fast Food Restaurant with Drive Thru	31,691.92	31,691.92	31691.92	29,610,558	29,610,558
General Light Industry	122,296.03	122,296.03	122296.03	357,044,610	357,044,610
General Office Building	175.98	175.98	175.98	420,549	420,549
Government (Civic Center)	0.00	0.00	0.00		
Government Office Building	9,296.40	0.00	0.00	11,387,296	11,387,296
High School	676.05	164.31	67.30	1,350,917	1,350,917
High Turnover (Sit Down Restaurant)	4,688.06	4,688.06	4688.06	5,439,390	5,439,390
Hotel	7,281.78	7,281.78	7281.78	13,834,878	13,834,878
Industrial Park	759.78	759.78	759.78	1,992,013	1,992,013
Junior College (2Yr)	3,818.00	966.00	92.00	7,309,513	7,309,513
Junior High School	1,400.13	0.00	0.00	2,248,403	2,248,403
Library	214.44	214.44	214.44	363,447	363,447
Medical Office Building	2,413.07	2,413.07	2413.07	4,722,977	4,722,977
Mobile Home Park	1,205.16	1,205.16	1205.16	3,441,097	3,441,097
Motel	225.00	225.00	225.00	426,998	426,998
Parking Lot	17,115.72	17,115.72	17115.72	45,589,541	45,589,541
Place of Worship	2,142.86	2,142.86	2142.86	4,008,611	4,008,611
Regional Shopping Center	62,816.77	62,816.77	62816.77	110,136,942	110,136,942
Single Family Housing	20,425.67	20,425.67	20425.67	58,321,484	58,321,484
Strip Mall	40,094.16	40,094.16	40094.16	61,746,331	61,746,331
Supermarket	3,446.09	3,446.09	3446.09	3,919,733	3,919,733
Unrefrigerated Warehouse-No Rail	58.65	58.65	58.65	171,229	171,229
Total	393,853.27	367,838.73	366,867.72	844,890,874	844,890,874

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Bank (with Drive-Through)	9.50	7.30	7.30	6.60	74.40	19.00	27	26	47
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Enclosed Parking Structure	9.50	7.30	7.30	0.80	80.20	19.00	100	0	0
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
High Turnover (Sit Down)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Junior High School	9.50	7.30	7.30	72.80	22.20	5.00	63	25	12
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Mobile Home Park	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Motel	9.50	7.30	7.30	19.00	62.00	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.80	80.20	19.00	100	0	0
Place of Worship	9.50	7.30	7.30	0.00	95.00	5.00	64	25	11
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated	1.4180	12.4812	7.8241	0.0774		0.9797	0.9797		0.9797	0.9797	0.0000	14,033.24 55	14,033.24 55	0.2690	0.2573	14,118.64 95
NaturalGas Unmitigated	1.4180	12.4812	7.8241	0.0774		0.9797	0.9797		0.9797	0.9797	0.0000	14,033.24 55	14,033.24 55	0.2690	0.2573	14,118.64 95
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	38,329.99 30	38,329.99 30	1.5428	0.3192	38,461.34 35
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	38,329.99 30	38,329.99 30	1.5428	0.3192	38,461.34 35

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Bank (with Drive-Through)	141335	7.6000e-004	6.9300e-003	5.8200e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5422	7.5422	1.4000e-004	1.4000e-004	7.5881
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	6.53637e+007	0.3525	3.0119	1.2816	0.0192		0.2435	0.2435		0.2435	0.2435	0.0000	3,488.0583	3,488.0583	0.0669	0.0640	3,509.2861
Convenience Market (24 Hour)	6507	4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3472	0.3472	1.0000e-005	1.0000e-005	0.3494
Convenience Market With Gas Pumps	28579.4	1.5000e-004	1.4000e-003	1.1800e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5251	1.5251	3.0000e-005	3.0000e-005	1.5344
Elementary School	2.36289e+006	0.0127	0.1158	0.0973	6.9000e-004		8.8000e-003	8.8000e-003		8.8000e-003	8.8000e-003	0.0000	126.0926	126.0926	2.4200e-003	2.3100e-003	126.8599
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	8.02309e+006	0.0433	0.3933	0.3304	2.3600e-003		0.0299	0.0299		0.0299	0.0299	0.0000	428.1425	428.1425	8.2100e-003	7.8500e-003	430.7481
General Light Industry	1.60974e+007	0.0868	0.7891	0.6628	4.7300e-003		0.0600	0.0600		0.0600	0.0600	0.0000	859.0208	859.0208	0.0165	0.0158	864.2487
General Office Building	164920	8.9000e-004	8.0800e-003	6.7900e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.8008	8.8008	1.7000e-004	1.6000e-004	8.8543
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	7.4803e+006	0.0403	0.3667	0.3080	2.2000e-003		0.0279	0.0279		0.0279	0.0279	0.0000	399.1773	399.1773	7.6500e-003	7.3200e-003	401.6066
High School	258688	1.3900e-003	0.0127	0.0107	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.8046	13.8046	2.6000e-004	2.5000e-004	13.8886
High Turnover (Sit Down Restaurant)	6.45028e+006	0.0348	0.3162	0.2656	1.9000e-003		0.0240	0.0240		0.0240	0.0240	0.0000	344.2115	344.2115	6.6000e-003	6.3100e-003	346.3063
Hotel	6.49252e+007	0.3501	3.1826	2.6734	0.0191		0.2419	0.2419		0.2419	0.2419	0.0000	3,464.6571	3,464.6571	0.0664	0.0635	3,485.7424
Industrial Park	1.10496e+006	5.9600e-003	0.0542	0.0455	3.2000e-004		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	58.9651	58.9651	1.1300e-003	1.0800e-003	59.3239
Junior College (2Yr)	4.14151e+006	0.0223	0.2030	0.1705	1.2200e-003		0.0154	0.0154		0.0154	0.0154	0.0000	221.0065	221.0065	4.2400e-003	4.0500e-003	222.3516
Junior High School	803163	4.3300e-003	0.0394	0.0331	2.4000e-004		2.9900e-003	2.9900e-003		2.9900e-003	2.9900e-003	0.0000	42.8598	42.8598	8.2000e-004	7.9000e-004	43.1207

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr											MT/yr					
Library	52847	2.8000e-004	2.5900e-003	2.1800e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8201	2.8201	5.0000e-005	5.0000e-005	2.8373	
Medical Office Building	1.13795e+006	6.1400e-003	0.0558	0.0469	3.3000e-004		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003	0.0000	60.7252	60.7252	1.1600e-003	1.1100e-003	61.0948	
Mobile Home Park	5.73353e+006	0.0309	0.2642	0.1124	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	305.9631	305.9631	5.8600e-003	5.6100e-003	307.8251	
Motel	3.01822e+006	0.0163	0.1480	0.1243	8.9000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	161.0636	161.0636	3.0900e-003	2.9500e-003	162.0438	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Place of Worship	2.1569e+006	0.0116	0.1057	0.0888	6.3000e-004		8.0400e-003	8.0400e-003		8.0400e-003	8.0400e-003	0.0000	115.1001	115.1001	2.2100e-003	2.1100e-003	115.8006	
Regional Shopping Center	3.47859e+006	0.0188	0.1705	0.1432	1.0200e-003		0.0130	0.0130		0.0130	0.0130	0.0000	185.6310	185.6310	3.5600e-003	3.4000e-003	186.7607	
Single Family Housing	6.81903e+007	0.3677	3.1421	1.3371	0.0201		0.2540	0.2540		0.2540	0.2540	0.0000	3,638.8962	3,638.8962	0.0698	0.0667	3,661.0419	
Strip Mall	1.22235e+006	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003	0.0000	65.2294	65.2294	1.2500e-003	1.2000e-003	65.6263	
Supermarket	606510	3.2700e-003	0.0297	0.0250	1.8000e-004		2.2600e-003	2.2600e-003		2.2600e-003	2.2600e-003	0.0000	32.3657	32.3657	6.2000e-004	5.9000e-004	32.5627	
Unrefrigerated Warehouse-No Rail	23230	1.3000e-004	1.1400e-003	9.6000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2396	1.2396	2.0000e-005	2.0000e-005	1.2472	
Total		1.4180	12.4812	7.8241	0.0774		0.9797	0.9797		0.9797	0.9797	0.0000	14,033.2455	14,033.2455	0.2690	0.2573	14,118.6495	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr											MT/yr					
Bank (with Drive-Through)	141335	7.6000e-004	6.9300e-003	5.8200e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5422	7.5422	1.4000e-004	1.4000e-004	7.5881	

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	6.53637e+007	0.3525	3.0119	1.2816	0.0192		0.2435	0.2435		0.2435	0.2435	0.0000	3,488.0583	3,488.0583	0.0669	0.0640	3,509.2861
Convenience Market (24 Hour)	6507	4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3472	0.3472	1.0000e-005	1.0000e-005	0.3494
Convenience Market With Gas Pumps	28579.4	1.5000e-004	1.4000e-003	1.1800e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5251	1.5251	3.0000e-005	3.0000e-005	1.5344
Elementary School	2.36289e+006	0.0127	0.1158	0.0973	6.9000e-004		8.8000e-003	8.8000e-003		8.8000e-003	8.8000e-003	0.0000	126.0926	126.0926	2.4200e-003	2.3100e-003	126.8599
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive-Thru	8.02309e+006	0.0433	0.3933	0.3304	2.3600e-003		0.0299	0.0299		0.0299	0.0299	0.0000	428.1425	428.1425	8.2100e-003	7.8500e-003	430.7481
General Light Industry	1.60974e+007	0.0868	0.7891	0.6628	4.7300e-003		0.0600	0.0600		0.0600	0.0600	0.0000	859.0208	859.0208	0.0165	0.0158	864.2487
General Office Building	164920	8.9000e-004	8.0800e-003	6.7900e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.8008	8.8008	1.7000e-004	1.6000e-004	8.8543
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	7.4803e+006	0.0403	0.3667	0.3080	2.2000e-003		0.0279	0.0279		0.0279	0.0279	0.0000	399.1773	399.1773	7.6500e-003	7.3200e-003	401.6066
High School	258688	1.3900e-003	0.0127	0.0107	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.8046	13.8046	2.6000e-004	2.5000e-004	13.8886
High Turnover (Sit Down Restaurant)	6.45028e+006	0.0348	0.3162	0.2656	1.9000e-003		0.0240	0.0240		0.0240	0.0240	0.0000	344.2115	344.2115	6.6000e-003	6.3100e-003	346.3063
Hotel	6.49252e+007	0.3501	3.1826	2.6734	0.0191		0.2419	0.2419		0.2419	0.2419	0.0000	3,464.6571	3,464.6571	0.0664	0.0635	3,485.7424
Industrial Park	1.10496e+006	5.9600e-003	0.0542	0.0455	3.2000e-004		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	58.9651	58.9651	1.1300e-003	1.0800e-003	59.3239
Junior College (2Yr)	4.14151e+006	0.0223	0.2030	0.1705	1.2200e-003		0.0154	0.0154		0.0154	0.0154	0.0000	221.0065	221.0065	4.2400e-003	4.0500e-003	222.3516
Junior High School	803163	4.3300e-003	0.0394	0.0331	2.4000e-004		2.9900e-003	2.9900e-003		2.9900e-003	2.9900e-003	0.0000	42.8598	42.8598	8.2000e-004	7.9000e-004	43.1207
Library	52847	2.8000e-004	2.5900e-003	2.1800e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8201	2.8201	5.0000e-005	5.0000e-005	2.8373

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Medical Office Building	1.13795e+006	6.1400e-003	0.0558	0.0469	3.3000e-004		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003	0.0000	60.7252	60.7252	1.1600e-003	1.1100e-003	61.0948
Mobile Home Park	5.73353e+006	0.0309	0.2642	0.1124	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	305.9631	305.9631	5.8600e-003	5.6100e-003	307.8251
Motel	3.01822e+006	0.0163	0.1480	0.1243	8.9000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	161.0636	161.0636	3.0900e-003	2.9500e-003	162.0438
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Place of Worship	2.1569e+006	0.0116	0.1057	0.0888	6.3000e-004		8.0400e-003	8.0400e-003		8.0400e-003	8.0400e-003	0.0000	115.1001	115.1001	2.2100e-003	2.1100e-003	115.8006
Regional Shopping Center	3.47859e+006	0.0188	0.1705	0.1432	1.0200e-003		0.0130	0.0130		0.0130	0.0130	0.0000	185.6310	185.6310	3.5600e-003	3.4000e-003	186.7607
Single Family Housing	6.81903e+007	0.3677	3.1421	1.3371	0.0201		0.2540	0.2540		0.2540	0.2540	0.0000	3,638.8962	3,638.8962	0.0698	0.0667	3,661.0419
Strip Mall	1.22235e+006	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003	0.0000	65.2294	65.2294	1.2500e-003	1.2000e-003	65.6263
Supermarket	606510	3.2700e-003	0.0297	0.0250	1.8000e-004		2.2600e-003	2.2600e-003		2.2600e-003	2.2600e-003	0.0000	32.3657	32.3657	6.2000e-004	5.9000e-004	32.5627
Unrefrigerated Warehouse-No Rail	23230	1.3000e-004	1.1400e-003	9.6000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2396	1.2396	2.0000e-005	2.0000e-005	1.2472
Total		1.4180	12.4812	7.8241	0.0774		0.9797	0.9797		0.9797	0.9797	0.0000	14,033.2455	14,033.2455	0.2690	0.2573	14,118.6495

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	107870	35.2529	1.4200e-003	2.9000e-004	35.3737
City Park	0	0.0000	0.0000	0.0000	0.0000

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.96269e+007	6,414.2290	0.2582	0.0534	6,436.2095
Convenience Market (24 Hour)	39933	13.0505	5.3000e-004	1.1000e-004	13.0952
Convenience Market With Gas Pumps	175390	57.3190	2.3100e-003	4.8000e-004	57.5154
Elementary School	2.18086e+006	712.7244	0.0287	5.9400e-003	715.1668
Enclosed Parking Structure	2.25401e+006	736.6310	0.0297	6.1300e-003	739.1553
Fast Food Restaurant with Drive Thru	1.93177e+006	631.3194	0.0254	5.2600e-003	633.4828
General Light Industry	1.22859e+007	4,015.1477	0.1616	0.0334	4,028.9069
General Office Building	110180	36.0078	1.4500e-003	3.0000e-004	36.1312
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	4.99745e+006	1,633.2105	0.0657	0.0136	1,638.8072
High School	238760	78.0289	3.1400e-003	6.5000e-004	78.2963
High Turnover (Sit Down Restaurant)	1.55308e+006	507.5585	0.0204	4.2300e-003	509.2978
Hotel	1.62234e+007	5,301.9491	0.2134	0.0442	5,320.1180
Industrial Park	738206	241.2522	9.7100e-003	2.0100e-003	242.0789
Junior College (2Yr)	1.08131e+006	353.3815	0.0142	2.9400e-003	354.5924
Junior High School	741291	242.2604	9.7500e-003	2.0200e-003	243.0906
Library	40334	13.1815	5.3000e-004	1.1000e-004	13.2267
Medical Office Building	760242	248.4538	0.0100	2.0700e-003	249.3052

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Mobile Home Park	1.25489e+006	410.1102	0.0165	3.4200e-003	411.5156
Motel	754187	246.4749	9.9200e-003	2.0500e-003	247.3195
Parking Lot	2.33517e+006	763.1534	0.0307	6.3600e-003	765.7686
Place of Worship	1.64619e+006	537.9893	0.0217	4.4800e-003	539.8329
Regional Shopping Center	2.13479e+007	6,976.6763	0.2808	0.0581	7,000.5842
Single Family Housing	1.64341e+007	5,370.7989	0.2162	0.0447	5,389.2038
Strip Mall	7.50149e+006	2,451.5520	0.0987	0.0204	2,459.9531
Supermarket	875150	286.0067	0.0115	2.3800e-003	286.9868
Unrefrigerated Warehouse-No Rail	49795	16.2734	6.6000e-004	1.4000e-004	16.3292
Total		38,329.9930	1.5428	0.3192	38,461.3435

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	107870	35.2529	1.4200e-003	2.9000e-004	35.3737
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.96269e+007	6,414.2290	0.2582	0.0534	6,436.2095

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market (24 Hour)	39933	13.0505	5.3000e-004	1.1000e-004	13.0952
Convenience Market With Gas Pumps	175390	57.3190	2.3100e-003	4.8000e-004	57.5154
Elementary School	2.18086e+006	712.7244	0.0287	5.9400e-003	715.1668
Enclosed Parking Structure	2.25401e+006	736.6310	0.0297	6.1300e-003	739.1553
Fast Food Restaurant with Drive_Thru	1.93177e+006	631.3194	0.0254	5.2600e-003	633.4828
General Light Industry	1.22859e+007	4,015.147	0.1616	0.0334	4,028.9069
General Office Building	110180	36.0078	1.4500e-003	3.0000e-004	36.1312
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	4.99745e+006	1,633.2105	0.0657	0.0136	1,638.8072
High School	238760	78.0289	3.1400e-003	6.5000e-004	78.2963
High Turnover (Sit Down Restaurant)	1.55308e+006	507.5585	0.0204	4.2300e-003	509.2978
Hotel	1.62234e+007	5,301.9491	0.2134	0.0442	5,320.1180
Industrial Park	738206	241.2522	9.7100e-003	2.0100e-003	242.0789
Junior College (2Yr)	1.08131e+006	353.3815	0.0142	2.9400e-003	354.5924
Junior High School	741291	242.2604	9.7500e-003	2.0200e-003	243.0906
Library	40334	13.1815	5.3000e-004	1.1000e-004	13.2267
Medical Office Building	760242	248.4538	0.0100	2.0700e-003	249.3052
Mobile Home Park	1.25489e+006	410.1102	0.0165	3.4200e-003	411.5156

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Motel	754187	246.4749	9.9200e-003	2.0500e-003	247.3195
Parking Lot	2.33517e+006	763.1534	0.0307	6.3600e-003	765.7686
Place of Worship	1.64619e+006	537.9893	0.0217	4.4800e-003	539.8329
Regional Shopping Center	2.13479e+007	6,976.6763	0.2808	0.0581	7,000.5842
Single Family Housing	1.64341e+007	5,370.7989	0.2162	0.0447	5,389.2038
Strip Mall	7.50149e+006	2,451.5520	0.0987	0.0204	2,459.9531
Supermarket	875150	286.0067	0.0115	2.3800e-003	286.9868
Unrefrigerated Warehouse-No Rail	49795	16.2734	6.6000e-004	1.4000e-004	16.3292
Total		38,329.9930	1.5428	0.3192	38,461.3435

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	537.2609	6.5498	592.1286	0.2136		76.1418	76.1418		76.1395	76.1395	7,215.209 6	3,111.011 8	10,326.22 13	6.7420	0.5675	10,643.73 70	
Unmitigated	537.2609	6.5498	592.1286	0.2136		76.1418	76.1418		76.1395	76.1395	7,215.209 6	3,111.011 8	10,326.22 13	6.7420	0.5675	10,643.73 70	

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	22.7519					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	74.6258					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	438.2822	5.9463	539.9166	0.2109		75.8550	75.8550		75.8528	75.8528	7,215.209 6	3,025.953 7	10,241.16 32	6.6584	0.5675	10,556.92 50
Landscaping	1.6011	0.6035	52.2120	2.7500e-003		0.2868	0.2868		0.2868	0.2868	0.0000	85.0581	85.0581	0.0835	0.0000	86.8120
Total	537.2609	6.5498	592.1286	0.2136		76.1418	76.1418		76.1395	76.1395	7,215.209 6	3,111.011 8	10,326.22 13	6.7420	0.5675	10,643.73 70

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	22.7519						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	74.6258						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	438.2822	5.9463	539.9166	0.2109		75.8550	75.8550		75.8528	75.8528	7,215.209 6	3,025.953 7	10,241.16 32	6.6584	0.5675	10,556.92 50	
Landscaping	1.6011	0.6035	52.2120	2.7500e-003		0.2868	0.2868		0.2868	0.2868	0.0000	85.0581	85.0581	0.0835	0.0000	86.8120	
Total	537.2609	6.5498	592.1286	0.2136		76.1418	76.1418		76.1395	76.1395	7,215.209 6	3,111.011 8	10,326.22 13	6.7420	0.5675	10,643.73 70	

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	6,711.196 3	34.7578	0.8677	7,710.109 9
Mitigated	6,711.196 3	34.7515	0.8664	7,709.574 0

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive-Through)	0.455664 / 0.279278	3.0976	0.0150	3.8000e-004	3.5282
City Park	0 / 42.655	154.8738	6.2300e-003	1.2900e-003	155.4046
Condo/Townhouse	291.629 / 183.853	2,001.056	9.5796	0.2403	2,276.712
Convenience Market (24 Hour)	0.199996 / 0.122578	1.3596	6.5700e-003	1.6000e-004	1.5486
Convenience Market With Gas Pumps	0.878403 / 0.538376	5.9714	0.0289	7.2000e-004	6.8015
Elementary School	9.95878 / 25.6083	138.5175	0.3300	8.7900e-003	148.1714
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	13.7804 / 0.879602	66.2065	0.4515	0.0111	79.1350
General Light Industry	302.891 / 0	1,385.009	9.9216	0.2438	1,668.934
General Office Building	1.24414 / 0.762535	8.4576	0.0409	1.0200e-003	9.6333
Government (Civic Center)	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	63.0745 / 38.6585	428.7793	2.0717	0.0519	488.3852
High School	1.24849 / 3.21041	17.3654	0.0414	1.1000e-003	18.5757
High Turnover (Sit Down Restaurant)	11.079 / 0.707169	53.2277	0.3630	8.9400e-003	63.6218
Hotel	18.4163 / 2.04625	91.6405	0.6036	0.0149	108.9290

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	10.8456 / 0	49.5930	0.3553	8.7300e- 003	59.7595
Junior College (2Yr)	4.92453 / 7.70247	50.4845	0.1624	4.2000e- 003	55.1965
Junior High School	2.40727 / 6.19012	33.4829	0.0798	2.1200e- 003	35.8165
Library	0.134542 / 0.210438	1.3793	4.4400e- 003	1.1000e- 004	1.5080
Medical Office Building	6.06071 / 1.15442	31.9049	0.1987	4.9100e- 003	37.6005
Mobile Home Park	15.7673 / 9.94024	108.1894	0.5179	0.0130	123.0930
Motel	0.634169 / 0.0704633	3.1557	0.0208	5.1000e- 004	3.7510
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Place of Worship	5.4912 / 8.58881	56.2939	0.1811	4.6800e- 003	61.5481
Regional Shopping Center	106.916 / 65.5293	726.8155	3.5118	0.0880	827.8523
Single Family Housing	147.704 / 93.1179	1,013.493 2	4.8519	0.1217	1,153.107 1
Strip Mall	37.5696 / 23.0265	255.3976	1.2340	0.0309	290.9011
Supermarket	2.83517 / 0.0876856	13.2826	0.0929	2.2800e- 003	15.9413
Unrefrigerated Warehouse-No Rail	2.65937 / 0	12.1603	0.0871	2.1400e- 003	14.6532
Total		6,711.196 3	34.7578	0.8677	7,710.109 9

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive-Through)	0.455664 / 0.279278	3.0976	0.0150	3.7000e-004	3.5280
City Park	0 / 42.655	154.8738	6.2300e-003	1.2900e-003	155.4046
Condo/Townhouse	291.629 / 183.853	2,001.0567	9.5778	0.2399	2,276.5650
Convenience Market (24 Hour)	0.199996 / 0.122578	1.3596	6.5700e-003	1.6000e-004	1.5485
Convenience Market With Gas Pumps	0.878403 / 0.538376	5.9714	0.0289	7.2000e-004	6.8010
Elementary School	9.95878 / 25.6083	138.5175	0.3299	8.7800e-003	148.1663
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	13.7804 / 0.879602	66.2065	0.4514	0.0111	79.1280
General Light Industry	302.891 / 0	1,385.0099	9.9198	0.2434	1,668.7816
General Office Building	1.24414 / 0.762535	8.4576	0.0409	1.0200e-003	9.6327
Government (Civic Center)	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	63.0745 / 38.6585	428.7793	2.0714	0.0519	488.3533
High School	1.24849 / 3.21041	17.3654	0.0414	1.1000e-003	18.5751
High Turnover (Sit Down Restaurant)	11.079 / 0.707169	53.2277	0.3629	8.9200e-003	63.6161
Hotel	18.4163 / 2.04625	91.6405	0.6034	0.0149	108.9197
Industrial Park	10.8456 / 0	49.5930	0.3552	8.7200e-003	59.7541
Junior College (2Yr)	4.92453 / 7.70247	50.4845	0.1624	4.1900e-003	55.1941
Junior High School	2.40727 / 6.19012	33.4829	0.0797	2.1200e-003	35.8153

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Library	0.134542 / 0.210438	1.3793	4.4400e- 003	1.1000e- 004	1.5080
Medical Office Building	6.06071 / 1.15442	31.9049	0.1987	4.9100e- 003	37.5974
Mobile Home Park	15.7673 / 9.94024	108.1894	0.5178	0.0130	123.0851
Motel	0.634169 / 0.0704633	3.1557	0.0208	5.1000e- 004	3.7507
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Place of Worship	5.4912 / 8.58881	56.2939	0.1811	4.6700e- 003	61.5453
Regional Shopping Center	106.916 / 65.5293	726.8155	3.5111	0.0879	827.7982
Single Family Housing	147.704 / 93.1179	1,013.493 2	4.8510	0.1215	1,153.032 4
Strip Mall	37.5696 / 23.0265	255.3976	1.2338	0.0309	290.8821
Supermarket	2.83517 / 0.0876856	13.2826	0.0929	2.2800e- 003	15.9399
Unrefrigerated Warehouse-No Rail	2.65937 / 0	12.1603	0.0871	2.1400e- 003	14.6519
Total		6,711.196 3	34.7515	0.8664	7,709.574 0

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2,703.311 9	159.7612	0.0000	6,058.296 1
Unmitigated	2,703.311 9	159.7612	0.0000	6,058.296 1

8.2 Waste by Land UseUnmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	10.73	2.1781	0.1287	0.0000	4.8813
City Park	3.08	0.6252	0.0370	0.0000	1.4011
Condo/Townhouse	2058.96	417.9503	24.7002	0.0000	936.6535
Convenience Market (24 Hour)	8.11	1.6463	0.0973	0.0000	3.6894
Elementary School	749.71	152.1844	8.9938	0.0000	341.0550
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	522.96	106.1562	6.2737	0.0000	237.9028

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1624.15	329.6878	19.4840	0.0000	738.8515
General Office Building	6.51	1.3215	0.0781	0.0000	2.9615
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	295.28	59.9392	3.5423	0.0000	134.3276
High School	48.88	9.9222	0.5864	0.0000	22.2363
High Turnover (Sit Down Restaurant)	434.35	88.1691	5.2107	0.0000	197.5927
Hotel	397.49	80.6869	4.7685	0.0000	180.8245
Industrial Park	58.16	11.8060	0.6977	0.0000	26.4579
Junior College (2Yr)	419.75	85.2055	5.0355	0.0000	190.9509
Junior High School	181.22	36.7860	2.1740	0.0000	82.4399
Library	3.96	0.8038	0.0475	0.0000	1.8015
Medical Office Building	521.64	105.8882	6.2578	0.0000	237.3023
Mobile Home Park	111.32	22.5970	1.3354	0.0000	50.6412
Motel	13.69	2.7790	0.1642	0.0000	6.2278
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	1000.35	203.0620	12.0006	0.0000	455.0751
Regional Shopping Center	1515.57	307.6470	18.1814	0.0000	689.4568
Single Family Housing	2658.44	539.6393	31.8918	0.0000	1,209.3664

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	532.56	108.1049	6.3888	0.0000	242.2700
Supermarket	129.72	26.3320	1.5562	0.0000	59.0117
Unrefrigerated Warehouse-No Rail	10.81	2.1943	0.1297	0.0000	4.9176
Total		2,703.3118	159.7612	0.0000	6,058.2961

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	10.73	2.1781	0.1287	0.0000	4.8813
City Park	3.08	0.6252	0.0370	0.0000	1.4011
Condo/Townhouse	2058.96	417.9503	24.7002	0.0000	936.6535
Convenience Market (24 Hour)	8.11	1.6463	0.0973	0.0000	3.6894
Elementary School	749.71	152.1844	8.9938	0.0000	341.0550
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	522.96	106.1562	6.2737	0.0000	237.9028
General Light Industry	1624.15	329.6878	19.4840	0.0000	738.8515
General Office Building	6.51	1.3215	0.0781	0.0000	2.9615

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	295.28	59.9392	3.5423	0.0000	134.3276
High School	48.88	9.9222	0.5864	0.0000	22.2363
High Turnover (Sit Down Restaurant)	434.35	88.1691	5.2107	0.0000	197.5927
Hotel	397.49	80.6869	4.7685	0.0000	180.8245
Industrial Park	58.16	11.8060	0.6977	0.0000	26.4579
Junior College (2Yr)	419.75	85.2055	5.0355	0.0000	190.9509
Junior High School	181.22	36.7860	2.1740	0.0000	82.4399
Library	3.96	0.8038	0.0475	0.0000	1.8015
Medical Office Building	521.64	105.8882	6.2578	0.0000	237.3023
Mobile Home Park	111.32	22.5970	1.3354	0.0000	50.6412
Motel	13.69	2.7790	0.1642	0.0000	6.2278
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	1000.35	203.0620	12.0006	0.0000	455.0751
Regional Shopping Center	1515.57	307.6470	18.1814	0.0000	689.4568
Single Family Housing	2658.44	539.6393	31.8918	0.0000	1,209.3664
Strip Mall	532.56	108.1049	6.3888	0.0000	242.2700
Supermarket	129.72	26.3320	1.5562	0.0000	59.0117

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	10.81	2.1943	0.1297	0.0000	4.9176
Total		2,703.3118	159.7612	0.0000	6,058.2961

9.0 Operational Offroad

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

10.0 Vegetation

SYCPU - Changed Proposed (2020)
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	0.00	1000sqft	0.00	0.00	0
General Office Building	0.00	1000sqft	0.00	0.00	0
Government (Civic Center)	0.00	1000sqft	0.00	0.00	0
Government Office Building	48.70	1000sqft	1.12	48,700.00	0
Medical Office Building	0.00	1000sqft	0.00	0.00	0
Elementary School	1,029.00	Student	1.97	86,027.87	0
High School	96.70	1000sqft	2.22	96,700.00	0
Junior College (2Yr)	0.00	Student	0.00	0.00	0
Junior High School	1,759.00	Student	4.75	206,791.00	0
Library	10.70	1000sqft	0.25	10,700.00	0
Place of Worship	0.00	1000sqft	0.00	0.00	0
General Light Industry	0.00	1000sqft	0.00	0.00	0
Industrial Park	0.00	1000sqft	0.00	0.00	0
Unrefrigerated Warehouse-No Rail	22.80	1000sqft	0.52	22,800.00	0
Enclosed Parking Structure	0.00	Acre	0.00	0.00	0
Parking Lot	3,057.00	Space	27.51	1,222,800.00	0
City Park	56.40	Acre	56.40	2,456,784.00	0
Fast Food Restaurant with Drive Thru	0.00	1000sqft	0.00	0.00	0
High Turnover (Sit Down Restaurant)	0.00	1000sqft	0.00	0.00	0
Hotel	0.00	Room	0.00	0.00	0
Motel	0.00	Room	0.00	0.00	0

Condo/Townhouse	4,418.00	Dwelling Unit	276.13	4,418,000.00	12635
Mobile Home Park	110.00	Dwelling Unit	13.86	132,000.00	315
Single Family Housing	2,069.00	Dwelling Unit	671.75	3,724,200.00	5917
Convenience Market (24 Hour)	0.00	1000sqft	0.00	0.00	0
Convenience Market With Gas Pumps	4.00	Pump	0.01	564.70	0
Regional Shopping Center	909.80	1000sqft	20.89	909,800.00	0
Strip Mall	518.10	1000sqft	11.89	518,100.00	0
Supermarket	0.00	1000sqft	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No change from Public Review Draft

Trips and VMT -

Architectural Coating -

Vehicle Trips - Kimley Horn 2016

Woodstoves -

Area Coating -

Water And Wastewater -

Solid Waste -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10,000.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	0.80
tblVehicleTrips	CW_TTP	0.00	0.80
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	86.32	200.26
tblVehicleTrips	ST_TR	1.59	50.66
tblVehicleTrips	ST_TR	7.16	6.69

tblVehicleTrips	ST_TR	863.10	706.30
tblVehicleTrips	ST_TR	204.47	150.23
tblVehicleTrips	ST_TR	0.00	122.88
tblVehicleTrips	ST_TR	722.03	699.22
tblVehicleTrips	ST_TR	1.32	12.94
tblVehicleTrips	ST_TR	2.37	25.14
tblVehicleTrips	ST_TR	158.37	129.69
tblVehicleTrips	ST_TR	8.19	10.03
tblVehicleTrips	ST_TR	2.49	16.20
tblVehicleTrips	ST_TR	46.55	49.87
tblVehicleTrips	ST_TR	8.96	49.96
tblVehicleTrips	ST_TR	5.00	4.97
tblVehicleTrips	ST_TR	5.63	9.00
tblVehicleTrips	ST_TR	0.00	2.26
tblVehicleTrips	ST_TR	10.37	11.95
tblVehicleTrips	ST_TR	49.97	42.21
tblVehicleTrips	ST_TR	10.08	9.01
tblVehicleTrips	ST_TR	42.04	93.10
tblVehicleTrips	ST_TR	177.59	150.17
tblVehicleTrips	ST_TR	2.59	5.10
tblVehicleTrips	SU_TR	31.90	200.26
tblVehicleTrips	SU_TR	1.59	50.66
tblVehicleTrips	SU_TR	6.07	6.69
tblVehicleTrips	SU_TR	758.45	706.30
tblVehicleTrips	SU_TR	166.88	150.23
tblVehicleTrips	SU_TR	0.00	122.88
tblVehicleTrips	SU_TR	542.72	699.22
tblVehicleTrips	SU_TR	0.68	12.94

tblVehicleTrips	SU_TR	0.98	25.14
tblVehicleTrips	SU_TR	131.84	129.69
tblVehicleTrips	SU_TR	5.95	10.03
tblVehicleTrips	SU_TR	0.73	16.20
tblVehicleTrips	SU_TR	25.49	49.87
tblVehicleTrips	SU_TR	1.55	49.96
tblVehicleTrips	SU_TR	4.36	4.97
tblVehicleTrips	SU_TR	5.63	9.00
tblVehicleTrips	SU_TR	0.00	2.26
tblVehicleTrips	SU_TR	36.63	11.95
tblVehicleTrips	SU_TR	25.24	42.21
tblVehicleTrips	SU_TR	8.77	9.01
tblVehicleTrips	SU_TR	20.43	93.10
tblVehicleTrips	SU_TR	166.44	150.17
tblVehicleTrips	SU_TR	2.59	5.10
tblVehicleTrips	WD_TR	148.15	200.26
tblVehicleTrips	WD_TR	1.59	50.66
tblVehicleTrips	WD_TR	6.59	6.69
tblVehicleTrips	WD_TR	737.99	706.30
tblVehicleTrips	WD_TR	542.60	150.23
tblVehicleTrips	WD_TR	1.29	2.91
tblVehicleTrips	WD_TR	0.00	122.88
tblVehicleTrips	WD_TR	496.12	699.22
tblVehicleTrips	WD_TR	6.97	12.94
tblVehicleTrips	WD_TR	11.01	25.14
tblVehicleTrips	WD_TR	27.92	29.83
tblVehicleTrips	WD_TR	68.93	27.80
tblVehicleTrips	WD_TR	12.89	18.00

tblVehicleTrips	WD_TR	127.15	129.69
tblVehicleTrips	WD_TR	8.17	10.03
tblVehicleTrips	WD_TR	6.96	16.20
tblVehicleTrips	WD_TR	1.20	1.66
tblVehicleTrips	WD_TR	1.62	1.41
tblVehicleTrips	WD_TR	56.24	49.87
tblVehicleTrips	WD_TR	36.13	49.96
tblVehicleTrips	WD_TR	4.99	4.97
tblVehicleTrips	WD_TR	5.63	9.00
tblVehicleTrips	WD_TR	0.00	2.26
tblVehicleTrips	WD_TR	9.11	11.95
tblVehicleTrips	WD_TR	42.94	42.21
tblVehicleTrips	WD_TR	9.57	9.01
tblVehicleTrips	WD_TR	44.32	93.10
tblVehicleTrips	WD_TR	102.24	150.17
tblVehicleTrips	WD_TR	2.59	5.10

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	487.5810	6.1851	559.1413	0.2018		71.9119	71.9119		71.9098	71.9098	6,814.4220	2,938.0171	9,752.4391	6.3670	0.5360	10,052.3070	
Energy	0.6873	5.8934	2.6475	0.0375		0.4749	0.4749		0.4749	0.4749	0.0000	26,022.9710	26,022.9710	0.9040	0.2848	26,130.2333	
Mobile	75.7087	143.5561	704.6525	1.7694	120.5904	2.0669	122.6572	32.2520	1.9073	34.1593	0.0000	122,784.3170	122,784.3170	4.8541	0.0000	122,886.2534	
Waste						0.0000	0.0000		0.0000	0.0000	1,364.9275	0.0000	1,364.9275	80.6649	0.0000	3,058.8904	
Water						0.0000	0.0000		0.0000	0.0000	177.9422	3,966.6015	4,144.5438	18.4360	0.4646	4,675.7194	
Total	563.9769	155.6345	1,266.4413	2.0086	120.5904	74.4536	195.0440	32.2520	74.2920	106.5440	8,357.2917	155,711.9066	164,069.1983	111.2260	1.2854	166,803.4035	

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	487.5810	6.1851	559.1413	0.2018		71.9119	71.9119		71.9098	71.9098	6,814.4220	2,938.0171	9,752.4391	6.3670	0.5360	10,052.3070	
Energy	0.4395	3.7694	1.6984	0.0240		0.3037	0.3037		0.3037	0.3037	0.0000	22,298.0940	22,298.0940	0.8058	0.2292	22,386.0712	
Mobile	75.7087	143.5561	704.6525	1.7694	120.5904	2.0669	122.6572	32.2520	1.9073	34.1593	0.0000	122,784.3170	122,784.3170	4.8541	0.0000	122,886.2534	
Waste						0.0000	0.0000		0.0000	0.0000	682.4637	0.0000	682.4637	40.3325	0.0000	1,529.4452	
Water						0.0000	0.0000		0.0000	0.0000	142.3538	3,107.0087	3,249.3625	14.7462	0.3711	3,674.0759	
Total	563.7291	153.5105	1,265.4922	1.9951	120.5904	74.2824	194.8728	32.2520	74.1208	106.3728	7,639.2395	151,127.4368	158,766.6763	67.1055	1.1363	160,528.1527	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.04	1.36	0.07	0.67	0.00	0.23	0.09	0.00	0.23	0.16	8.59	2.94	3.23	39.67	11.59	3.76

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	12/31/2015	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	75.7087	143.5561	704.6525	1.7694	120.5904	2.0669	122.6572	32.2520	1.9073	34.1593	0.0000	122,784.3 170	122,784.3 170	4.8541	0.0000	122,886.2 534	
Unmitigated	75.7087	143.5561	704.6525	1.7694	120.5904	2.0669	122.6572	32.2520	1.9073	34.1593	0.0000	122,784.3 170	122,784.3 170	4.8541	0.0000	122,886.2 534	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Bank (with Drive-Through)	0.00	0.00	0.00		
City Park	2,857.22	2,857.22	2857.22	6,099,752	6,099,752
Condo/Townhouse	29,556.42	29,556.42	29556.42	84,392,545	84,392,545
Convenience Market (24 Hour)	0.00	0.00	0.00		
Convenience Market With Gas Pumps	600.92	600.92	600.92	322,336	322,336
Elementary School	2,994.39	0.00	0.00	4,716,034	4,716,034
Enclosed Parking Structure	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Government (Civic Center)	0.00	0.00	0.00		
Government Office Building	1,353.86	0.00	0.00	1,658,363	1,658,363
High School	1,740.60	422.58	173.09	3,477,918	3,477,918
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Junior High School	2,480.19	0.00	0.00	3,982,821	3,982,821
Library	533.61	533.61	533.61	904,391	904,391
Medical Office Building	0.00	0.00	0.00		
Mobile Home Park	546.70	546.70	546.70	1,560,994	1,560,994
Motel	0.00	0.00	0.00		
Parking Lot	6,908.82	6,908.82	6908.82	18,402,377	18,402,377
Place of Worship	0.00	0.00	0.00		
Regional Shopping Center	38,402.66	38,402.66	38402.66	67,331,566	67,331,566
Single Family Housing	18,641.69	18,641.69	18641.69	53,227,680	53,227,680
Strip Mall	48,235.11	48,235.11	48235.11	74,283,663	74,283,663
Supermarket	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	116.28	116.28	116.28	339,481	339,481
Total	154,968.47	146,822.01	146,572.52	320,699,921	320,699,921

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Bank (with Drive-Through)	9.50	7.30	7.30	6.60	74.40	19.00	27	26	47
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Enclosed Parking Structure	9.50	7.30	7.30	0.80	80.20	19.00	100	0	0
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
High Turnover (Sit Down)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Junior High School	9.50	7.30	7.30	72.80	22.20	5.00	63	25	12
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Mobile Home Park	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Motel	9.50	7.30	7.30	19.00	62.00	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.80	80.20	19.00	100	0	0
Place of Worship	9.50	7.30	7.30	0.00	95.00	5.00	64	25	11
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated	0.4395	3.7694	1.6984	0.0240		0.3037	0.3037		0.3037	0.3037	0.0000	4,349.487	4,349.487	0.0834	0.0797	4,375.958
NaturalGas Unmitigated	0.6873	5.8934	2.6475	0.0375		0.4749	0.4749		0.4749	0.4749	0.0000	6,801.764	6,801.764	0.1304	0.1247	6,843.159
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17,948.60	17,948.60	0.7224	0.1495	18,010.11
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	19,221.20	19,221.20	0.7737	0.1601	19,287.07

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Bank (with Drive-Through)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	6.09289e+007	0.3285	2.8075	1.1947	0.0179		0.2270	0.2270		0.2270	0.2270	0.0000	3,251.3959	3,251.3959	0.0623	0.0596	3,271.1834
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	1293.16	1.0000e-005	6.0000e-005	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0690	0.0690	0.0000	0.0000	0.0694
Elementary School	533373	2.8800e-003	0.0262	0.0220	1.6000e-004		1.9900e-003	1.9900e-003		1.9900e-003	1.9900e-003	0.0000	28.4628	28.4628	5.5000e-004	5.2000e-004	28.6360
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	1.02416e+006	5.5200e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6531	54.6531	1.0500e-003	1.0000e-003	54.9857
High School	599540	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	31.9937	31.9937	6.1000e-004	5.9000e-004	32.1885
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior High School	1.2821e+006	6.9100e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003	0.0000	68.4180	68.4180	1.3100e-003	1.2500e-003	68.8343

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Land Use	kBTU/yr	tons/yr												MT/yr					
Library	126153	6.8000e-004	6.1800e-003	5.1900e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7320	6.7320	1.3000e-004	1.2000e-004	6.7730		
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Mobile Home Park	2.43991e+006	0.0132	0.1124	0.0478	7.2000e-004		9.0900e-003	9.0900e-003		9.0900e-003	9.0900e-003	0.0000	130.2031	130.2031	2.5000e-003	2.3900e-003	130.9955		
Motel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Place of Worship	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Regional Shopping Center	2.08344e+006	0.0112	0.1021	0.0858	6.1000e-004		7.7600e-003	7.7600e-003		7.7600e-003	7.7600e-003	0.0000	111.1804	111.1804	2.1300e-003	2.0400e-003	111.8570		
Single Family Housing	5.72151e+007	0.3085	2.6364	1.1219	0.0168		0.2132	0.2132		0.2132	0.2132	0.0000	3,053.2141	3,053.2141	0.0585	0.0560	3,071.7954		
Strip Mall	1.18645e+006	6.4000e-003	0.0582	0.0489	3.5000e-004		4.4200e-003	4.4200e-003		4.4200e-003	4.4200e-003	0.0000	63.3134	63.3134	1.2100e-003	1.1600e-003	63.6988		
Supermarket	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Unrefrigerated Warehouse-No Rail	39900	2.2000e-004	1.9600e-003	1.6400e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.1292	2.1292	4.0000e-005	4.0000e-005	2.1422		
Total		0.6873	5.8934	2.6475	0.0375		0.4749	0.4749		0.4749	0.4749	0.0000	6,801.7648	6,801.7648	0.1304	0.1247	6,843.1592		

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	3.90016e+007	0.2103	1.7971	0.7647	0.0115		0.1453	0.1453		0.1453	0.1453	0.0000	2,081.2747	2,081.2747	0.0399	0.0382	2,093.9410
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	981.449	1.0000e-005	5.0000e-005	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0524	0.0524	0.0000	0.0000	0.0527
Elementary School	307016	1.6600e-003	0.0151	0.0126	9.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	16.3836	16.3836	3.1000e-004	3.0000e-004	16.4833
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	647135	3.4900e-003	0.0317	0.0267	1.9000e-004		2.4100e-003	2.4100e-003		2.4100e-003	2.4100e-003	0.0000	34.5336	34.5336	6.6000e-004	6.3000e-004	34.7438
High School	345103	1.8600e-003	0.0169	0.0142	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4160	18.4160	3.5000e-004	3.4000e-004	18.5281
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior High School	737996	3.9800e-003	0.0362	0.0304	2.2000e-004		2.7500e-003	2.7500e-003		2.7500e-003	2.7500e-003	0.0000	39.3823	39.3823	7.5000e-004	7.2000e-004	39.6219
Library	103807	5.6000e-004	5.0900e-003	4.2700e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5395	5.5395	1.1000e-004	1.0000e-004	5.5733

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	1.42396e+006	7.6800e-003	0.0656	0.0279	4.2000e-004		5.3000e-003	5.3000e-003		5.3000e-003	5.3000e-003	0.0000	75.9882	75.9882	1.4600e-003	1.3900e-003	76.4507
Motel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Place of Worship	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.58123e+006	8.5300e-003	0.0775	0.0651	4.7000e-004		5.8900e-003	5.8900e-003		5.8900e-003	5.8900e-003	0.0000	84.3806	84.3806	1.6200e-003	1.5500e-003	84.8941
Single Family Housing	3.64343e+007	0.1965	1.6788	0.7144	0.0107		0.1357	0.1357		0.1357	0.1357	0.0000	1,944.2737	1,944.2737	0.0373	0.0357	1,956.1062
Strip Mall	900458	4.8600e-003	0.0441	0.0371	2.6000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	48.0519	48.0519	9.2000e-004	8.8000e-004	48.3443
Supermarket	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	22699.7	1.2000e-004	1.1100e-003	9.3000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.2113	1.2113	2.0000e-005	2.0000e-005	1.2187
Total		0.4395	3.7694	1.6984	0.0240		0.3036	0.3036		0.3036	0.3036	0.0000	4,349.4877	4,349.4877	0.0834	0.0797	4,375.9580

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.91485e+007	6,257.896	0.2519	0.0521	6,279.341
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	7928.39	2.5911	1.0000e-004	2.0000e-005	2.6000
Elementary School	512726	167.5634	6.7400e-003	1.4000e-003	168.1376
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	730013	238.5747	9.6000e-003	1.9900e-003	239.3922
High School	576332	188.3504	7.5800e-003	1.5700e-003	188.9958
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Junior High School	1.23247e+006	402.7834	0.0162	3.3500e-003	404.1637
Library	96300	31.4717	1.2700e-003	2.6000e-004	31.5795
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Mobile Home Park	552515	180.5666	7.2700e-003	1.5000e-003	181.1854
Motel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	1.07606e+006	351.6672	0.0142	2.9300e-003	352.8723
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.27736e+007	4,174.5219	0.1680	0.0348	4,188.8272
Single Family Housing	1.47401e+007	4,817.1987	0.1939	0.0401	4,833.7064
Strip Mall	7.27412e+006	2,377.2475	0.0957	0.0198	2,385.3939
Supermarket	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	94164	30.7736	1.2400e-003	2.6000e-004	30.8791
Total		19,221.2062	0.7737	0.1601	19,287.0741

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.87284e+007	6,120.6196	0.2464	0.0510	6,141.5939

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	6917.91	2.2608	9.0000e-005	2.0000e-005	2.2686
Elementary School	439121	143.5085	5.7800e-003	1.2000e-003	144.0003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive_Thru	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	602546	196.9172	7.9300e-003	1.6400e-003	197.5920
High School	493595	161.3113	6.4900e-003	1.3400e-003	161.8641
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Junior High School	1.05554e+006	344.9610	0.0139	2.8700e-003	346.1432
Library	89015.4	29.0910	1.1700e-003	2.4000e-004	29.1907
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	518967	169.6031	6.8300e-003	1.4100e-003	170.1843

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Motel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	1.07606e+006	351.6672	0.0142	2.9300e-003	352.8723
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.11456e+007	3,642.4784	0.1466	0.0303	3,654.9606
Single Family Housing	1.4335e+007	4,684.8151	0.1886	0.0390	4,700.8692
Strip Mall	6.34704e+006	2,074.2670	0.0835	0.0173	2,081.3751
Supermarket	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	82941.8	27.1061	1.0900e-003	2.3000e-004	27.1990
Total		17,948.6063	0.7224	0.1495	18,010.1132

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	487.5810	6.1851	559.1413	0.2018		71.9119	71.9119		71.9098	71.9098	6,814.4220	2,938.0171	9,752.4391	6.3670	0.5360	10,052.3070	
Unmitigated	487.5810	6.1851	559.1413	0.2018		71.9119	71.9119		71.9098	71.9098	6,814.4220	2,938.0171	9,752.4391	6.3670	0.5360	10,052.3070	

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	18.0346					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	54.1067					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	413.9366	5.6160	509.9255	0.1992		71.6414	71.6414		71.6393	71.6393	6,814.4220	2,857.8692	9,672.2912	6.2886	0.5360	9,970.5131
Landscaping	1.5031	0.5691	49.2158	2.5900e-003		0.2705	0.2705		0.2705	0.2705	0.0000	80.1479	80.1479	0.0784	0.0000	81.7939
Total	487.5810	6.1851	559.1413	0.2018		71.9119	71.9119		71.9098	71.9098	6,814.4220	2,938.0171	9,752.4391	6.3670	0.5360	10,052.3070

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	18.0346					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	54.1067					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	413.9366	5.6160	509.9255	0.1992		71.6414	71.6414		71.6393	71.6393	6,814.4220	2,857.8692	9,672.2912	6.2886	0.5360	9,970.5131	
Landscaping	1.5031	0.5691	49.2158	2.5900e-003		0.2705	0.2705		0.2705	0.2705	0.0000	80.1479	80.1479	0.0784	0.0000	81.7939	
Total	487.5810	6.1851	559.1413	0.2018		71.9119	71.9119		71.9098	71.9098	6,814.4220	2,938.0171	9,752.4391	6.3670	0.5360	10,052.3070	

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	4,144.543 8	18.4360	0.4646	4,675.719 4
Mitigated	3,249.362 5	14.7462	0.3711	3,674.075 9

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive-Through)	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 67.1995	243.9912	9.8200e-003	2.0300e-003	244.8273
Condo/Townhous e	287.85 / 181.471	1,975.127	9.4554	0.2372	2,247.211
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	0.0418287 / 0.025637	0.2844	1.3700e-003	3.0000e-005	0.3239
Elementary School	2.49454 / 6.41454	34.6968	0.0827	2.2000e-003	37.1150
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	9.67473 / 5.92967	65.7687	0.3178	7.9700e-003	74.9114
High School	3.21089 / 8.25657	44.6605	0.1064	2.8300e-003	47.7731
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior High School	4.26424 / 10.9652	59.3117	0.1413	3.7600e-003	63.4453
Library	0.334791 / 0.523648	3.4322	0.0110	2.9000e-004	3.7525
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	7.16694 / 4.51829	49.1770	0.2354	5.9000e-003	55.9514
Motel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	67.3912 / 41.3043	458.1244	2.2135	0.0555	521.8097
Single Family Housing	134.804 / 84.9849	924.9746	4.4281	0.1111	1,052.394
				6	

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	38.377 / 23.5214	260.8862	1.2605	0.0316	297.1528
Supermarket	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	5.2725 / 0	24.1092	0.1727	4.2400e- 003	29.0516
Total		4,144.543 8	18.4360	0.4646	4,675.719 4

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive- Through)	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 53.7596	195.1929	7.8600e- 003	1.6300e- 003	195.8618
Condo/Townhous e	230.28 / 145.177	1,546.089 9	7.5630	0.1895	1,763.640 5
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pump	0.033463 / 0.0205096	0.2225	1.1000e- 003	3.0000e- 005	0.2541
Elementary School	1.99563 / 5.13163	27.4627	0.0661	1.7600e- 003	29.3962
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	7.73978 / 4.74374	51.4718	0.2542	6.3600e-003	58.7820
High School	2.56871 / 6.60526	35.3490	0.0851	2.2600e-003	37.8378
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior High School	3.41139 / 8.77215	46.9455	0.1130	3.0100e-003	50.2507
Library	0.267833 / 0.418918	2.7062	8.8300e-003	2.3000e-004	2.9623
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	5.73355 / 3.61463	38.4948	0.1883	4.7200e-003	43.9114
Motel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	53.9129 / 33.0434	358.5368	1.7705	0.0443	409.4577
Single Family Housing	107.843 / 67.9879	724.0516	3.5418	0.0887	825.9331
Strip Mall	30.7016 / 18.8171	204.1744	1.0082	0.0252	233.1721

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Supermarket	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4.218 / 0	18.6644	0.1381	3.3900e- 003	22.6161
Total		3,249.362 5	14.7462	0.3711	3,674.075 9

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	682.4637	40.3325	0.0000	1,529.445 2
Unmitigated	1,364.927 5	80.6649	0.0000	3,058.890 4

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	0	0.0000	0.0000	0.0000	0.0000
City Park	4.85	0.9845	0.0582	0.0000	2.2063
Condo/Townhouse	2032.28	412.5345	24.3801	0.0000	924.5163
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Elementary School	187.79	38.1197	2.2528	0.0000	85.4286
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive-Thru	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	45.29	9.1935	0.5433	0.0000	20.6031
High School	125.71	25.5180	1.5081	0.0000	57.1875
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Junior High School	321.02	65.1642	3.8511	0.0000	146.0371
Library	9.85	1.9995	0.1182	0.0000	4.4809

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	50.6	10.2713	0.6070	0.0000	23.0187
Motel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	955.29	193.9152	11.4601	0.0000	434.5765
Single Family Housing	2425.97	492.4500	29.1030	0.0000	1,103.6122
Strip Mall	544	110.4271	6.5261	0.0000	247.4742
Supermarket	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	21.43	4.3501	0.2571	0.0000	9.7489
Total		1,364.9275	80.6649	0.0000	3,058.8904

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	0	0.0000	0.0000	0.0000	0.0000
City Park	2.425	0.4923	0.0291	0.0000	1.1032

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	1016.14	206.2672	12.1900	0.0000	462.2582
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Elementary School	93.895	19.0598	1.1264	0.0000	42.7143
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	22.645	4.5967	0.2717	0.0000	10.3016
High School	62.855	12.7590	0.7540	0.0000	28.5937
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Junior High School	160.51	32.5821	1.9256	0.0000	73.0185
Library	4.925	0.9997	0.0591	0.0000	2.2405
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Mobile Home Park	25.3	5.1357	0.3035	0.0000	11.5094

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Motel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	477.645	96.9576	5.7300	0.0000	217.2883
Single Family Housing	1212.98	246.2250	14.5515	0.0000	551.8061
Strip Mall	272	55.2135	3.2630	0.0000	123.7371
Supermarket	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	10.715	2.1751	0.1285	0.0000	4.8744
Total	1,529.445	682.4637	40.3325	0.0000	2

9.0 Operational Offroad

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

SYCPU - No Change Proposed (2020)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	11.50	1000sqft	0.26	11,500.00	0
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Government (Civic Center)	6.00	1000sqft	0.14	6,000.00	0
Government Office Building	317.50	1000sqft	7.29	317,500.00	0
Medical Office Building	48.30	1000sqft	1.11	48,300.00	0
Elementary School	4,108.00	Student	7.88	343,442.64	0
High School	37.60	1000sqft	0.86	37,600.00	0
Junior College (2Yr)	2,300.00	Student	2.30	100,400.15	0
Junior High School	993.00	Student	2.68	116,738.75	0
Library	4.30	1000sqft	0.10	4,300.00	0
Place of Worship	175.50	1000sqft	4.03	175,500.00	0
General Light Industry	1,023.00	1000sqft	23.48	1,023,000.00	0
Industrial Park	46.90	1000sqft	1.08	46,900.00	0
Unrefrigerated Warehouse-No Rail	11.50	1000sqft	0.26	11,500.00	0
Enclosed Parking Structure	7.30	Acre	7.30	317,988.00	0
Parking Lot	7,987.00	Space	71.88	3,194,800.00	0
City Park	35.80	Acre	35.80	1,559,448.00	0
Fast Food Restaurant with Drive Thru	44.90	1000sqft	1.03	44,900.00	0
High Turnover (Sit Down Restaurant)	22.40	1000sqft	0.51	22,400.00	0
Hotel	756.00	Room	25.20	1,097,712.00	0
Motel	35.00	Room	1.57	68,607.00	0

Condo/Townhouse	4,476.00	Dwelling Unit	279.75	4,476,000.00	12801
Mobile Home Park	532.00	Dwelling Unit	67.02	638,400.00	1522
Single Family Housing	2,339.00	Dwelling Unit	759.42	4,210,200.00	6690
Convenience Market (24 Hour)	0.00	1000sqft	0.00	0.00	0
Convenience Market With Gas Pumps	84.00	Pump	0.27	11,858.69	0
Regional Shopping Center	1,443.40	1000sqft	33.14	1,443,400.00	0
Strip Mall	507.20	1000sqft	11.64	507,200.00	0
Supermarket	4.60	1000sqft	0.11	4,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction for existing

Vehicle Trips - Kimley Horn 2015

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Energy Use -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Woodstoves -

Water And Wastewater -

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10,000.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	0.80
tblVehicleTrips	CW_TTP	0.00	0.80
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	86.32	200.26
tblVehicleTrips	ST_TR	1.59	50.66

tblVehicleTrips	ST_TR	7.16	6.69
tblVehicleTrips	ST_TR	863.10	706.30
tblVehicleTrips	ST_TR	204.47	150.23
tblVehicleTrips	ST_TR	0.00	122.88
tblVehicleTrips	ST_TR	722.03	699.22
tblVehicleTrips	ST_TR	1.32	12.94
tblVehicleTrips	ST_TR	2.37	25.14
tblVehicleTrips	ST_TR	158.37	129.69
tblVehicleTrips	ST_TR	8.19	10.03
tblVehicleTrips	ST_TR	2.49	16.20
tblVehicleTrips	ST_TR	46.55	49.87
tblVehicleTrips	ST_TR	8.96	49.96
tblVehicleTrips	ST_TR	5.00	4.97
tblVehicleTrips	ST_TR	5.63	9.00
tblVehicleTrips	ST_TR	0.00	2.26
tblVehicleTrips	ST_TR	10.37	11.95
tblVehicleTrips	ST_TR	49.97	42.21
tblVehicleTrips	ST_TR	10.08	9.01
tblVehicleTrips	ST_TR	42.04	93.10
tblVehicleTrips	ST_TR	177.59	150.17
tblVehicleTrips	ST_TR	2.59	5.10
tblVehicleTrips	SU_TR	31.90	200.26
tblVehicleTrips	SU_TR	1.59	50.66
tblVehicleTrips	SU_TR	6.07	6.69
tblVehicleTrips	SU_TR	758.45	706.30
tblVehicleTrips	SU_TR	166.88	150.23
tblVehicleTrips	SU_TR	0.00	122.88
tblVehicleTrips	SU_TR	542.72	699.22

tblVehicleTrips	SU_TR	0.68	12.94
tblVehicleTrips	SU_TR	0.98	25.14
tblVehicleTrips	SU_TR	131.84	129.69
tblVehicleTrips	SU_TR	5.95	10.03
tblVehicleTrips	SU_TR	0.73	16.20
tblVehicleTrips	SU_TR	25.49	49.87
tblVehicleTrips	SU_TR	1.55	49.96
tblVehicleTrips	SU_TR	4.36	4.97
tblVehicleTrips	SU_TR	5.63	9.00
tblVehicleTrips	SU_TR	0.00	2.26
tblVehicleTrips	SU_TR	36.63	11.95
tblVehicleTrips	SU_TR	25.24	42.21
tblVehicleTrips	SU_TR	8.77	9.01
tblVehicleTrips	SU_TR	20.43	93.10
tblVehicleTrips	SU_TR	166.44	150.17
tblVehicleTrips	SU_TR	2.59	5.10
tblVehicleTrips	WD_TR	148.15	200.26
tblVehicleTrips	WD_TR	1.59	50.66
tblVehicleTrips	WD_TR	6.59	6.69
tblVehicleTrips	WD_TR	737.99	706.30
tblVehicleTrips	WD_TR	542.60	150.23
tblVehicleTrips	WD_TR	1.29	2.91
tblVehicleTrips	WD_TR	0.00	122.88
tblVehicleTrips	WD_TR	496.12	699.22
tblVehicleTrips	WD_TR	6.97	12.94
tblVehicleTrips	WD_TR	11.01	25.14
tblVehicleTrips	WD_TR	27.92	29.83
tblVehicleTrips	WD_TR	68.93	27.80

tblVehicleTrips	WD_TR	12.89	18.00
tblVehicleTrips	WD_TR	127.15	129.69
tblVehicleTrips	WD_TR	8.17	10.03
tblVehicleTrips	WD_TR	6.96	16.20
tblVehicleTrips	WD_TR	1.20	1.66
tblVehicleTrips	WD_TR	1.62	1.41
tblVehicleTrips	WD_TR	56.24	49.87
tblVehicleTrips	WD_TR	36.13	49.96
tblVehicleTrips	WD_TR	4.99	4.97
tblVehicleTrips	WD_TR	5.63	9.00
tblVehicleTrips	WD_TR	0.00	2.26
tblVehicleTrips	WD_TR	9.11	11.95
tblVehicleTrips	WD_TR	42.94	42.21
tblVehicleTrips	WD_TR	9.57	9.01
tblVehicleTrips	WD_TR	44.32	93.10
tblVehicleTrips	WD_TR	102.24	150.17
tblVehicleTrips	WD_TR	2.59	5.10

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	562.9949	6.8892	622.8167	0.2247		80.0878	80.0878		80.0855	80.0855	7,589.140 3	3,272.242 7	10,861.38 29	7.0914	0.5969	11,195.35 40	
Energy	1.4529	12.7718	7.8956	0.0793		1.0038	1.0038		1.0038	1.0038	0.0000	52,494.79 36	52,494.79 36	1.8098	0.5810	52,712.91 72	
Mobile	135.0045	244.4897	1,218.491 6	2.9656	201.3732	3.4871	204.8603	53.8574	3.2180	57.0754	0.0000	205,770.3 290	205,770.3 290	8.2024	0.0000	205,942.5 787	
Waste						0.0000	0.0000		0.0000	0.0000	2,591.587 7	0.0000	2,591.587 7	153.1584	0.0000	5,807.915 0	
Water						0.0000	0.0000		0.0000	0.0000	320.8631	6,228.777 3	6,549.640 3	33.2064	0.8300	7,504.283 6	
Total	699.4523	264.1507	1,849.203 9	3.2695	201.3732	84.5787	285.9519	53.8574	84.3073	138.1647	10,501.59 10	267,766.1 426	278,267.7 336	203.4684	2.0080	283,163.0 485	

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	562.9949	6.8892	622.8167	0.2247		80.0878	80.0878		80.0855	80.0855	7,589.140 3	3,272.242 7	10,861.38 29	7.0914	0.5969	11,195.35 40	
Energy	1.4529	12.7718	7.8956	0.0793		1.0038	1.0038		1.0038	1.0038	0.0000	52,494.79 36	52,494.79 36	1.8098	0.5810	52,712.91 72	
Mobile	135.0045	244.4897	1,218.491 6	2.9656	201.3732	3.4871	204.8603	53.8574	3.2180	57.0754	0.0000	205,770.3 290	205,770.3 290	8.2024	0.0000	205,942.5 787	
Waste						0.0000	0.0000		0.0000	0.0000	2,591.587 7	0.0000	2,591.587 7	153.1584	0.0000	5,807.915 0	
Water						0.0000	0.0000		0.0000	0.0000	320.8631	6,228.777 3	6,549.640 3	33.2004	0.8288	7,503.771 7	
Total	699.4523	264.1507	1,849.203 9	3.2695	201.3732	84.5787	285.9519	53.8574	84.3073	138.1647	10,501.59 10	267,766.1 426	278,267.7 336	203.4624	2.0068	283,162.5 366	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	12/31/2015	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	135.0045	244.4897	1,218.4916	2.9656	201.3732	3.4871	204.8603	53.8574	3.2180	57.0754	0.0000	205,770.3290	205,770.3290	8.2024	0.0000	205,942.5787	
Unmitigated	135.0045	244.4897	1,218.4916	2.9656	201.3732	3.4871	204.8603	53.8574	3.2180	57.0754	0.0000	205,770.3290	205,770.3290	8.2024	0.0000	205,942.5787	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Bank (with Drive-Through)	2,302.99	2,302.99	2302.99	2,130,210	2,130,210
City Park	1,813.63	1,813.63	1813.63	3,871,829	3,871,829
Condo/Townhouse	29,944.44	29,944.44	29944.44	85,500,460	85,500,460
Convenience Market (24 Hour)	0.00	0.00	0.00		
Convenience Market With Gas Pumps	12,619.32	12,619.32	12619.32	6,769,057	6,769,057
Elementary School	11,954.28	0.00	0.00	18,827,471	18,827,471
Enclosed Parking Structure	897.02	897.02	897.02	2,389,319	2,389,319
Fast Food Restaurant with Drive Thru	31,394.98	31,394.98	31394.98	29,333,114	29,333,114
General Light Industry	13,237.62	13,237.62	13237.62	38,647,379	38,647,379
General Office Building	175.98	175.98	175.98	420,549	420,549
Government (Civic Center)	178.98	0.00	0.00	244,389	244,389
Government Office Building	8,826.50	0.00	0.00	10,811,709	10,811,709
High School	676.80	164.31	67.30	1,352,324	1,352,324
High Turnover (Sit Down Restaurant)	2,905.06	2,905.06	2905.06	3,370,634	3,370,634
Hotel	7,582.68	7,582.68	7582.68	14,406,567	14,406,567
Industrial Park	759.78	759.78	759.78	1,992,013	1,992,013
Junior College (2Yr)	3,818.00	966.00	92.00	7,309,513	7,309,513
Junior High School	1,400.13	0.00	0.00	2,248,403	2,248,403
Library	214.44	214.44	214.44	363,447	363,447
Medical Office Building	2,413.07	2,413.07	2413.07	4,722,977	4,722,977
Mobile Home Park	2,644.04	2,644.04	2644.04	7,549,536	7,549,536
Motel	315.00	315.00	315.00	597,797	597,797
Parking Lot	18,050.62	18,050.62	18050.62	48,079,747	48,079,747
Place of Worship	2,097.23	2,097.23	2097.23	3,923,252	3,923,252
Regional Shopping Center	60,925.91	60,925.91	60925.91	106,821,699	106,821,699
Single Family Housing	21,074.39	21,074.39	21074.39	60,173,777	60,173,777
Strip Mall	47,220.32	47,220.32	47220.32	72,720,853	72,720,853
Supermarket	690.78	690.78	690.78	785,726	785,726
Unrefrigerated Warehouse-No Rail	58.65	58.65	58.65	171,229	171,229
Total	286,192.64	260,468.26	259,497.25	535,534,977	535,534,977

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Bank (with Drive-Through)	9.50	7.30	7.30	6.60	74.40	19.00	27	26	47
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Enclosed Parking Structure	9.50	7.30	7.30	0.80	80.20	19.00	100	0	0
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
High Turnover (Sit Down)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Junior High School	9.50	7.30	7.30	72.80	22.20	5.00	63	25	12
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Mobile Home Park	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Motel	9.50	7.30	7.30	19.00	62.00	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.80	80.20	19.00	100	0	0
Place of Worship	9.50	7.30	7.30	0.00	95.00	5.00	64	25	11
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated	1.4529	12.7718	7.8956	0.0793		1.0038	1.0038		1.0038	1.0038	0.0000	14,378.58 39	14,378.58 39	0.2756	0.2636	14,466.08 96
NaturalGas Unmitigated	1.4529	12.7718	7.8956	0.0793		1.0038	1.0038		1.0038	1.0038	0.0000	14,378.58 39	14,378.58 39	0.2756	0.2636	14,466.08 96
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	38,116.20 97	38,116.20 97	1.5342	0.3174	38,246.82 77
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	38,116.20 97	38,116.20 97	1.5342	0.3174	38,246.82 77

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Bank (with Drive-Through)	141335	7.6000e-004	6.9300e-003	5.8200e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5422	7.5422	1.4000e-004	1.4000e-004	7.5881
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	6.53637e+007	0.3525	3.0119	1.2816	0.0192		0.2435	0.2435		0.2435	0.2435	0.0000	3,488.0583	3,488.0583	0.0669	0.0640	3,509.2861
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	28579.4	1.5000e-004	1.4000e-003	1.1800e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5251	1.5251	3.0000e-005	3.0000e-005	1.5344
Elementary School	2.36289e+006	0.0127	0.1158	0.0973	6.9000e-004		8.8000e-003	8.8000e-003		8.8000e-003	8.8000e-003	0.0000	126.0926	126.0926	2.4200e-003	2.3100e-003	126.8599
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	7.93473e+006	0.0428	0.3890	0.3267	2.3300e-003		0.0296	0.0296		0.0296	0.0296	0.0000	423.4273	423.4273	8.1200e-003	7.7600e-003	426.0042
General Light Industry	1.25727e+007	0.0678	0.6163	0.5177	3.7000e-003		0.0468	0.0468		0.0468	0.0468	0.0000	670.9256	670.9256	0.0129	0.0123	675.0087
General Office Building	164920	8.9000e-004	8.0800e-003	6.7900e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.8008	8.8008	1.7000e-004	1.6000e-004	8.8543
Government (Civic Center)	141360	7.6000e-004	6.9300e-003	5.8200e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5435	7.5435	1.4000e-004	1.4000e-004	7.5894
Government Office Building	7.4803e+006	0.0403	0.3667	0.3080	2.2000e-003		0.0279	0.0279		0.0279	0.0279	0.0000	399.1773	399.1773	7.6500e-003	7.3200e-003	401.6066
High School	258688	1.3900e-003	0.0127	0.0107	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.8046	13.8046	2.6000e-004	2.5000e-004	13.8886
High Turnover (Sit Down Restaurant)	3.95853e+006	0.0214	0.1941	0.1630	1.1600e-003		0.0148	0.0148		0.0148	0.0148	0.0000	211.2421	211.2421	4.0500e-003	3.8700e-003	212.5277
Hotel	6.76081e+007	0.3646	3.3141	2.7839	0.0199		0.2519	0.2519		0.2519	0.2519	0.0000	3,607.8247	3,607.8247	0.0692	0.0661	3,629.7814
Industrial Park	1.10496e+006	5.9600e-003	0.0542	0.0455	3.2000e-004		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	58.9651	58.9651	1.1300e-003	1.0800e-003	59.3239
Junior College (2Yr)	4.14151e+006	0.0223	0.2030	0.1705	1.2200e-003		0.0154	0.0154		0.0154	0.0154	0.0000	221.0065	221.0065	4.2400e-003	4.0500e-003	222.3516
Junior High School	803163	4.3300e-003	0.0394	0.0331	2.4000e-004		2.9900e-003	2.9900e-003		2.9900e-003	2.9900e-003	0.0000	42.8598	42.8598	8.2000e-004	7.9000e-004	43.1207

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr											MT/yr					
Library	52847	2.8000e-004	2.5900e-003	2.1800e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8201	2.8201	5.0000e-005	5.0000e-005	2.8373	
Medical Office Building	1.13795e+006	6.1400e-003	0.0558	0.0469	3.3000e-004		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003	0.0000	60.7252	60.7252	1.1600e-003	1.1100e-003	61.0948	
Mobile Home Park	1.26043e+007	0.0680	0.5808	0.2471	3.7100e-003		0.0470	0.0470		0.0470	0.0470	0.0000	672.6131	672.6131	0.0129	0.0123	676.7065	
Motel	4.22551e+006	0.0228	0.2071	0.1740	1.2400e-003		0.0157	0.0157		0.0157	0.0157	0.0000	225.4891	225.4891	4.3200e-003	4.1300e-003	226.8613	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Place of Worship	2.1569e+006	0.0116	0.1057	0.0888	6.3000e-004		8.0400e-003	8.0400e-003		8.0400e-003	8.0400e-003	0.0000	115.1001	115.1001	2.2100e-003	2.1100e-003	115.8006	
Regional Shopping Center	3.47859e+006	0.0188	0.1705	0.1432	1.0200e-003		0.0130	0.0130		0.0130	0.0130	0.0000	185.6310	185.6310	3.5600e-003	3.4000e-003	186.7607	
Single Family Housing	7.03561e+007	0.3794	3.2419	1.3795	0.0207		0.2621	0.2621		0.2621	0.2621	0.0000	3,754.4677	3,754.4677	0.0720	0.0688	3,777.3168	
Strip Mall	1.22235e+006	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003	0.0000	65.2294	65.2294	1.2500e-003	1.2000e-003	65.6263	
Supermarket	121302	6.5000e-004	5.9500e-003	4.9900e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	6.4731	6.4731	1.2000e-004	1.2000e-004	6.5125	
Unrefrigerated Warehouse-No Rail	23230	1.3000e-004	1.1400e-003	9.6000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2396	1.2396	2.0000e-005	2.0000e-005	1.2472	
Total		1.4529	12.7718	7.8956	0.0792		1.0038	1.0038		1.0038	1.0038	0.0000	14,378.5839	14,378.5839	0.2756	0.2636	14,466.0896	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr											MT/yr					
Bank (with Drive-Through)	141335	7.6000e-004	6.9300e-003	5.8200e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5422	7.5422	1.4000e-004	1.4000e-004	7.5881	

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Condo/Townhouse	6.53637e+007	0.3525	3.0119	1.2816	0.0192		0.2435	0.2435		0.2435	0.2435	0.0000	3,488.0583	3,488.0583	0.0669	0.0640	3,509.2861	
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Convenience Market With Gas Pumps	28579.4	1.5000e-004	1.4000e-003	1.1800e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5251	1.5251	3.0000e-005	3.0000e-005	1.5344	
Elementary School	2.36289e+006	0.0127	0.1158	0.0973	6.9000e-004		8.8000e-003	8.8000e-003		8.8000e-003	8.8000e-003	0.0000	126.0926	126.0926	2.4200e-003	2.3100e-003	126.8599	
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Fast Food Restaurant with Drive-Thru	7.93473e+006	0.0428	0.3890	0.3267	2.3300e-003		0.0296	0.0296		0.0296	0.0296	0.0000	423.4273	423.4273	8.1200e-003	7.7600e-003	426.0042	
General Light Industry	1.25727e+007	0.0678	0.6163	0.5177	3.7000e-003		0.0468	0.0468		0.0468	0.0468	0.0000	670.9256	670.9256	0.0129	0.0123	675.0087	
General Office Building	164920	8.9000e-004	8.0800e-003	6.7900e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.8008	8.8008	1.7000e-004	1.6000e-004	8.8543	
Government (Civic Center)	141360	7.6000e-004	6.9300e-003	5.8200e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5435	7.5435	1.4000e-004	1.4000e-004	7.5894	
Government Office Building	7.4803e+006	0.0403	0.3667	0.3080	2.2000e-003		0.0279	0.0279		0.0279	0.0279	0.0000	399.1773	399.1773	7.6500e-003	7.3200e-003	401.6066	
High School	258688	1.3900e-003	0.0127	0.0107	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.8046	13.8046	2.6000e-004	2.5000e-004	13.8886	
High Turnover (Sit Down Restaurant)	3.95853e+006	0.0214	0.1941	0.1630	1.1600e-003		0.0148	0.0148		0.0148	0.0148	0.0000	211.2421	211.2421	4.0500e-003	3.8700e-003	212.5277	
Hotel	6.76081e+007	0.3646	3.3141	2.7839	0.0199		0.2519	0.2519		0.2519	0.2519	0.0000	3,607.8247	3,607.8247	0.0692	0.0661	3,629.7814	
Industrial Park	1.10496e+006	5.9600e-003	0.0542	0.0455	3.2000e-004		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	58.9651	58.9651	1.1300e-003	1.0800e-003	59.3239	
Junior College (2Yr)	4.14151e+006	0.0223	0.2030	0.1705	1.2200e-003		0.0154	0.0154		0.0154	0.0154	0.0000	221.0065	221.0065	4.2400e-003	4.0500e-003	222.3516	
Junior High School	803163	4.3300e-003	0.0394	0.0331	2.4000e-004		2.9900e-003	2.9900e-003		2.9900e-003	2.9900e-003	0.0000	42.8598	42.8598	8.2000e-004	7.9000e-004	43.1207	
Library	52847	2.8000e-004	2.5900e-003	2.1800e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8201	2.8201	5.0000e-005	5.0000e-005	2.8373	

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr											MT/yr					
Medical Office Building	1.13795e+006	6.1400e-003	0.0558	0.0469	3.3000e-004		4.2400e-003	4.2400e-003	4.2400e-003	4.2400e-003	0.0000	60.7252	60.7252	1.1600e-003	1.1100e-003	61.0948		
Mobile Home Park	1.26043e+007	0.0680	0.5808	0.2471	3.7100e-003		0.0470	0.0470		0.0470	0.0470	0.0000	672.6131	672.6131	0.0129	0.0123	676.7065	
Motel	4.22551e+006	0.0228	0.2071	0.1740	1.2400e-003		0.0157	0.0157		0.0157	0.0157	0.0000	225.4891	225.4891	4.3200e-003	4.1300e-003	226.8613	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Place of Worship	2.1569e+006	0.0116	0.1057	0.0888	6.3000e-004		8.0400e-003	8.0400e-003		8.0400e-003	8.0400e-003	0.0000	115.1001	115.1001	2.2100e-003	2.1100e-003	115.8006	
Regional Shopping Center	3.47859e+006	0.0188	0.1705	0.1432	1.0200e-003		0.0130	0.0130		0.0130	0.0130	0.0000	185.6310	185.6310	3.5600e-003	3.4000e-003	186.7607	
Single Family Housing	7.03561e+007	0.3794	3.2419	1.3795	0.0207		0.2621	0.2621		0.2621	0.2621	0.0000	3,754.4677	3,754.4677	0.0720	0.0688	3,777.3168	
Strip Mall	1.22235e+006	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003	0.0000	65.2294	65.2294	1.2500e-003	1.2000e-003	65.6263	
Supermarket	121302	6.5000e-004	5.9500e-003	4.9900e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	6.4731	6.4731	1.2000e-004	1.2000e-004	6.5125	
Unrefrigerated Warehouse-No Rail	23230	1.3000e-004	1.1400e-003	9.6000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2396	1.2396	2.0000e-005	2.0000e-005	1.2472	
Total		1.4529	12.7718	7.8956	0.0792		1.0038	1.0038		1.0038	1.0038	0.0000	14,378.5839	14,378.5839	0.2756	0.2636	14,466.0896	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	107870	35.2529	1.4200e-003	2.9000e-004	35.3737
City Park	0	0.0000	0.0000	0.0000	0.0000

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.96269e+007	6,414.229	0.2582	0.0534	6,436.209
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	175390	57.3190	2.3100e-003	4.8000e-004	57.5154
Elementary School	2.18086e+006	712.7244	0.0287	5.9400e-003	715.1668
Enclosed Parking Structure	2.08282e+006	680.6843	0.0274	5.6700e-003	683.0169
Fast Food Restaurant with Drive Thru	1.91049e+006	624.3665	0.0251	5.2000e-003	626.5061
General Light Industry	9.59574e+006	3,135.972	0.1262	0.0261	3,146.7184
General Office Building	110180	36.0078	1.4500e-003	3.0000e-004	36.1312
Government (Civic Center)	94440	30.8638	1.2400e-003	2.6000e-004	30.9696
Government Office Building	4.99745e+006	1,633.210	0.0657	0.0136	1,638.8072
High School	238760	78.0289	3.1400e-003	6.5000e-004	78.2963
High Turnover (Sit Down Restaurant)	953120	311.4880	0.0125	2.5900e-003	312.5554
Hotel	1.68938e+007	5,521.037	0.2222	0.0460	5,539.9576
Industrial Park	738206	241.2522	9.7100e-003	2.0100e-003	242.0789
Junior College (2Yr)	1.08131e+006	353.3815	0.0142	2.9400e-003	354.5924
Junior High School	741291	242.2604	9.7500e-003	2.0200e-003	243.0906
Library	40334	13.1815	5.3000e-004	1.1000e-004	13.2267
Medical Office Building	760242	248.4538	0.0100	2.0700e-003	249.3052

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Mobile Home Park	2.75869e +006	901.5645	0.0363	7.5100e-003	904.6540
Motel	1.05586e +006	345.0649	0.0139	2.8700e-003	346.2474
Parking Lot	2.81142e +006	918.7980	0.0370	7.6500e-003	921.9466
Place of Worship	1.64619e +006	537.9893	0.0217	4.4800e-003	539.8329
Regional Shopping Center	2.13479e +007	6,976.6763	0.2808	0.0581	7,000.5842
Single Family Housing	1.6956e +007	5,541.3757	0.2230	0.0462	5,560.3651
Strip Mall	7.50149e +006	2,451.5520	0.0987	0.0204	2,459.9531
Supermarket	175030	57.2013	2.3000e-003	4.8000e-004	57.3974
Unrefrigerated Warehouse-No Rail	49795	16.2734	6.6000e-004	1.4000e-004	16.3292
Total		38,116.2097	1.5342	0.3175	38,246.8277

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	107870	35.2529	1.4200e-003	2.9000e-004	35.3737
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.96269e +007	6,414.2290	0.2582	0.0534	6,436.2095

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	175390	57.3190	2.3100e-003	4.8000e-004	57.5154
Elementary School	2.18086e+006	712.7244	0.0287	5.9400e-003	715.1668
Enclosed Parking Structure	2.08282e+006	680.6843	0.0274	5.6700e-003	683.0169
Fast Food Restaurant with Drive_Thru	1.91049e+006	624.3665	0.0251	5.2000e-003	626.5061
General Light Industry	9.59574e+006	3,135.972	0.1262	0.0261	3,146.7184
General Office Building	110180	36.0078	1.4500e-003	3.0000e-004	36.1312
Government (Civic Center)	94440	30.8638	1.2400e-003	2.6000e-004	30.9696
Government Office Building	4.99745e+006	1,633.2105	0.0657	0.0136	1,638.8072
High School	238760	78.0289	3.1400e-003	6.5000e-004	78.2963
High Turnover (Sit Down Restaurant)	953120	311.4880	0.0125	2.5900e-003	312.5554
Hotel	1.68938e+007	5,521.0379	0.2222	0.0460	5,539.9576
Industrial Park	738206	241.2522	9.7100e-003	2.0100e-003	242.0789
Junior College (2Yr)	1.08131e+006	353.3815	0.0142	2.9400e-003	354.5924
Junior High School	741291	242.2604	9.7500e-003	2.0200e-003	243.0906
Library	40334	13.1815	5.3000e-004	1.1000e-004	13.2267
Medical Office Building	760242	248.4538	0.0100	2.0700e-003	249.3052
Mobile Home Park	2.75869e+006	901.5645	0.0363	7.5100e-003	904.6540

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Motel	1.05586e+006	345.0649	0.0139	2.8700e-003	346.2474
Parking Lot	2.81142e+006	918.7980	0.0370	7.6500e-003	921.9466
Place of Worship	1.64619e+006	537.9893	0.0217	4.4800e-003	539.8329
Regional Shopping Center	2.13479e+007	6,976.6763	0.2808	0.0581	7,000.5842
Single Family Housing	1.6956e+007	5,541.3757	0.2230	0.0462	5,560.3651
Strip Mall	7.50149e+006	2,451.5520	0.0987	0.0204	2,459.9531
Supermarket	175030	57.2013	2.3000e-003	4.8000e-004	57.3974
Unrefrigerated Warehouse-No Rail	49795	16.2734	6.6000e-004	1.4000e-004	16.3292
Total		38,116.2097	1.5342	0.3175	38,246.8277

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	562.9949	6.8892	622.8167	0.2247		80.0878	80.0878		80.0855	80.0855	7,589.140 3	3,272.242 7	10,861.38 29	7.0914	0.5969	11,195.35 40	
Unmitigated	562.9949	6.8892	622.8167	0.2247		80.0878	80.0878		80.0855	80.0855	7,589.140 3	3,272.242 7	10,861.38 29	7.0914	0.5969	11,195.35 40	

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	22.8013					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	77.5132					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	460.9963	6.2545	567.8979	0.2218		79.7862	79.7862		79.7839	79.7839	7,589.140 3	3,182.774 7	10,771.91 50	7.0035	0.5969	11,104.04 12
Landscaping	1.6841	0.6348	54.9188	2.8900e-003		0.3016	0.3016		0.3016	0.3016	0.0000	89.4680	89.4680	0.0879	0.0000	91.3128
Total	562.9949	6.8892	622.8167	0.2247		80.0878	80.0878		80.0855	80.0855	7,589.140 3	3,272.242 7	10,861.38 29	7.0914	0.5969	11,195.35 40

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	22.8013					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	77.5132					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	460.9963	6.2545	567.8979	0.2218		79.7862	79.7862		79.7839	79.7839	7,589.140 3	3,182.774 7	10,771.91 50	7.0035	0.5969	11,104.04 12	
Landscaping	1.6841	0.6348	54.9188	2.8900e-003		0.3016	0.3016		0.3016	0.3016	0.0000	89.4680	89.4680	0.0879	0.0000	91.3128	
Total	562.9949	6.8892	622.8167	0.2247		80.0878	80.0878		80.0855	80.0855	7,589.140 3	3,272.242 7	10,861.38 29	7.0914	0.5969	11,195.35 40	

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	6,549.640 3	33.2064	0.8300	7,504.283 6
Mitigated	6,549.640 3	33.2004	0.8288	7,503.771 7

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive-Through)	0.455664 / 0.279278	3.0976	0.0150	3.8000e-004	3.5282
City Park	0 / 42.655	154.8738	6.2300e-003	1.2900e-003	155.4046
Condo/Townhouse	291.629 / 183.853	2,001.056	9.5796	0.2403	2,276.712
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	0.878403 / 0.538376	5.9714	0.0289	7.2000e-004	6.8015
Elementary School	9.95878 / 25.6083	138.5175	0.3300	8.7900e-003	148.1714
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	13.6287 / 0.869915	65.4774	0.4466	0.0110	78.2635
General Light Industry	236.569 / 0	1,081.741	7.7491	0.1904	1,303.497
General Office Building	1.24414 / 0.762535	8.4576	0.0409	1.0200e-003	9.6333
Government (Civic Center)	1.19196 / 0.730555	8.1029	0.0392	9.8000e-004	9.2293
Government Office Building	63.0745 / 38.6585	428.7793	2.0717	0.0519	488.3852
High School	1.24849 / 3.21041	17.3654	0.0414	1.1000e-003	18.5757
High Turnover (Sit Down Restaurant)	6.79916 / 0.433989	32.6658	0.2228	5.4900e-003	39.0446
Hotel	19.1773 / 2.13081	95.4273	0.6285	0.0155	113.4302

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	10.8456 / 0	49.5930	0.3553	8.7300e- 003	59.7595
Junior College (2Yr)	4.92453 / 7.70247	50.4845	0.1624	4.2000e- 003	55.1965
Junior High School	2.40727 / 6.19012	33.4829	0.0798	2.1200e- 003	35.8165
Library	0.134542 / 0.210438	1.3793	4.4400e- 003	1.1000e- 004	1.5080
Medical Office Building	6.06071 / 1.15442	31.9049	0.1987	4.9100e- 003	37.6005
Mobile Home Park	34.6619 / 21.8521	237.8378	1.1386	0.0286	270.6012
Motel	0.887837 / 0.0986486	4.4179	0.0291	7.2000e- 004	5.2514
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Place of Worship	5.4912 / 8.58881	56.2939	0.1811	4.6800e- 003	61.5481
Regional Shopping Center	106.916 / 65.5293	726.8155	3.5118	0.0880	827.8523
Single Family Housing	152.395 / 96.0753	1,045.681 8	5.0059	0.1256	1,189.729 8
Strip Mall	37.5696 / 23.0265	255.3976	1.2340	0.0309	290.9011
Supermarket	0.567034 / 0.0175371	2.6565	0.0186	4.6000e- 004	3.1883
Unrefrigerated Warehouse-No Rail	2.65937 / 0	12.1603	0.0871	2.1400e- 003	14.6532
Total		6,549.640 3	33.2065	0.8300	7,504.283 6

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive-Through)	0.455664 / 0.279278	3.0976	0.0150	3.7000e-004	3.5280
City Park	0 / 42.655	154.8738	6.2300e-003	1.2900e-003	155.4046
Condo/Townhouse	291.629 / 183.853	2,001.056	9.5778	0.2399	2,276.565
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
Convenience Market With Gas Pumps	0.878403 / 0.538376	5.9714	0.0289	7.2000e-004	6.8010
Elementary School	9.95878 / 25.6083	138.5175	0.3299	8.7800e-003	148.1663
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	13.6287 / 0.869915	65.4774	0.4465	0.0110	78.2566
General Light Industry	236.569 / 0	1,081.741	7.7477	0.1901	1,303.377
General Office Building	1.24414 / 0.762535	8.4576	0.0409	1.0200e-003	9.6327
Government (Civic Center)	1.19196 / 0.730555	8.1029	0.0391	9.8000e-004	9.2287
Government Office Building	63.0745 / 38.6585	428.7793	2.0714	0.0519	488.3533
High School	1.24849 / 3.21041	17.3654	0.0414	1.1000e-003	18.5751
High Turnover (Sit Down Restaurant)	6.79916 / 0.433989	32.6658	0.2227	5.4800e-003	39.0411
Hotel	19.1773 / 2.13081	95.4273	0.6284	0.0155	113.4205
Industrial Park	10.8456 / 0	49.5930	0.3552	8.7200e-003	59.7541
Junior College (2Yr)	4.92453 / 7.70247	50.4845	0.1624	4.1900e-003	55.1941
Junior High School	2.40727 / 6.19012	33.4829	0.0797	2.1200e-003	35.8153

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Library	0.134542 / 0.210438	1.3793	4.4400e- 003	1.1000e- 004	1.5080
Medical Office Building	6.06071 / 1.15442	31.9049	0.1987	4.9100e- 003	37.5974
Mobile Home Park	34.6619 / 21.8521	237.8378	1.1384	0.0285	270.5837
Motel	0.887837 / 0.0986486	4.4179	0.0291	7.2000e- 004	5.2510
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Place of Worship	5.4912 / 8.58881	56.2939	0.1811	4.6700e- 003	61.5453
Regional Shopping Center	106.916 / 65.5293	726.8155	3.5111	0.0879	827.7982
Single Family Housing	152.395 / 96.0753	1,045.681 8	5.0050	0.1254	1,189.652 7
Strip Mall	37.5696 / 23.0265	255.3976	1.2338	0.0309	290.8821
Supermarket	0.567034 / 0.0175371	2.6565	0.0186	4.6000e- 004	3.1880
Unrefrigerated Warehouse-No Rail	2.65937 / 0	12.1603	0.0871	2.1400e- 003	14.6519
Total		6,549.640 3	33.2004	0.8288	7,503.771 7

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2,591.587 7	153.1584	0.0000	5,807.915 0
Unmitigated	2,591.587 7	153.1584	0.0000	5,807.915 0

8.2 Waste by Land UseUnmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	10.73	2.1781	0.1287	0.0000	4.8813
City Park	3.08	0.6252	0.0370	0.0000	1.4011
Condo/Townhouse	2058.96	417.9503	24.7002	0.0000	936.6535
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Elementary School	749.71	152.1844	8.9938	0.0000	341.0550
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	517.2	104.9869	6.2046	0.0000	235.2825

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1268.52	257.4981	15.2177	0.0000	577.0698
General Office Building	6.51	1.3215	0.0781	0.0000	2.9615
Government (Civic Center)	34.2	6.9423	0.4103	0.0000	15.5581
Government Office Building	295.28	59.9392	3.5423	0.0000	134.3276
High School	48.88	9.9222	0.5864	0.0000	22.2363
High Turnover (Sit Down Restaurant)	266.56	54.1093	3.1978	0.0000	121.2624
Hotel	413.91	84.0200	4.9654	0.0000	188.2942
Industrial Park	58.16	11.8060	0.6977	0.0000	26.4579
Junior College (2Yr)	419.75	85.2055	5.0355	0.0000	190.9509
Junior High School	181.22	36.7860	2.1740	0.0000	82.4399
Library	3.96	0.8038	0.0475	0.0000	1.8015
Medical Office Building	521.64	105.8882	6.2578	0.0000	237.3023
Mobile Home Park	244.72	49.6760	2.9358	0.0000	111.3270
Motel	19.16	3.8893	0.2299	0.0000	8.7162
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	1000.35	203.0620	12.0006	0.0000	455.0751
Regional Shopping Center	1515.57	307.6470	18.1814	0.0000	689.4568
Single Family Housing	2559.63	519.5818	30.7064	0.0000	1,164.4162

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	532.56	108.1049	6.3888	0.0000	242.2700
Supermarket	25.94	5.2656	0.3112	0.0000	11.8005
Unrefrigerated Warehouse-No Rail	10.81	2.1943	0.1297	0.0000	4.9176
Total		2,591.5877	153.1584	0.0000	5,807.9150

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	10.73	2.1781	0.1287	0.0000	4.8813
City Park	3.08	0.6252	0.0370	0.0000	1.4011
Condo/Townhouse	2058.96	417.9503	24.7002	0.0000	936.6535
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
Elementary School	749.71	152.1844	8.9938	0.0000	341.0550
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	517.2	104.9869	6.2046	0.0000	235.2825
General Light Industry	1268.52	257.4981	15.2177	0.0000	577.0698
General Office Building	6.51	1.3215	0.0781	0.0000	2.9615

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government (Civic Center)	34.2	6.9423	0.4103	0.0000	15.5581
Government Office Building	295.28	59.9392	3.5423	0.0000	134.3276
High School	48.88	9.9222	0.5864	0.0000	22.2363
High Turnover (Sit Down Restaurant)	266.56	54.1093	3.1978	0.0000	121.2624
Hotel	413.91	84.0200	4.9654	0.0000	188.2942
Industrial Park	58.16	11.8060	0.6977	0.0000	26.4579
Junior College (2Yr)	419.75	85.2055	5.0355	0.0000	190.9509
Junior High School	181.22	36.7860	2.1740	0.0000	82.4399
Library	3.96	0.8038	0.0475	0.0000	1.8015
Medical Office Building	521.64	105.8882	6.2578	0.0000	237.3023
Mobile Home Park	244.72	49.6760	2.9358	0.0000	111.3270
Motel	19.16	3.8893	0.2299	0.0000	8.7162
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Place of Worship	1000.35	203.0620	12.0006	0.0000	455.0751
Regional Shopping Center	1515.57	307.6470	18.1814	0.0000	689.4568
Single Family Housing	2559.63	519.5818	30.7064	0.0000	1,164.4162
Strip Mall	532.56	108.1049	6.3888	0.0000	242.2700
Supermarket	25.94	5.2656	0.3112	0.0000	11.8005

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	10.81	2.1943	0.1297	0.0000	4.9176
Total		2,591.5877	153.1584	0.0000	5,807.9150

9.0 Operational Offroad

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

10.0 Vegetation
