



Greenhouse Gas Analysis  
for the Uptown, North Park,  
and Golden Hill Community  
Plan Updates, City of San  
Diego

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A handwritten signature in black ink, appearing to read "William A. Maddux".

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# Acronyms

AB	Assembly Bill
APS	Alternative Planning Strategy
BAU	business-as-usual
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAP	Climate Change Action Plan
CCP	Cities for Climate Protection
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CF <sub>4</sub>	Tetrafluoromethane
CH <sub>4</sub>	Methane
CMAP	Climate Mitigation and Adaptation Plan
CO <sub>2</sub>	carbon dioxide
CPAP	Climate Protection Action Plan
CPU	Community Plan Update
CPUC	California Public Utilities Commission
C&D	Construction and Demolition
du	dwelling unit
EO	Executive Order
EPIC	Energy Policy Initiative Center
GDP	gross domestic product
GHG	greenhouse gas
GWh	gigaWatt hour
GWP	global warming potential
HFC	Hydrofluorocarbons
HVAC	heating, ventilation, and air conditioning
ICLEI	International Council for Local Environmental Initiatives
LCFS	Low Carbon Fuel Standard
LEED	Leadership in Energy and Environmental Design
MMTCO <sub>2</sub> E	million metric tons of carbon dioxide equivalent
mpg	miles per gallon
MPO	Metropolitan Planning Organization
MTCO <sub>2</sub> E	metric tons of carbon dioxide equivalent
MW	megawatt
N <sub>2</sub> O	nitrous oxide

Greenhouse Gas Analysis for  
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PFC	Perfluorocarbon
RPS	Renewables Portfolio Standard
RTP	regional transportation plan
SANDAG	San Diego Association of Governments
SCAQMD	South Coast Air Quality Management District
SCP	Sustainable Community Program
SCS	Sustainable Communities Strategy
SDAPCD	San Diego Air Pollution Control District
SF <sub>6</sub>	sulfur hexafluoride
U.S. DOE	U.S. Department of Energy
U.S. DOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled

# Executive Summary

This report evaluates potential greenhouse gas (GHG) impacts associated with the Uptown, North Park, and Golden Hill Community Plan Updates (CPUs). The CPUs would update the adopted 1988 Uptown Community Plan, 1986 North Park Community Plan, and 1988 Golden Hill Community Plan. The CPUs provide goals and supporting policies for future development within the planning areas, consistent with the 2008 City of San Diego General Plan (General Plan) as well as provide a long-range, comprehensive policy framework for growth and development in the three communities through 2035.

The CPUs encompass a broad range of the land use designations defined in the General Plan and contain a more detailed description and distribution of land uses than the citywide General Plan. Land uses include residential with a variety of density ranges, village centers, commercial, industrial, open space, parks, and institutional.

New policies within the CPUs have been designed to reflect and implement the GHG reduction recommendations of the General Plan, strategies of other local plans, and state GHG reduction measures identified in the Scoping Plan. Specifically, the CPUs include updated Land Use, Mobility, and Conservation elements that include multiple policies aimed at reducing GHG emissions from target emission sources and adapting to climate change. The CPU policies refine existing General Plan policies with site-specific recommendations applicable to the individual communities. Compared to the existing land uses, the CPUs envision reducing industrial, institutional, recreational, and single-family residential land uses and increasing commercial space and multi-family dwelling units. This would increase the diversity of land uses within the plan area and would be consistent with the General Plan City of Villages Strategy, which directs growth into pedestrian-friendly mixed-use activity centers linked to an improved regional transit system.

This GHG analysis evaluates potential effects associated with cumulative GHG emissions generated by each CPU. In accordance with California Environmental Quality Act (CEQA) and City guidelines, this analysis evaluates the significance of the CPUs in terms of (1) contribution of GHGs to cumulative statewide emissions and (2) consistency with local and state regulations, plans, and policies aimed at reducing GHG emissions.

With regard to the first CEQA question, i.e., to evaluate cumulative GHG emissions impacts, GHG emissions were calculated for the CPUs using the California Emissions Estimator Model (CalEEMod). CalEEMod estimates GHG emissions from construction and operational emissions sources. Pursuant to City Guidelines for Determining Significance, the estimated GHGs for the CPUs were evaluated relative to business-as-usual (BAU) emissions, and a determination was made as to whether or not buildout of

each of the CPUs would achieve a reduction equal to or greater than 28.3 percent relative to BAU.

The annual BAU emissions associated with the Uptown, North Park, and Golden Hill CPUs would total 480,531, 415,619, 102,043 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>E), respectively. GHG emissions estimates account for reductions due to statewide regulations on auto and fuel manufacturers that would lower vehicle emissions and the recently updated Title 24 California Building Code that contains increased energy- and water-efficiency requirements that would reduce GHG emissions from those sources. Additionally, CPU policies such as increasing land use diversity, increasing multi-family units near to job centers, and increasing the walkability of the communities would further reduce GHG emissions.

Overall, the Uptown, North Park, and Golden Hill CPUs would result in 33.5, 32.64, and 32.6 percent reductions versus BAU, respectively. Statewide regulations account for a majority of the reduction in each of the planning areas, and CPU specific policies would account for the remainder. As GHG emissions associated with adoption all three CPUs exceed the City requirement to demonstrating a 28.3 percent reduction in GHG emissions relative to BAU, the GHG emissions associated with the CPUs would not be a significant impact.

The Uptown, North Park and Golden Hill CPUs would also be consistent with the goals, strategies, and reduction targets of relevant local plans and regulations aimed at reducing GHG emissions from land use and development. All three CPUs propose an increase in the number of multi-family residences and a decrease in the number of single-family residences from what would occur under the existing community plans. Additionally, the CPUs propose an increase in the amount of commercial land uses. All three communities are considered by the General Plan as having a moderate to high propensity as creating village centers. Therefore, the CPU policies to increase multi-family development and commercial land uses would support the General Plan's City of Villages Strategy of directing growth into pedestrian-friendly mixed-use activity centers linked to an improved regional transit system. Additionally, under the City Guidelines for Determining Significance, consistency with the California Air Resources Board (CARB) Scoping Plan is demonstrated by the same 28.3 percent reduction criterion that is used to assess contribution to cumulative emissions. Thus, all three CPUs would also be consistent with the state Scoping Plan. As the CPUs do not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs, impacts would be less than significant.

## **1.0 Introduction**

To evaluate the incremental effect of the Community Plan Updates (CPUs) on statewide emissions and global climate change, it is important to have a basic understanding of the nature of the global climate change problem.

### **1.1 Understanding Global Climate Change**

Global climate change is a change in the average weather of the earth, which can be measured by wind patterns, storms, precipitation, and temperature. The earth's climate is in a state of constant flux with periodic warming and cooling cycles. Extreme periods of cooling are termed ice ages, which may then be followed by extended periods of warmth. For most of the earth's geologic history, these periods of warming and cooling have been the result of many complicated interacting natural factors that include: volcanic eruptions that spew gases and particles (dust) into the atmosphere; the amount of water, vegetation, and ice covering the earth's surface; subtle changes in the earth's orbit; and the amount of energy released by the sun (sun cycles). However, since the beginning of the Industrial Revolution around 1750, the average temperature of the earth has been increasing at a rate that is faster than can be explained by natural climate cycles alone.

With the Industrial Revolution came an increase in the combustion of carbon-based fuels such as wood, coal, oil, natural gas, and biomass. Industrial processes have also created emissions of substances not found in nature. This in turn has led to a marked increase in the emissions of gases shown to influence the world's climate. These gases, termed greenhouse gases, influence the amount of heat trapped in the earth's atmosphere. Because recently observed increased concentrations of greenhouse gases (GHGs) in the atmosphere are related to increased emissions resulting from human activity, the current cycle of global warming is generally believed to be largely due to human activity. Of late, the issue of global warming or global climate change has arguably become the most important and widely debated environmental issue in the United States and the world. Because it is the collective of human actions taking place throughout the world that contributes to climate change, it is quintessentially a global or cumulative issue.

### **1.2 Greenhouse Gases of Primary Concern**

There are numerous GHGs, both naturally occurring and manmade. Each GHG has variable atmospheric lifetime and global warming potential (GWP). The atmospheric lifetime of the gas is the average time a molecule stays stable in the atmosphere. Most GHGs have long atmospheric lifetimes, staying in the atmosphere hundreds or thousands of years. GWP is a measure of the potential for a gas to trap heat and warm

the atmosphere. Although GWP is related to its atmospheric lifetime, many other factors including chemical reactivity of the gas also influence GWP. GWP is reported as a unitless factor representing the potential for the gas to affect global climate relative to the potential of carbon dioxide (CO<sub>2</sub>). Because CO<sub>2</sub> is the reference gas for establishing GWP, by definition its GWP is 1. Although methane (CH<sub>4</sub>) has a shorter atmospheric lifetime than CO<sub>2</sub>, it has a 100-year GWP of 25; this means that CH<sub>4</sub> has 25 times more effect on global warming than CO<sub>2</sub> on a molecule-by-molecule basis.

The GWP is officially defined as (U.S. Environmental Protection Agency [U.S. EPA] 2010):

The cumulative radiative forcing—both direct and indirect effects—integrated over a period of time from the emission of a unit mass of gas relative to some reference gas.

GHG emission estimates are typically represented in terms of equivalent metric tons of CO<sub>2</sub>E (MTCO<sub>2</sub>E). CO<sub>2</sub>E emissions are the product of the amount of each gas by its GWP. The effects of several GHGs may be discussed in terms of MTCO<sub>2</sub>E and can be summed to represent the total potential of these gases to warm the global climate. Table 1 summarizes some of the most common GHGs

**TABLE 1  
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES (YEARS)**

Gas	Atmospheric Lifetime	100-year GWP	20-year GWP	500-year GWP
Carbon dioxide (CO <sub>2</sub> )	50–200	1	1	1
Methane (CH <sub>4</sub> ) <sup>*</sup>	12	25	72	7.6
Nitrous oxide (N <sub>2</sub> O)	114	298	289	153
HFC-23	270	14,800	12,000	12,200
HFC-32	4.9	675	2,330	205
HFC-125	29	3,500	6,350	1,100
HFC-134a	14	1,430	3,830	435
HFC-143a	52	4,470	5,890	1,590
HFC-152a	1.4	124	437	38
HFC-227ea	34.2	3,220	5,310	1,040
HFC-236fa	240	9,810	8,100	7,660
HFC-43-10mee	15.9	1,640	4,140	500
CF <sub>4</sub>	50,000	7,390	5,210	11,200
C <sub>2</sub> F <sub>6</sub>	10,000	12,200	8,630	18,200
C <sub>3</sub> F <sub>8</sub>	2,600	8,830	6,310	12,500
C <sub>4</sub> F <sub>10</sub>	2,600	8,860	6,330	12,500
c-C <sub>4</sub> F <sub>8</sub>	3,200	10,300	7,310	14,700
C <sub>5</sub> F <sub>12</sub>	4,100	9,160	6,510	13,300
C <sub>6</sub> F <sub>14</sub>	3,200	9,300	6,600	13,300
SF <sub>6</sub>	3,200	22,800	16,300	32,600

SOURCE: IPCC 2007.

GWP = global warming potential

\* The methane GWP includes the direct effects and those indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO<sub>2</sub> is not included.

Of the gases listed in Table 1, only CO<sub>2</sub>, CH<sub>4</sub>, and nitrous oxide (N<sub>2</sub>O) are produced by both biogenic (natural) and anthropogenic (human) sources. The remaining gases occur solely as the result of human processes. Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals used as substitutes for ozone-depleting chlorofluorocarbons used in air conditioners and as refrigerants. Perfluorocarbons (PFCs) such as tetrafluoromethane (CF<sub>4</sub>) are used primarily in aluminum production and semiconductor manufacture. Sulfur hexafluoride (SF<sub>6</sub>) is used for insulation in electric power transmission and distribution equipment. HFCs, PFCs, and SF<sub>6</sub> are not of primary concern to the CPUs.

CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O are the GHGs of primary concern in this analysis. Carbon dioxide would be emitted by the CPUs due to the combustion of fossil fuels in vehicles (including construction), from electricity generation and natural gas consumption, water use, and from solid waste disposal. Smaller amounts of methane and nitrous oxide would be emitted from the same CPU operations.

## **2.0 Project Description**

### **2.1 Project Overview**

The CPUs would update the adopted 1988 Uptown Community Plan, 1986 North Park Community Plan, and 1988 Golden Hill Community Plan. The CPUs provide goals and supporting policies for future development within the planning areas. Approval of the CPUs would amend the City of San Diego's (City) General Plan and establish land use designations and policies to guide future development consistent with the General Plan (City of San Diego 2008a). The CPUs express the General Plan policies through the provision of more site-specific recommendations.

Each CPU includes eight elements based on those promulgated in the City's General Plan, with goals and policies for each. The eight elements are: Land Use; Mobility; Urban Design; Economic Prosperity; Public Facilities, Services, and Safety; Recreation; Conservation; and Noise.

New policies within the CPUs have been designed to reflect and implement the GHG reduction recommendations of the General Plan, strategies of other local plans, and state GHG reduction measures identified in the Scoping Plan. Specifically, the CPUs include updated Land Use, Mobility, and Conservation elements that include multiple policies aimed at reducing GHG emissions from target emission sources and adapting to climate change. The CPU policies refine existing General Plan policies with site-specific recommendations applicable to the individual communities. Compared to the existing land uses, the CPUs envision reducing industrial, institutional, recreational, and single-family residential land uses and increasing commercial space and multi-family dwelling units. This would increase the diversity of land uses within the plan area and would be consistent with the General Plan City of Villages Strategy, which directs growth into

pedestrian-friendly mixed-use activity centers linked to an improved regional transit system.

Figure 1 shows the regional location of the planning areas; Figure 2 shows the boundaries of the planning areas on a U.S. Geological Survey map; and Figures 3a through 3c show an aerial photograph of each of the planning areas. Figures 4a through 4c and Figures 5a through 5c show the existing and proposed land uses within the planning areas. The planning areas are bounded by Mission Valley to the north, Normal Heights and City Heights to the east, Southeastern San Diego and Centre City to the south, and Midway Pacific Highway Corridor and Old Town San Diego communities to the west. Additionally, Balboa Park lies in between the three planning areas.

## **2.2 Development Summary**

The CPUs encompass a broad range of the land use designations defined in the General Plan and contain a more detailed description and distribution of land uses than the citywide General Plan. Land use designations under the proposed CPUs are summarized in Table 2.

## **2.3 Relevant CPU Policies**

New policies within the CPUs are intended to reflect and implement the general GHG reduction recommendations of the General Plan, strategies of other local plans, and state GHG reduction measures. Specifically, the CPUs include updated Land Use, Mobility, Urban Design, and Conservation elements that include policies aimed at reducing GHG emissions from target emission sources and/or adapting to climate change. The CPU policies provide refinement of the General Plan and citywide policies specifically applicable to the Uptown, North Park, and Golden Hill community planning areas.



**TABLE 2  
LAND USE DISTRIBUTIONS IN 2035 BY COMMUNITY**

Land Use	Proposed Community Plan (2035)	Proposed Change Versus	
		Existing (2015)	Adopted Plan (2035)
Uptown			
Residential <sup>1</sup>			
Single-Family	5,510 du	-2,032 du	-28 du
Multi-Family <sup>2</sup>	27,084 du	3,654 du	-2,004 du
Non-Residential			
Commercial	4,784,437 sf	600,273 sf	-10,525 sf
Industrial	-	-19,711 sf	-
Institutional	2,305,445 sf	-2,704 sf	183,945 sf
Hotels	173,869 sf	-192,594 sf	-
Recreation	31,111 sf	-	-
<b>SUBTOTAL<sup>3</sup></b>	<b>32,594 du 7,483,400 sf</b>	<b>10,018 du 152,451 sf</b>	<b>-2,032 du 173,420 sf</b>
North Park			
Residential <sup>1</sup>			
Single-Family	5,116 du	-681 du	-
Multi-Family <sup>2</sup>	30,352 du	11,118 du	1,193 du
Non-Residential			
Commercial	2,328,274 sf	38,069 sf	164,715 sf
Industrial	-	-42,846 sf	-
Institutional	870,441 sf	-38,939 sf	-
Hotels	158,866 sf	-5,000 sf	-
Recreation	27,463 sf	-44,967 sf	-
<b>SUBTOTAL<sup>3</sup></b>	<b>35,468 du 3,396,977 sf</b>	<b>10,437 du -93,683 sf</b>	<b>1,193 du 164,715 sf</b>
Golden Hill			
Residential <sup>1</sup>			
Single-Family	2,097 du	-995 du	27 du
Multi-Family <sup>2</sup>	6,740 du	2,585 du	-31 du
Non-Residential			
Commercial	393,973 sf	125,164 sf	-37,210 sf
Industrial	102,563 sf	-10,190 sf	-
Institutional	207,044 sf	-29,089 sf	-
Hotels	-	-	-
Recreation	2,250 sf	-	-
<b>SUBTOTAL<sup>3</sup></b>	<b>8,837 du 718,830 sf</b>	<b>1,590 du 69,885 sf</b>	<b>-4 du -41053 sf</b>

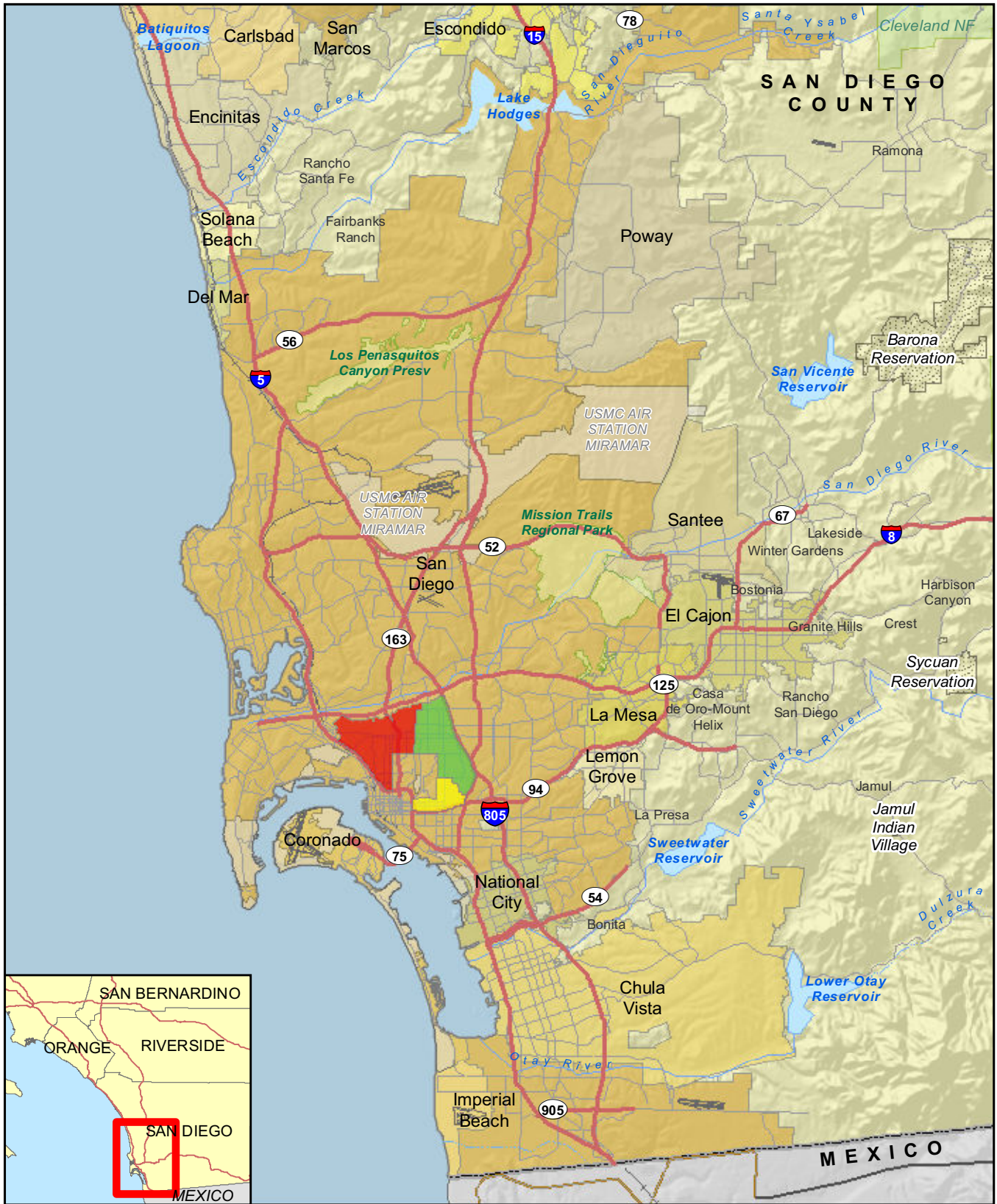
du = dwelling unit(s)      sf = square feet

<sup>1</sup> Residential buildings were not count towards total square footage.

<sup>2</sup> All dwelling units that are not single-family were counted as multi-family. This includes dwelling units on other land uses such as commercial and institutional.

<sup>3</sup> Total area may not match sum of listed areas. Some non-residential buildings are located on lots that are classified as single- or multi-family land uses.

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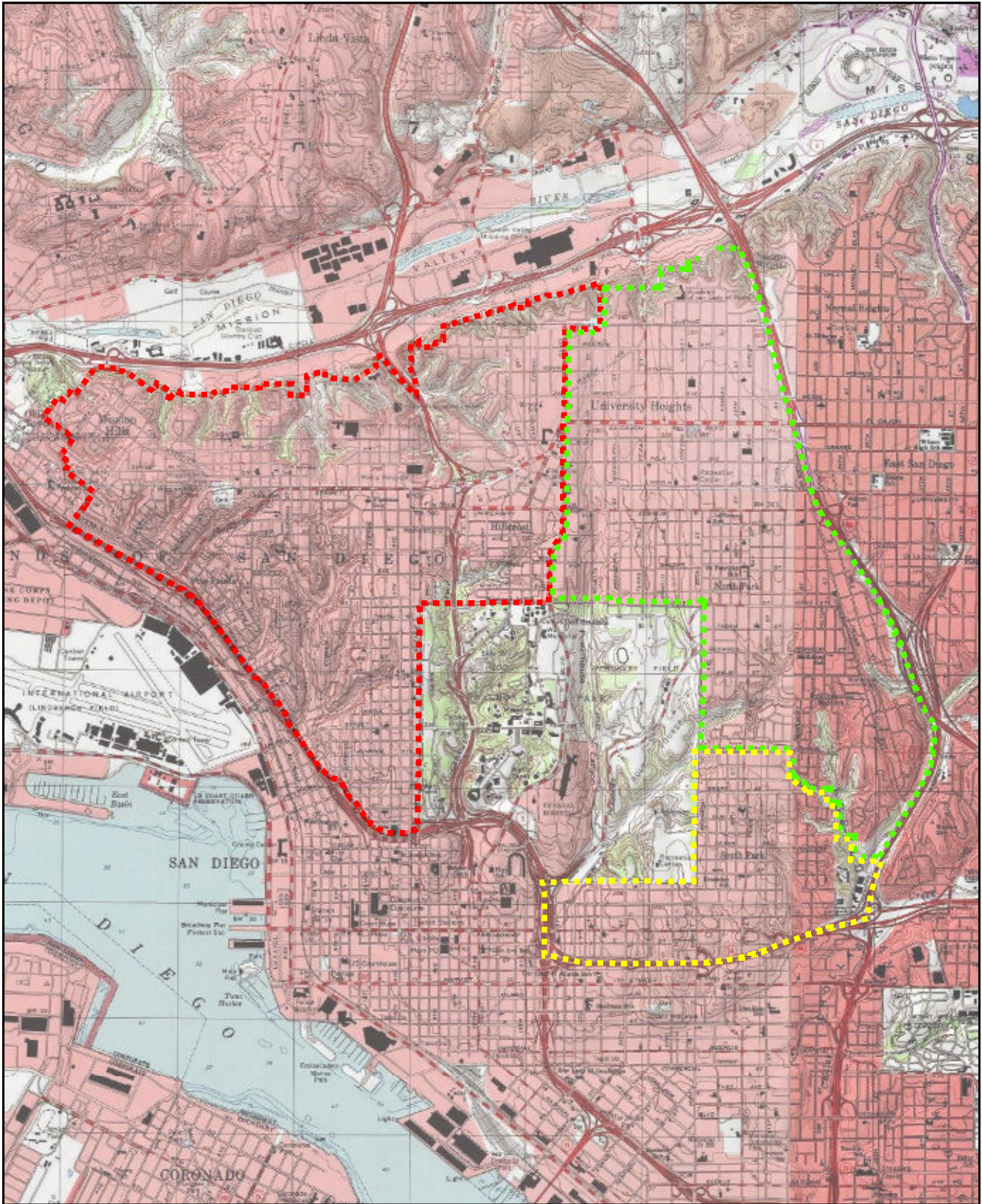
**Community Plan Boundaries**

- Uptown
- North Park
- Golden Hill

**FIGURE 1**

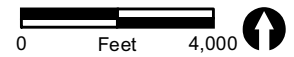
Regional Location





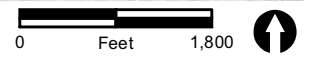
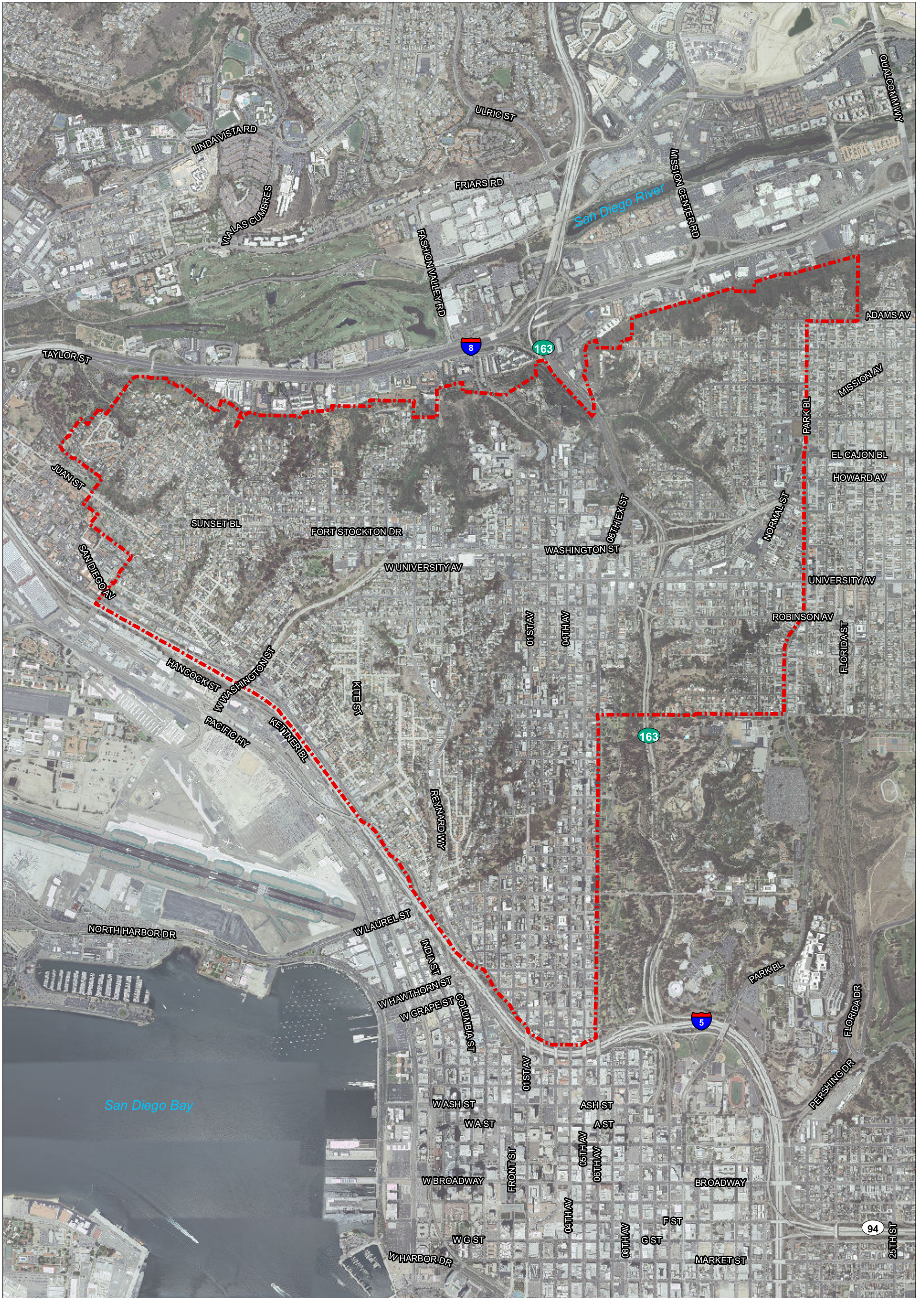
**Community Plan Boundaries**

-  Uptown
-  North Park
-  Golden Hill



**FIGURE 2**  
Project Location on USGS Map






 Uptown Community Plan Boundary

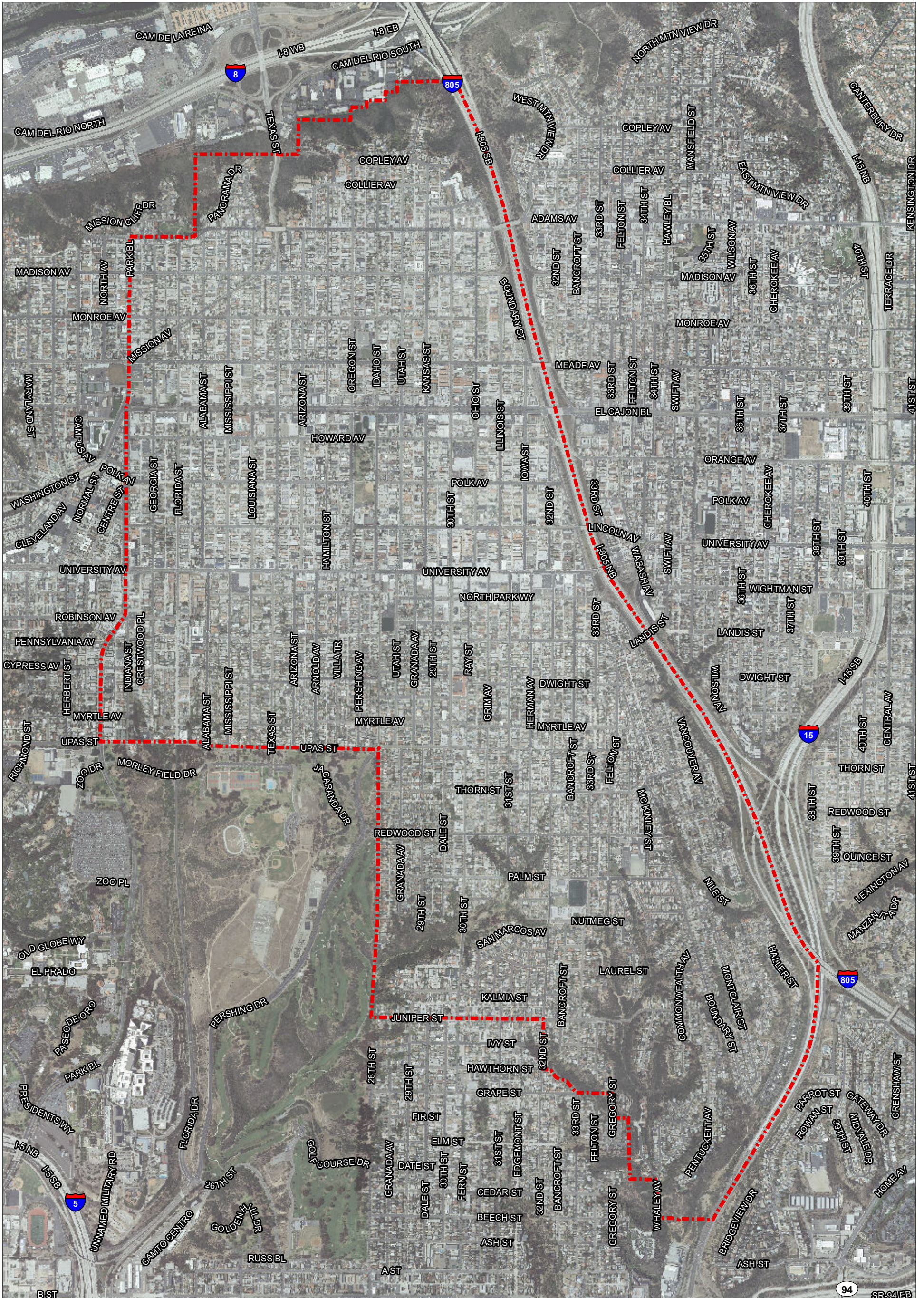
FIGURE 3a

Location of the Uptown Community Plan Area on Aerial Photograph



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 North Park Community Plan Boundary

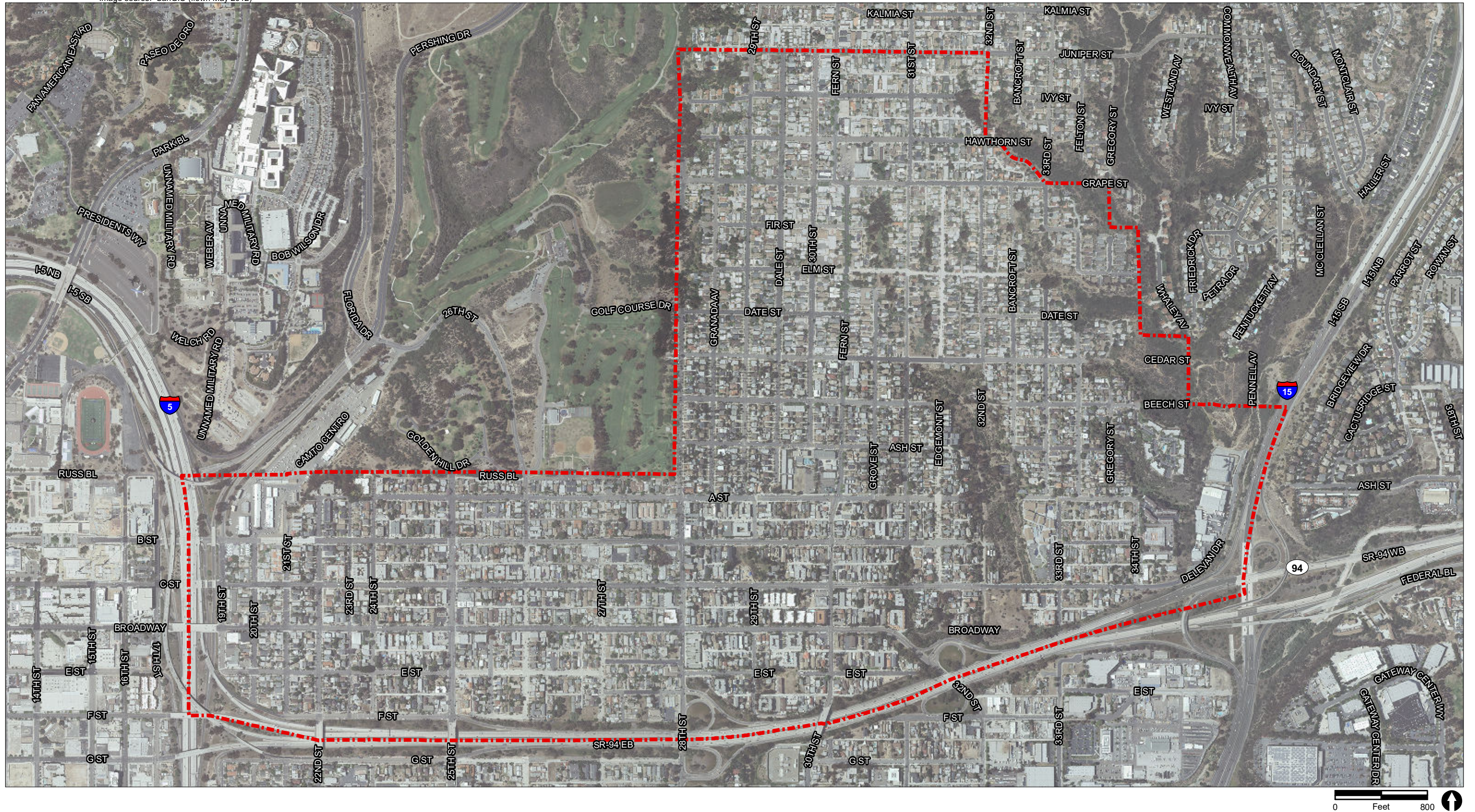
FIGURE 3b

Location of the North Park CPU Area on Aerial Photograph



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 Golden Hill Community Plan Boundary

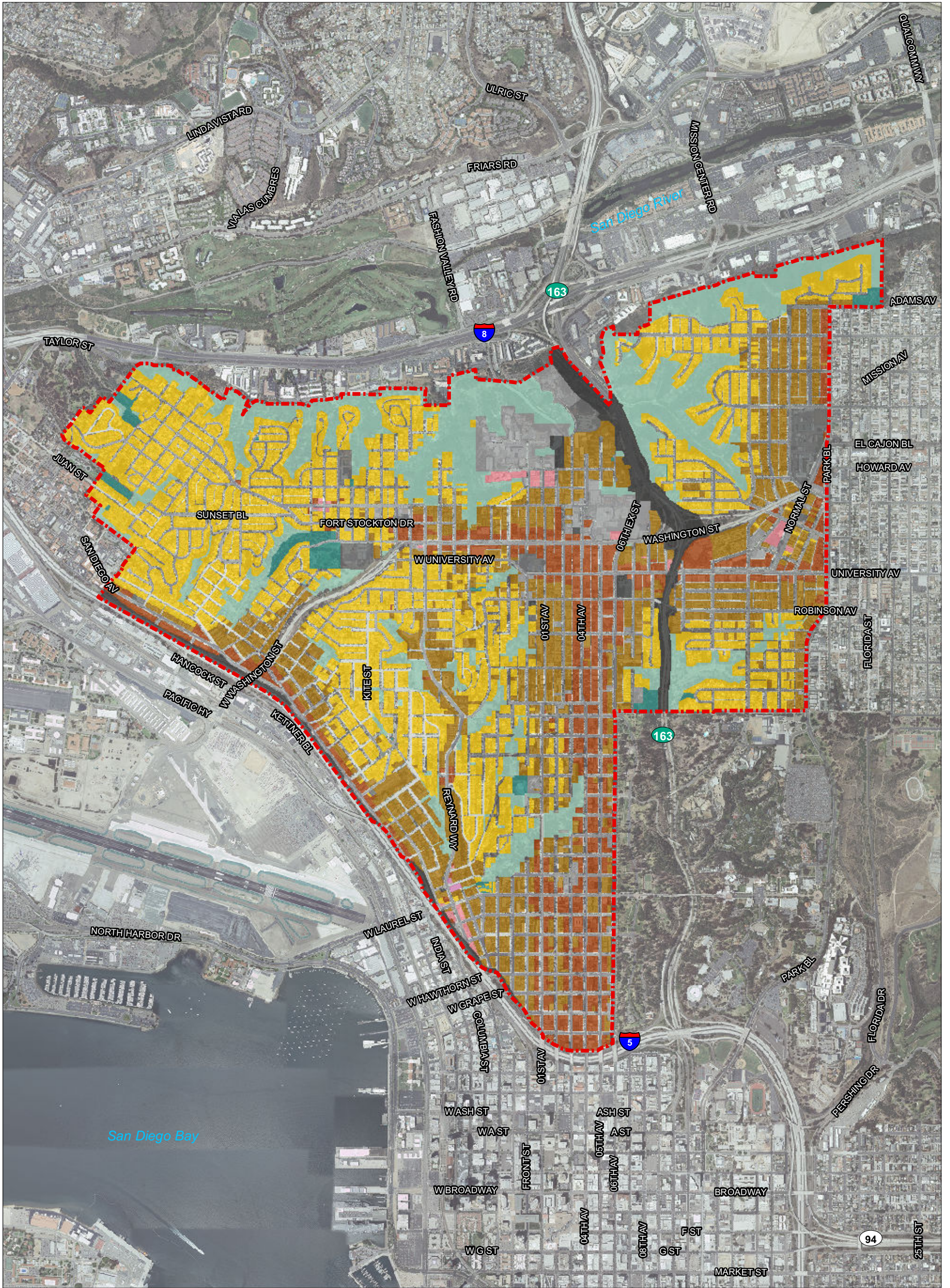
FIGURE 3c

Location of the Golden Hill CPU Area on Aerial Photograph



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- Uptown Community Plan Boundary
- Planned Land Use**
- RESIDENTIAL**
- Single Family Residential
- Multi-Family Residential
- Mixed Use

- COMMERCIAL AND OFFICE**
- Commercial and Office
- INDUSTRIAL**
- Light Industry
- PUBLIC FACILITIES AND UTILITIES**
- Transportation, Communications, Utilities

- Education
- Institutions
- PARKS AND RECREATION**
- Recreation
- Open Space Parks

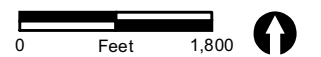


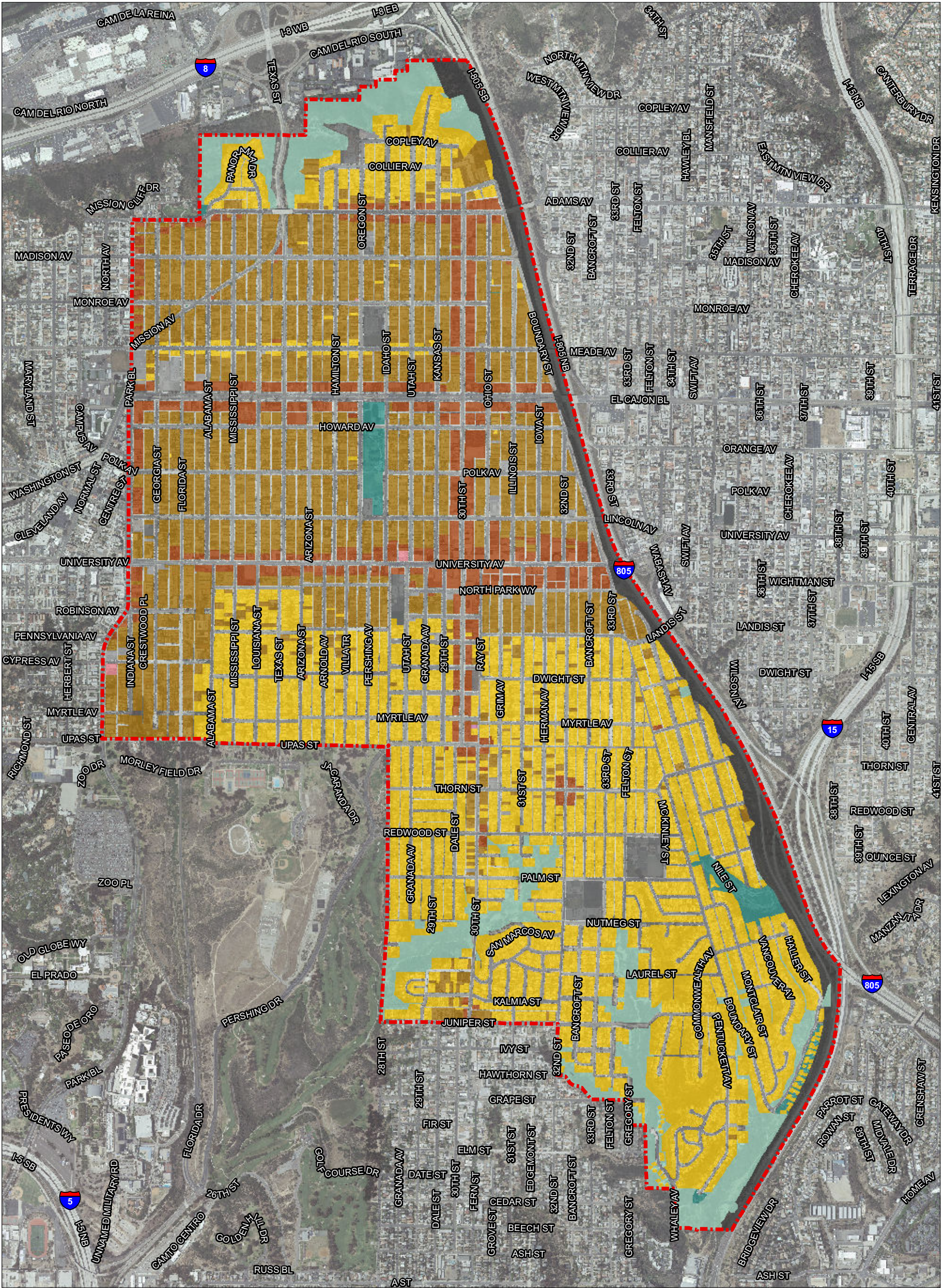
FIGURE 4a

Uptown Land Uses under Adopted Community Plan



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- North Park Community Plan Boundary
- Planned Land Use**
- RESIDENTIAL**
- Single Family Residential
- Multi-Family Residential
- Mixed Use

**COMMERCIAL AND OFFICE**

- Commercial and Office

**INDUSTRIAL**

- Light Industry

**PUBLIC FACILITIES AND UTILITIES**

- Transportation, Communications, Utilities

- Education

- Institutions

**PARKS AND RECREATION**

- Recreation

- Open Space Parks

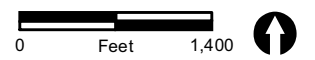


FIGURE 4b



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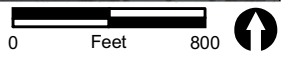
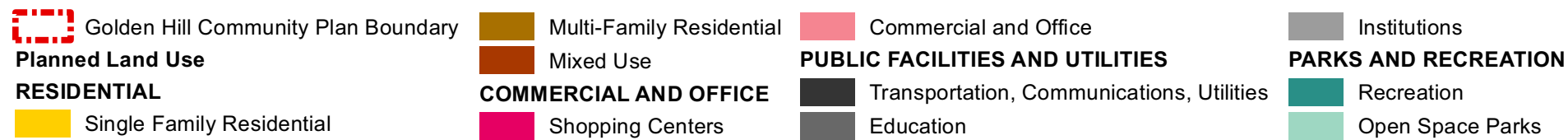
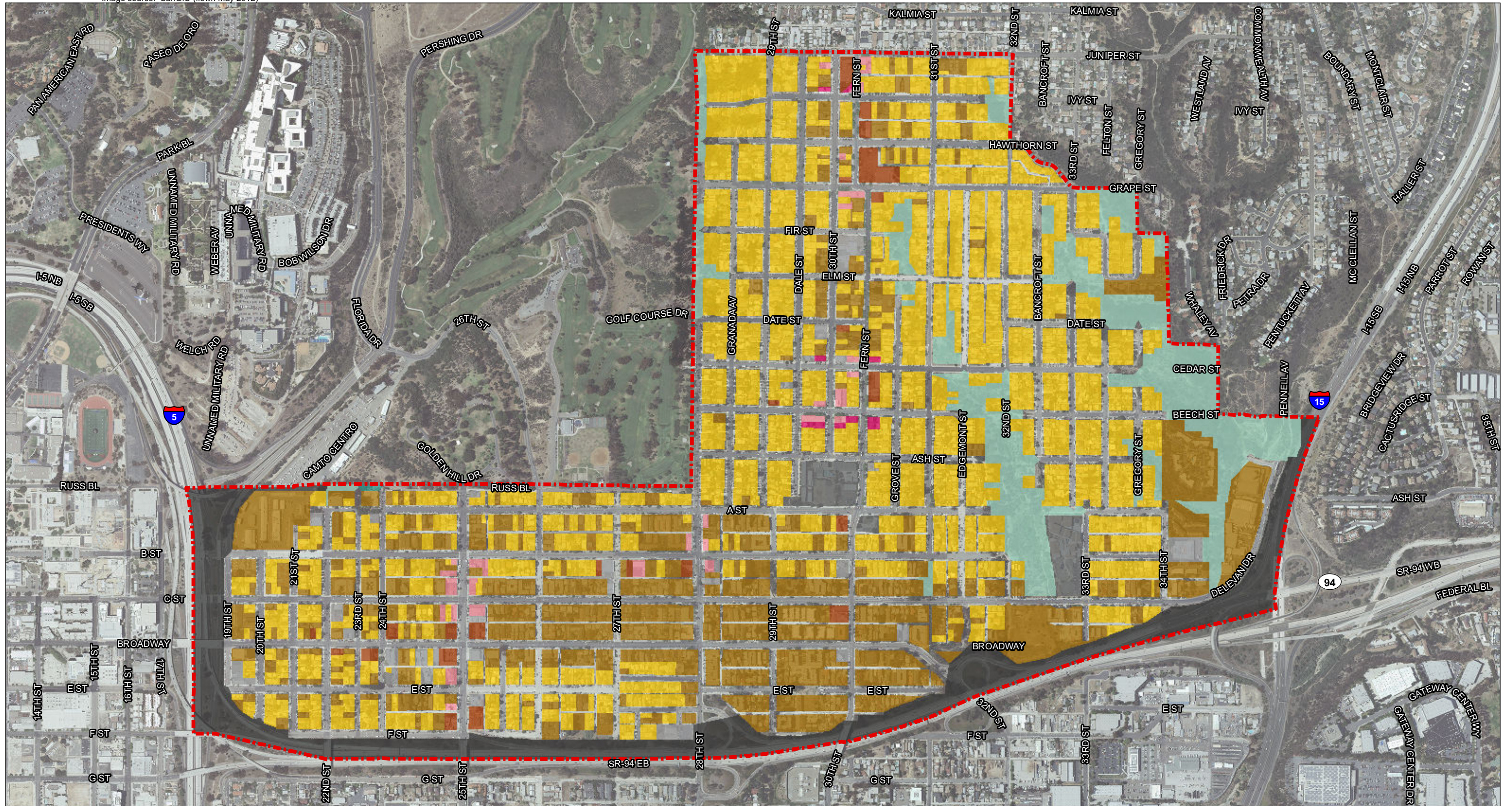
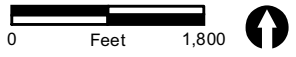
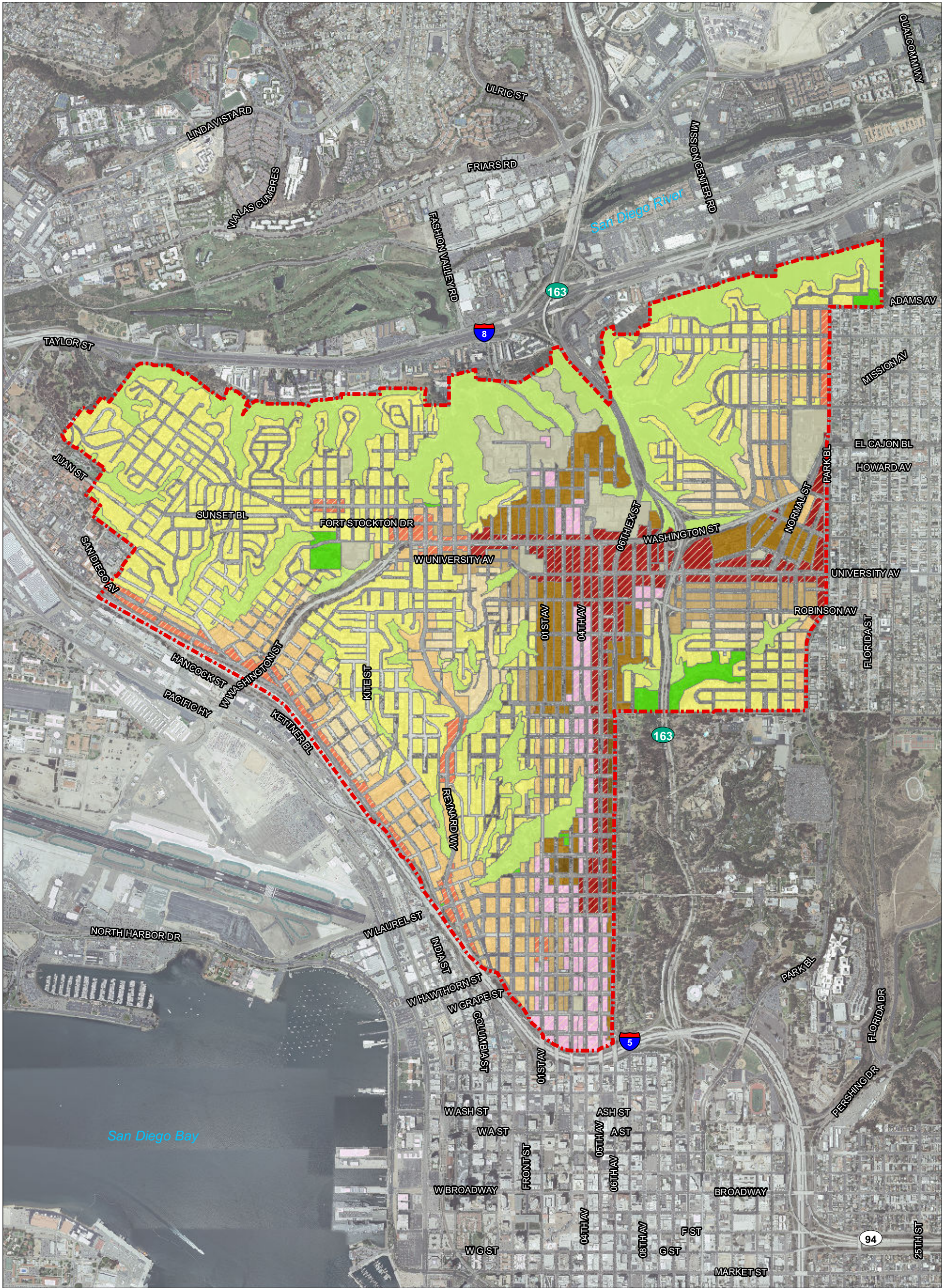


FIGURE 4c



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- |                                |   |   |
|--------------------------------|---|---|
| Uptown Community Plan Boundary | Residential - Medium High                           | Office Commercial                                       |
| <b>Proposed Land Use</b>       | Residential - High                                  | <b>Institutional, and Public/Semi-Public Facilities</b> |
| <b>Residential</b>             | Residential - Very High                             | Institutional   |
| Residential - Low              | <b>Commercial, Employment, Retail, and Services</b> | <b>Park, Open Space, and Recreation</b>                 |
| Residential - Low Medium       | Community Commercial                                | Open Space  |
| Residential - Medium           | Neighborhood Commercial                             | Park  |

FIGURE 5a

Uptown Land Uses under Proposed Community Plan



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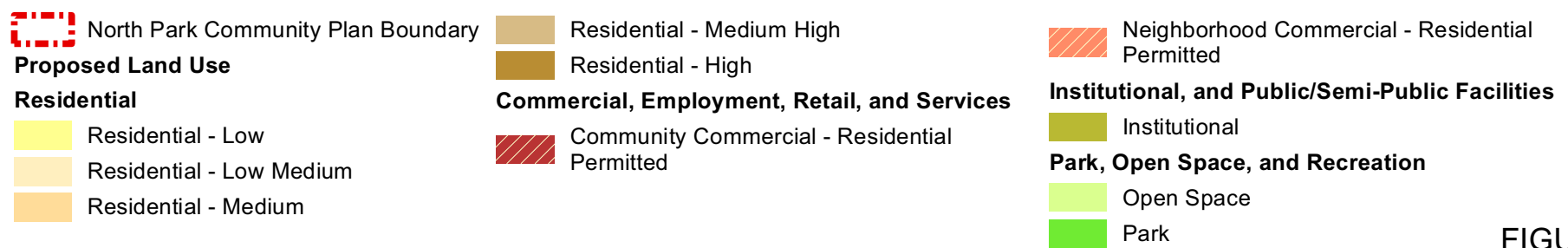
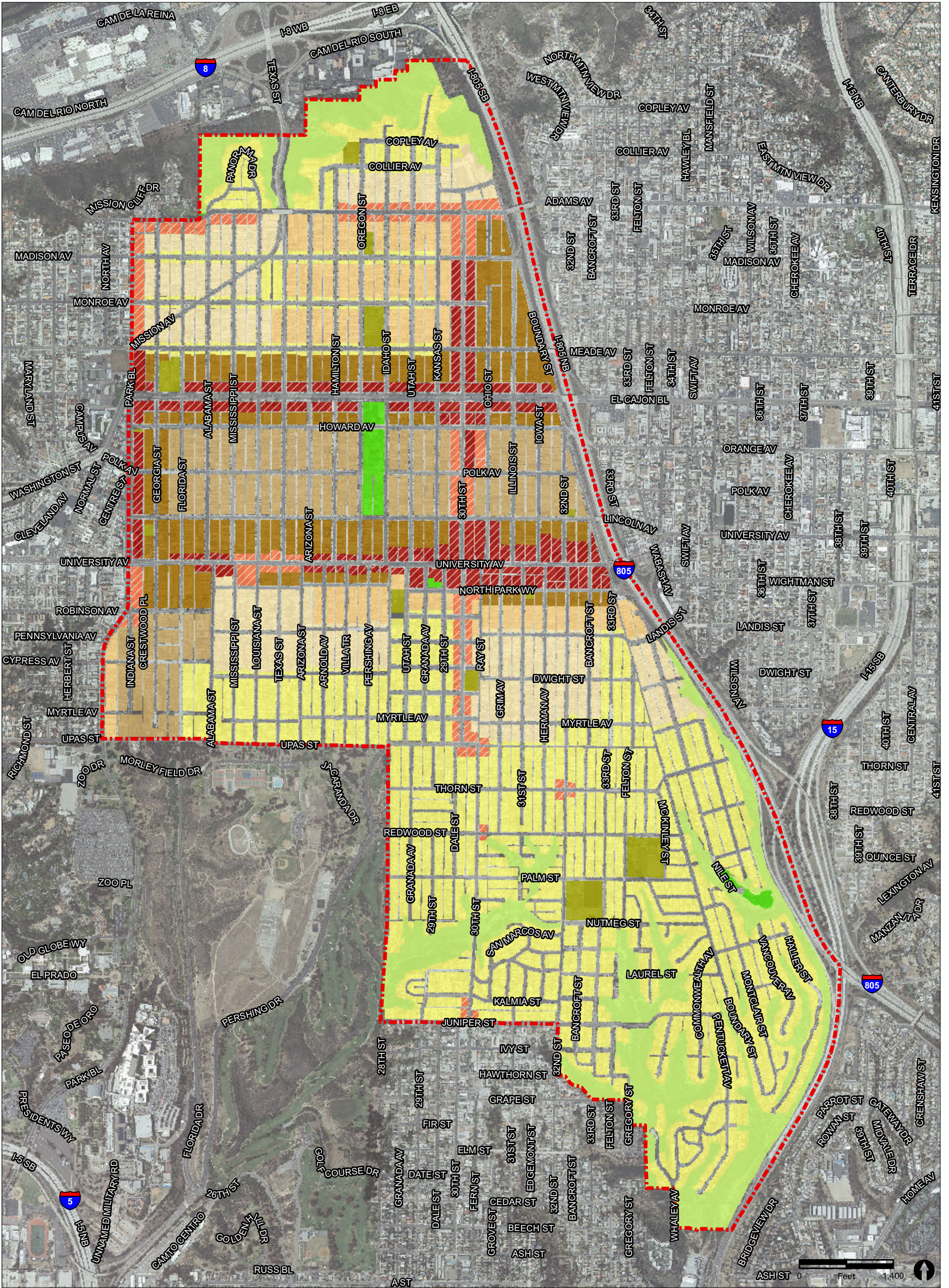


FIGURE 5b



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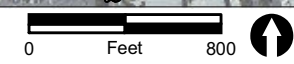
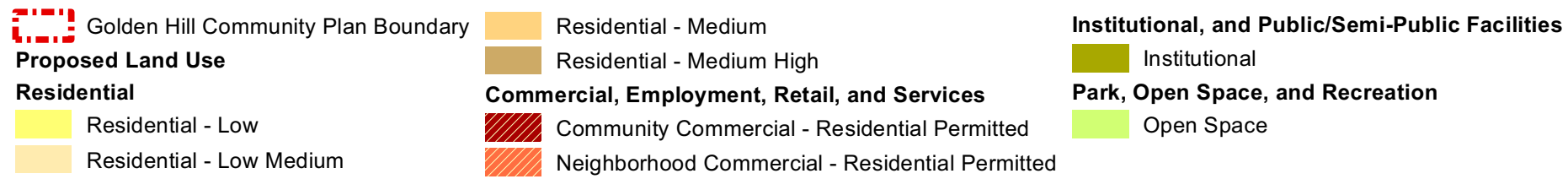
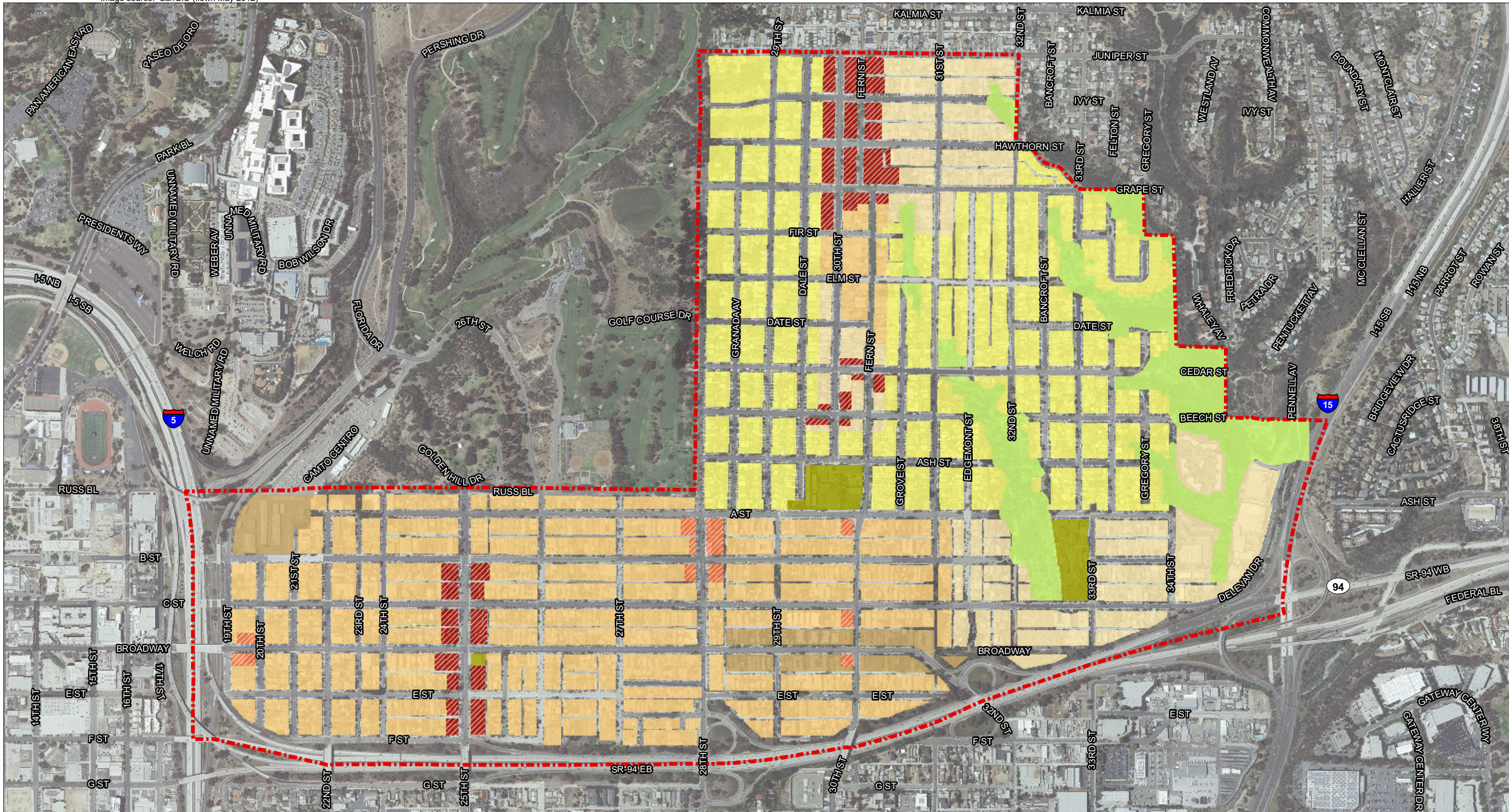


FIGURE 5c



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### 2.3.1 Uptown CPU Policies

The Uptown CPU proposes an increased variety of land uses within the plan area. As compared to the existing land uses, the CPU would reduce the amount of planned industrial, institutional, recreational, and single-family residential land uses while increasing the development of commercial space and multi-family dwelling units. In addition, the Uptown CPU proposes a variety of policies that would reduce GHG emissions from the plan area. Policies support encouraging development diversity, walkable neighborhoods, multi-family development, and alternative modes of transportation. These policies would improve community walkability by addressing sidewalk and other infrastructure maintenance deficits. Proposed improvements to pedestrian facilities include curb extensions to decrease crossing lengths for pedestrians, expanded sidewalks, and implementation of the Pedestrian Master Plan, a citywide plan that includes a comprehensive analysis of each community’s existing pedestrian conditions and needs with an emphasis on community input throughout the process. This would indirectly reduce GHG emissions from mobile sources. These policies are listed in Table 3.

**TABLE 3  
UPTOWN CPU GHG RELATED GOALS**

Element	Policy No. <sup>1</sup>	Policy
Land Use	2.1-1	Provide a variety of land use types to maintain the existing balance of land uses.
	2.2-1	Provide a diverse mix of housing types and forms consistent with allowable densities.
	2.2-2	Enable rental and ownership opportunities in all types of housing including alternative housing units such as companion units, live/work studios and shopkeeper units.
	2.2-7	Concentrate medium and high density housing: <ul style="list-style-type: none"> <li>• On upper floors as part of mixed use development in commercial areas;</li> <li>• Adjacent to commercial areas;</li> <li>• Near transit and higher volume traffic corridors.</li> </ul>
	2.2-8	Preserve and provide incentives for mixed residential/commercial development at appropriate locations.
	2.2-9	Locate higher density residential development in appropriate areas that are situated to promote safer and livelier commercial districts.
	2.2-17	Utilize publicly-controlled open space for passive recreation where desirable and where feasible.
	2.3-1	Provide public spaces within each Neighborhood Center to implement the General Plan Urban Design Element requirements for Mixed-Use villages.
Mobility	3.1-1	Reduce the number of conflicts between the different modes of travel by incorporating complete streets concepts to enhance the street landscape and safety for all modes.
	3.1-2	Implement road diets (reduction in number of traffic lanes) or lane diets (narrowing traffic lanes) where appropriate to repurpose the streets to accommodate more modes of travel.
	3.1-3	Visually enhance transportation corridors with street furniture, shade trees and planted medians.
	3.1-4	Utilize Intelligent Transportation System (ITS) improvements to improve safety, efficiency and service and congestion, including but not limited to traffic signal coordination, traffic and transit information, and transit priority measures.

**TABLE 3  
UPTOWN CPU GHG RELATED GOALS  
(continued)**

Element	Policy No. <sup>1</sup>	Policy
Mobility (continued)	3.1-5	Encourage employers to utilize transportation demand management strategies such as providing transit passes and providing car share spaces.
	3.2-1	Enhance existing pedestrian travel routes to include street trees, pedestrian streetlights, street furniture, and wayfinding signage.
	3.2-2	Consider the use of pedestrian countdown signals and/or pedestrian phasing at signals, and corner bulbouts to enhance and encourage pedestrian activity.
	3.2-3	Install missing sidewalks and curb ramps and address accessibility barriers.
	3.2-4	Relocate above-ground infrastructure especially within areas of higher pedestrian traffic such as along commercial corridors, major streets and transit lines.
	3.2-5	Locate public utilities outside of the pedestrian zone and designed so as not to obstruct a clear path of travel. Public utilities should be screened from public view, and placed underground where feasible.
	3.3-1	Implement the San Diego Bicycle Master Plan to connect Uptown to the citywide network for safe convenient travel by bicycle.
	3.3-2	Install Bicycle Parking Facilities consistent with the citywide bikeway network.
	3.3-3	Utilize Uptown's street grid to identify bicycle priority streets connecting the Uptown to Golden Hill and North Park.
	3.3-4	Identify developed bikeways with bikeway signage to encourage bicycle activity.
	3.3-5	Increase bike comfort and accessibility for everyday riders with improvements such as traffic actuated signal timing for bicycles, priority parking for bicycles, wider bike lanes and additional buffering where feasible.
	3.3-6	Support bicycle facilities in Uptown including facilities on Washington Street, Laurel Street, Juniper Street, San Diego Avenue, Third, Fourth, Fifth, and Sixth Avenues, and Bachman Place.
	3.3-7	Support bicycle facilities that connect Uptown to North Park including connections along the following roadways; Washington Street, Lincoln Avenue, University Avenue, Robinson Avenue, and Park Boulevard.
	3.4-1	Provide convenient public transit connections to downtown and the airport.
	3.4-2	Work with MTS to improve public transit amenities such as benches, shade structures, lighting, secure bicycle parking facilities and timetables where appropriate.
	3.4-3	Where appropriate, install electronic arrival schedules and real time transit schedule updates to provide timely and efficient loading.
3.4-4	Include public art, shade trees, and landscaping surrounding bus stops, where appropriate, to improve the environment and encourage the use of public transportation.	
Conservation	8.1-1	Design new development and build-upon the existing community's street grid network to create a more functional environment for pedestrians and bicyclists to reduce local dependence on the automobile as a mode of transportation.
	8.1-2	Implement the Sustainable Design recommendations of the Urban Design Element.
	8.1-5	Encourage the use of solar energy systems to supplement or replace traditional building energy systems.
	8.1-6	Provide and/or retrofit lighting within the public-right-of-way that is energy efficient. Use solar powered lights where practical.
	8.1-7	Seek small City-owned sites not suitable for recreation use as opportunities for community gardens.
	8.1-9	Promote community initiatives for locally-sourced and more environmentally sustainable goods and services.



**TABLE 3  
UPTOWN CPU GHG RELATED GOALS  
(continued)**

Element	Policy No. <sup>1</sup>	Policy
Conservation (continued)	8.2-15	Encourage new development and building retrofits to incorporate as many water-wise practices as possible in their design and construction Specifically encourage: <ul style="list-style-type: none"> <li>• Use of recycled and/or gray water landscape irrigation systems;</li> <li>• Retrofit public spaces and public rights-of-way with low-water use vegetation and/or alternative permeable surface materials that meet adopted landscape regulations; and</li> <li>• Ensure that any 'community greening' projects utilize water-efficient landscape design.</li> </ul>
	8.3-1	Implement a pattern of land uses and street designs that foster walking and biking as modes of travel.

Source: City of San Diego 2015a.

<sup>1</sup>Note that the policy numbering for the Uptown CPU is independent of the policy number for the North Park and Golden Hill CPUs (e.g., Uptown Policy 2.2-1 is not the same as North Park CPU Policy 2.2-1 or Golden Hill CPU Policy 2.2-1).

### 2.3.2 North Park CPU Policies

As compared to the existing land uses, the North Park CPU would reduce planned industrial, institutional, recreational, and single-family residential land uses while increasing the development of commercial uses and multi-family dwelling units. This change represents an increase in land use types and density in the plan area.

In addition, the North Park CPU proposes a variety of policies that would reduce GHG emissions from the plan area. Policies support encouraging increased business/employment, alternative modes of transportation, and reduced dependence on outside sources for water and energy. These policies would improve community walkability. Proposed improvements to pedestrian facilities include implementation of the Pedestrian Master Plan discussed in Section 2.3.1 This would indirectly reduce GHG emissions from mobile sources. These policies are listed in Table 4.

**TABLE 4  
NORTH PARK CPU GHG RELATED GOALS**

Element	Policy No. <sup>1</sup>	Policy
Land Use	2.2-1	Maintain the low density character of predominantly single family areas, outside of the designated higher density areas primarily located along El Cajon Boulevard and University Avenue, and encourage rehabilitation and where appropriate.
	2.2-2	Maintain consistent residential land use designations along east-west running streets within the northern and southern single-family neighborhoods of North Park such as Madison Avenue, Monroe Avenue, Meade Avenue, Wightman Street, Gunn Street, Landis Street, Dwight Street, Myrtle Avenue, and Upas Street in order to promote and maintain a walkable and pedestrian scale within these neighborhoods.

**TABLE 4  
NORTH PARK CPU GHG RELATED GOALS  
(continued)**

Element	Policy No. <sup>1</sup>	Policy
Land Use (continued)	2.2-3	Allow stand-alone residential development or live-work units as an option along linear commercial corridors between major mixed-use nodes such as along Adams Avenue between 30th Street and Texas Street and along 30th Street between Adams Avenue and El Cajon Boulevard.
	2.2-4	Provide a diverse mix of housing opportunities, including senior and housing for the disabled, within close proximity to transit and services.
	2.2-5	Support a diversity of compatible goods and specialty services, along commercial streets like 30th Street and Upas Street, so that the needs of local residents can be met locally.
	2.2-6	Along all Neighborhood and Community Commercial designated corridors in the community, encourage mixed-use development at major village centers, commercial nodes and intersections especially where 30th Street intersects with Adams Avenue, El Cajon Boulevard, University Avenue, and Upas Street and where Texas Street intersects with El Cajon Boulevard and University Avenue and allow mixed-use as an option between villages and commercial nodes.
	2.2-7	Encourage mixed-use development to include retail, offices, and housing at medium to very high densities within commercial nodes.
	2.2-8	Design commercial spaces within mixed-use developments for maximum flexibility and reuse to prevent long-term vacant commercial storefronts.
	2.2-9	Enhance the level and quality of business activity in North Park by encouraging infill of retail and commercial uses and mixed-use development that emphasizes adaptive reuse.
	2.2-10	Enforce and improve the appearance of commercial development through establishment of overall design standards that encourage adaptive re-use and preservation of historic structures.
	2.2-16	Continue to maintain school sites for a public serving purpose such as a park, community/recreation center, when they are considered for reuse and no longer serve to function as educational centers.
	2.3-1	Apply General Plan village policies particularly those found in the General Plan's Urban Design Element (LU-C.1 through LU-C.8) to future village development especially in the areas of use, pedestrian oriented design, the provision of public space, and streetscape.
	2.3-2	Continue to promote North Park's Community Village as a premier destination for living, working, shopping, and entertainment.
	2.3-3	Prioritize the implementation of future park sites and public space within village areas with input from the public.
	2.3-4	Encourage the creation and use of an incentive zoning program that provides incentives such as added height and density in exchange for public space.
	Mobility	3.1-1
3.1-3		Direct future trips to walking, biking and transit by creating a safe, effective multimodal network.
3.1-6		Repurpose the roadway, where feasible to accommodate multiple modes of travel within the existing right-of-way.
3.2-1		Enhance existing pedestrian travel routes based upon infrastructure conditions and level of use.
3.2-2		Relocate above-ground infrastructure especially within areas of higher pedestrian traffic such as along commercial corridors, major streets and transit lines.
3.2-3		Locate public utilities outside of the pedestrian zone and designed so as not to obstruct a clear path of travel. Public utilities should be screened from public view, and placed underground where feasible.
3.2-4		Prioritize activities within the sidewalk and make mobility functions such as pedestrian access, bicycle parking and transit stops the main priority.

**TABLE 4  
NORTH PARK CPU GHG RELATED GOALS  
(continued)**

Element	Policy No. <sup>1</sup>	Policy
Mobility (continued)	3.2-6	Include pedestrian mobility enhancements in all mobility improvement recommendations, including construction or implementation of missing facilities.
	3.2-7	Provide pedestrian facilities such as shade trees, landscaping, pathways, street furniture, and signage to encourage place making and create a pedestrian experience within the community.
	3.2-8	Install missing sidewalks, curb ramps, and remove any other barriers to accessibility.
	3.3-1	Connect North Park to the citywide network for safe convenient bicycle facilities.
	3.3-2	Utilize North Park's street grid to establish bicycle priority streets to connect to Uptown and Golden Hill.
	3.3-3	Provide signage to identify bikeways and encourage their use for trips within the community, adjacent communities and attractions.
	3.3-4	Increase bike comfort and accessibility for everyday riders with improvements such as traffic actuated signal timing for bicycles, priority parking for bicycles, wider bike lanes and additional buffering where feasible.
	3.3-5	Prioritize North Park bikeway projects to eliminate gaps in the network.
	3.4-1	Implement transit system priority (TSP) for buses and queue jumps to improve the efficiency of travel by bus, where appropriate.
	3.4-2	Consider the use of exclusive or restricted transit lanes where there is sufficient ridership.
	3.4-3	Enhance the pedestrian and bicycle amenities around transit stops such as bicycle parking, shade trees and landscaping to increase the comfort and convenience for transit riders.
	3.4-4	Work with MTS to increase the transit rider experience by placing shade structures, benches and timetables at bus stops, where feasible.
	3.5-2	Encourage the use of alternative modes of transportation such as bicycles and transit to enhance pedestrian facilities to encourage movement.
	3.5-3	Add shade trees, landscaped islands, and patterned paving to surface parking areas, where feasible to contribute to the community character of Washington Street along India Street, Hancock Street, and San Diego Avenue.
Conservation	8.1-1	Design new development and build-upon the existing community's street grid network to create a more functional environment for pedestrians and bicyclists to reduce local dependence on the automobile as a mode of transportation.
	8.1-2	Implement the Sustainable Design recommendations of the Urban Design Element.
	8.1-5	Encourage the use of solar energy systems to supplement or replace traditional building energy systems.
	8.1-6	Provide and/or retrofit lighting within the public-right-of-way that is energy efficient. Use solar powered lights where practical.
	8.1-9	Promote community initiatives for locally-sourced and more environmentally sustainable goods and services.
	8.1-10	Ensure that development within North Park comprehensively reflects all sustainability considerations – environmental, financial, and cultural.
	8.1-11	Support community stakeholders in their efforts to promote North Park's emerging green clusters and facilitate green business growth through data collection and incentive programs.
	8.1-12	Support community organizations in establishing a Sustainability Resource Center to provide information and resources to residents, businesses, schools, nonprofits, developers, and design and construction professionals.
	8.1-13	Promote community walkability through such features as: mid-block pedestrian crossings; "popouts"; "North Park" branded tree grates; pedestrian-oriented landscaping; and energy efficient pedestrian-scale lighting that enhances pedestrian safety and reflects the historic character of North Park.

**TABLE 4**  
**NORTH PARK CPU GHG RELATED GOALS**  
**(continued)**

Element	Policy No. <sup>1</sup>	Policy
Conservation (continued)	8.1-14	Promote community use of bicycles through the installation of bike corrals, bike lanes, bike share stations, and bicycle parking for new multi-family and commercial development.
	8.1-15	Support the timely implementation of the University Avenue Mobility Plan (UAMP).
	8.1-16	Encourage new commercial and residential development to provide electric vehicle charging stations.
	8.1-17	Encourage businesses to offer carpool/car share and transit incentives to customers and employees.
	8.1-18	Promote community stewardship of locally-sourced and environmentally friendly goods and services.
	8.1-19	Support North Park businesses in establishing a composting cooperative to facilitate waste recovery and contribute compost to community gardens.
	8.1-20	Provide networks of urban public open spaces, pocket parks, parklets, plazas, and outdoor gathering spaces connected by creative wayfinding elements.
	8.1-21	Encourage local artist-generated wall murals and other public art to enhance public spaces and help brand North Park as an inviting art and culture district for pedestrians and bicycles.
	8.1-22	Provide pedestrian-scale amenities such as kiosks, lamppost banners, street planters, and solar-powered electrical outlets in tree wells.
	8.1-23	Support sustainable infill and adaptive reuse which preserves North Park's historic buildings and leverages energy efficient construction.
	8.1-24	Encourage eco-friendly North Park community-oriented special events, including parades, music and art festivals, bicycle rides, restaurant crawls, craft fairs, etc.
	8.1-25	Encourage the establishment of a sustainable community resource center to provide technical, financial, marketing and other assistance to the North Park business community.
	8.1-26	Encourage the implementation of energy efficient measures that exceed California Code, such as: <ul style="list-style-type: none"> <li>• energy-efficient machinery for laundry operations;</li> <li>• energy-efficient kitchens in restaurants and residential uses storefront shading;</li> <li>• Encourage the use of water efficient machinery for laundry operations and encourage capture of gray water for implementation in other uses;</li> <li>• solar tubes &amp; skylights to reduce daytime energy consumption for lighting; passive or zero net energy strategies in new building design</li> </ul>
	8.1-29	Connect North Park residents with educational opportunities and job training and placement programs to meet North Park workforce and employer needs.
	8.1-30	Support the creation of an ad-hoc North Park Sustainable Community Task Force (NPSC) to assess North Park's strengths and weaknesses related to community sustainability partnerships, initiatives, outreach, funding and other resources.
8.1-31	Promote partnerships and strategies, such as Sustainable North Park Man Street's Sustainability Demonstration Project, to make North Park a more sustainable community for all residents and businesses.	
8.1-32	Promote energy conservation as a means to lower the cost of energy bills for individual residents and businesses.	
8.1-33	Promote car and bicycle sharing programs as cost-effective alternatives to car ownership for residents and employees.	

Source: City of San Diego 2015b.

<sup>1</sup>Note that the policy numbering for the North Park CPU is independent of the policy number for the Uptown and Golden Hill CPUs (e.g., North Park Policy 2.2-1 is not the same as Uptown CPU Policy 2.2-1 or Golden Hill CPU Policy 2.2-1).

### 2.3.3 Golden Hill CPU Policies

As compared to the existing land uses, the Golden Hill CPU would reduce planned industrial, institutional, and single-family residential land uses while increasing the development potential for commercial uses and multi-family dwelling units. This would result in an increase in the variety of uses and density.

In addition, the Golden Hill CPU proposes a variety of policies that would reduce GHG emissions from the plan area. These policies would improve community walkability. Proposed improvements to pedestrian facilities include implementation of the Pedestrian Master Plan discussed in Section 2.3.1 This would indirectly reduce GHG emissions from mobile sources. Policies in the Golden Hill CPU that are relevant to GHG emissions are shown in Table 5.

**TABLE 5  
GOLDEN HILL CPU GHG RELATED GOALS**

Element	Policy No. <sup>1</sup>	Policy
Land Use	2.2-1	Provide a variety of land use types suitable for a predominantly residential community.
	2.2-7	Promote new development that serves the retail, service and employment needs of local community residents.
	2.2-8	Support the development of shopkeeper units and live/work units that allow residents to also own and operate commercial uses.
	2.2-9	Encourage the future improvement of commercial districts by improving the appearance of existing storefront facades as well as adjacent streetscapes.
	2.2-10	Ensure sidewalk maintenance as well as needed mobility and nighttime safety improvements occurs within commercial districts and along associated neighborhood access routes.
	2.2-22	Promote walkability within neighborhood centers and between adjacent neighborhoods by addressing sidewalk and other infrastructure maintenance deficits.
Mobility	3.1-1	Focus multimodal improvements in transit corridors with high pedestrian volumes
	3.1-2	Establish different mode priorities on streets that are not able to accommodate all modes of transportation.
	3.1-3	Implement traffic calming features, diagonal parking, bike facilities and improved pedestrian facilities where feasible.
	3.2-2	Expand sidewalk/landscape buffers to enhance pedestrian circulation where feasible.
	3.2-3	Implement pedestrian enhancements on high priority pedestrian routes developed as part of the Pedestrian Master Plan effort.

**TABLE 5  
GOLDEN HILL CPU GHG RELATED GOALS  
(continued)**

Element	Policy No. <sup>1</sup>	Policy
Mobility (continued)	3.2-4	Clearly demarcate pedestrian crossings for routes with higher levels of pedestrian use.
	3.2-5	Implement raised median islands/pedestrian crossing islands, where appropriate, to reduce traffic conflicts, provide pedestrians a crossing refuge, and reduce the scale of the street.
	3.2-6	Implement mid-block crossings, where appropriate, to provide pedestrians additional opportunities to cross along streets with infrequent intersections, or where a direct route is needed to a popular destination.
	3.2-7	Implement bulbouts/curb extensions where appropriate to decrease the crossing length for pedestrians, increase the visibility of pedestrians, and calm traffic.
	3.2-8	Implement appropriate application of varying traffic and pedestrian signals to influence traffic flow such as pedestrian countdown timers, leading pedestrian interval, accessible pedestrian signals, detection for bicycles and motorcycles at traffic signals, bicycle signals, rectangular rapid flashing beacons and in-roadway lights.
	3.3-1	Utilize Golden Hill's street grid to establish bicycle priority streets.
	3.3-2	Increase safety, comfort, and accessibility for everyday bicycle riders with improvements such as convenient parking for bicycles, buffered bike lanes and cycle tracks, where feasible.
	3.3-3	Implement the bicycle facilities to connect Golden Hill to the citywide bicycle network.
	3.3-4	Provide adequate bicycle parking facilities within commercial districts, and other activity centers in the community. Consider bicycle parking opportunities at the following locations: <ul style="list-style-type: none"> <li>• Juniper Street/30th Street</li> <li>• Grape Street/Fern Street</li> <li>• Beech Street/30th Street</li> <li>• 25th Street/B Street</li> <li>• 25th Street/South of Broadway Street</li> </ul>
	3.3-5	Implement wayfinding signage to complement the bikeway system.
	3.4-1	Support MTS/SANDAG efforts for improving public transit by operating later in the evening and increasing frequency of service.
	3.4-2	Support infrastructure that enhances accessibility and improves [alternative] transit user's experience commensurate with SANDAG's transit stop typologies.
	3.4-3	Work with MTS to place benches, shade structures and timetables at bus stops, where feasible.
	3.4-4	Implement [alternative] transit improvements identified in the 2050 RTP, including Rapid Bus Route 2, an improved service using the existing Route 2; Rapid Bus Route 637, service planned between the 32nd Street Trolley Station and the Golden Hill and North Park; and Street Car Service to connect the Golden Hill community with North Park, Petco Park and the Gaslamp district of downtown.
3.4-5	Coordinate the implementation of complete streets concepts, as appropriate, with ongoing transportation and congestion relief programs such as: TDM Program, Street Smarts Traffic Safety program, Residential Traffic Calming Program, Safe Routes to School Program, and TRAFFIX Program.	
Conservation	8.1-1	Design new development and build-upon the existing community's street grid network to create a more functional environment for pedestrians and bicyclists to reduce local dependence on the automobile as a mode of transportation (also reference the recommendations for the Streetscape and Public Realm within the Urban Design Element and Pedestrian/Bicycle Movement within the Mobility Element).

**TABLE 5  
GOLDEN HILL CPU GHG RELATED GOALS  
(continued)**

Element	Policy No. <sup>1</sup>	Policy
Conservation (continued)	8.1-2	Implement the Green Building Practices and Sustainability recommendations of the Urban Design Element.
	8.1-5	Encourage the use of solar energy systems to supplement or replace traditional building energy systems.
	8.2-15	Encourage new development and building retrofits to incorporate as many water-wise practices as possible in their design and construction. Specifically encourage: <ul style="list-style-type: none"> <li>• Use of recycled and/or gray water landscape irrigation systems;</li> <li>• Retrofit public spaces and public rights-of-way with low-water use vegetation and/or alternative permeable surface materials that meet adopted landscape regulations; and</li> <li>• Ensure that any 'community greening' projects utilize water-efficient landscape design.</li> </ul>
	8.3-1	Implement a pattern of land uses and street designs that foster walking and biking as modes of travel.

Source: City of San Diego 2015c.

<sup>1</sup>Note that the policy numbering for the Golden Hill CPU is independent of the policy number for the Uptown and North Park CPUs (e.g., Golden Hill Policy 2.2-1 is not the same as Uptown CPU Policy 2.2-1 or North Park CPU Policy 2.2-1).

## 3.0 Existing Conditions

### 3.1 Environmental Setting

#### 3.1.1 State and Regional GHG Inventories

The California Air Resources Board (CARB) performs statewide GHG inventories. The inventory is divided into nine broad sectors of economic activity: agriculture, commercial, electricity generation, forestry, high GWP emitters, industrial, recycling and waste, residential, and transportation. Emissions are quantified in million metric tons of CO<sub>2</sub> equivalent (MMTCo<sub>2</sub>E). Table 6 shows the estimated statewide GHG emissions for the years 1990, 2008 and 2012.

As shown in Table 6, statewide GHG source emissions totaled approximately 427 MMTCo<sub>2</sub>E in 1990, 487 MMTCo<sub>2</sub>E in 2008, and 459 MMTCo<sub>2</sub>E in 2012. Many factors affect year-to-year changes in GHG emissions, including economic activity, demographic influences, environmental conditions such as drought, and the impact of regulatory efforts to control GHG emissions. While CARB has adopted multiple GHG emission reduction measures, the effect of those reductions will not be seen until around 2015. According to CARB, most of the reductions since 2008 have been driven by economic factors (recession), previous energy-efficiency actions, and the Renewables Portfolio

Standard (RPS; CARB 2014a). Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions.

The forestry sector is unique because it not only includes emissions associated with harvest, fire, and land use conversion (sources), but also includes removals of atmospheric CO<sub>2</sub> (sinks) by photosynthesis, which is then bound (sequestered) in plant tissues.

**TABLE 6**  
**CALIFORNIA GHG EMISSIONS BY SECTOR IN 1990, 2008, AND 2012**

Sector	1990 <sup>1</sup> Emissions in MMTCO <sub>2</sub> E (% total) <sup>2</sup>	2008 <sup>3</sup> Emissions in MMTCO <sub>2</sub> E (% total) <sup>2</sup>	2012 Emissions in MMTCO <sub>2</sub> E (% total) <sup>2</sup>
<b>Sources</b>			
Agriculture	23.4 (5%)	37.99 (8%)	37.86 (8%)
Commercial	14.4 (3%)	13.37 (3%)	14.20 (3%)
Electricity Generation	110.6 (26%)	120.15 (25%)	95.09 (21%)
High GWP	--	12.87 (3%)	18.41 (4%)
Industrial	103.0 (24%)	87.54 (18%)	89.16 (19%)
Recycling and Waste	--	8.09 (2%)	8.49 (2%)
Residential	29.7 (7%)	29.07 (6%)	28.09 (6%)
Transportation	150.7 (35%)	178.02 (37%)	167.38 (36%)
Forestry (Net CO <sub>2</sub> flux)	-6.69	--	--
Not Specified	1.27	--	--
<b>TOTAL</b>	<b>426.6</b>	<b>487.10</b>	<b>458.68</b>

SOURCE: California Energy Commission (CEC) 2014, CARB 2007 & 2014a

<sup>1</sup> 1990 data was retrieved from the CARB 2007 source.

<sup>2</sup> Percentages may not total 100 due to rounding.

<sup>3</sup> 2008 and 2012 data was retrieved from the CARB 2014a source.

<sup>4</sup> Reported emissions for key sectors. The inventory totals for 2008 and 2012 did not include Forestry or Not Specified sources.

A San Diego regional emissions inventory was prepared by the University of San Diego School of Law, Energy Policy Initiatives Center (EPIC) that took into account the unique characteristics of the region. Their 2010 emissions inventory for San Diego is duplicated in Table 7. The sectors included in this inventory are somewhat different from those in the statewide inventory, which is based on the 2008 Scoping Plan categories.

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



**TABLE 7**  
**SAN DIEGO COUNTY GHG EMISSIONS BY SECTOR IN 2010**

Sector	2010 Emissions	
	MMTCO <sub>2</sub> E	% total <sup>1</sup>
Agriculture/Forestry/Land Use	0.05	0.2%
Waste	0.6	1.8%
Electricity	8.3	25.0%
Natural Gas Consumption	2.9	8.7%
Industrial Processes & Products	1.8	5.4%
On-Road Transportation	14.4	43.4%
Off-Road Equipment & Vehicles	1.4	4.2%
Civil Aviation	1.9	5.7%
Rail	0.32	1.0%
Water-Borne Navigation	0.1	0.3%
Other Fuels/Other	1.58	4.8%
Land Use Wildfires	0.28	0.8%
Development (Loss of Vegetation)	0.18	0.5%
Sequestration from Land Cover	(0.66)	(0.5%)
<b>TOTAL</b>	<b>33.15</b>	

SOURCE: EPIC 2013.

<sup>1</sup> Percentages may not total 100 due to rounding.

### 3.1.2 Consequences of Global Climate Change

The potential consequences of global climate change on the San Diego region are far reaching. The Climate Scenarios analysis report, published in 2006 by the California Climate Change Center, uses a range of emissions scenarios to project a series of potential warming ranges (low, medium, or high temperature increases) that may occur in California during the 21<sup>st</sup> century. Throughout the state and the region, global climate and local microclimate changes could cause an increase in extreme heat days; higher concentrations, frequency, and duration of air pollutants; an increase in wildfires; more intense coastal storms; sea level rise; impacts to water supply and water quality through reduced snowpack and saltwater influx; public health impacts; impacts to near-shore marine ecosystems; reduced quantity and quality of agricultural products; pest population increases; and altered natural ecosystems and biodiversity.

## 3.2 Regulatory Background

In response to rising concern associated with increasing GHG emissions and global climate change impacts, several plans and regulations have been adopted at the international, national, and state levels with the aim of reducing GHG emissions.

## **3.2.1 Federal**

### **3.2.1.1 Climate Change Action Plan**

Adopted in 1993, the U.S. Climate Change Action Plan (CCAP) consists of voluntary actions to reduce all significant GHGs from all economic sectors. Backed by federal funding, the CCAP supports cooperative partnerships between the government and the private sector in establishing flexible and cost-effective ways to reduce GHG emissions. The CCAP encourages investments in new technologies, but also relies on previous actions and programs focused on saving energy, reducing transportation emissions, improving forestry management, and reducing waste. With respect to energy and transportation-related GHG emissions reductions, the CCAP includes the following:

- Energy Demand Actions to accelerate the use of existing energy saving technologies and encourage the development of more advanced technologies. Commercial actions focus on installing efficient heating and cooling systems in commercial buildings and upgrading to energy-efficient lighting systems (the Green Lights program). The State Buildings Energy Incentive Fund provides funding to states for the development of public building energy management programs. Residential actions focus on developing new residential energy standards and building codes and providing money-saving energy efficient options to homeowners.
- Energy Supply Actions to reduce emissions from energy supply. These actions focus on increasing the use of natural gas, which emits less CO<sub>2</sub> than coal or oil, and investing in renewable energy sources, such as solar and wind power, which result in zero net CO<sub>2</sub> emissions. Energy supply strategies also focus on reducing the amount of energy lost during distribution from power plants to consumers.
- Transportation Actions to reduce transportation-related emissions are focused on investing in cleaner fuels and more efficient technologies, and reducing vehicle miles traveled (VMT). In addition, the U.S. EPA and Department of Transportation (U.S. DOT) are to draft guidance documents for reducing VMTs for use in developing local clean air programs.

### **3.2.1.2 GHG Emissions Intensity Reduction Programs**

The GHG Emissions Intensity is the ratio of GHG emissions to economic output. In 2002, the U.S. GHG Emissions Intensity was 183 metric tons per million dollars of gross domestic product (GDP; U.S. EPA 2007). In February 2002, the U.S. set a goal to reduce this GHG Emissions Intensity by 18 percent by 2012 through various reduction programs. A number of ongoing voluntary programs have thus been instituted to reduce nationwide GHG emissions. These include (U.S. EPA 2007):

- **Climate VISION Partnership:** In 2003, this program established a partnership between 12 major industries and the U.S. Department of Energy (U.S. DOE), the U.S. EPA, the DOT and the U.S. Department of Agriculture. The involved industries include electric utilities; petroleum refiners and natural gas producers; automobile, iron and steel, chemical, and magnesium manufacturers; forest and paper producers; railroads; and cement, mining, aluminum, and semiconductor industries. These industries are working with the four agencies to reduce their GHG emissions by developing cost-effective solutions, measuring and reporting emissions, developing strategies for the adoption of advanced technologies, and implementing voluntary mitigation actions.
- **Cleaner Energy–Environment State Partnership:** This program established a partnership between federal and state agencies to support states in implementing strategies and policies to promote renewable energy, energy efficiency, and other cost-effective clean energies. States receive technical assistance from the U.S. EPA.
- **Climate Leaders:** Climate Leaders is a U.S. EPA's voluntary program that establishes partnerships with individual companies. Together they establish individual corporate goals for GHG emissions reduction and monitor their emissions to measure progress. More than 100 corporations that represent 8 percent of U.S. GHG emissions are involved in Climate Leaders. More than half have reached their emissions goals so far.
- **Energy Star:** Energy Star was established in 1992 by the U.S. EPA and became a joint program with the U.S. DOE in 1996. Energy Star is a program that labels energy-efficient products with the Energy Star label. Energy Star enables consumers to choose energy-efficient and cost-saving products. More than 1,400 manufacturers use Energy Star labels on their energy-efficient products.
- **Green Power Partnership:** This program establishes partnerships between the U.S. EPA, and companies and organizations that have bought or are considering buying green power, which is power generated from renewable energy sources. The U.S. EPA offers recognition and promotion to organizations that replace electricity consumption with green power.

### 3.2.1.3 Corporate Average Fuel Economy Standards

The federal Corporate Average Fuel Economy (CAFE) standards determine the fuel efficiency of certain vehicle classes in the U.S. While the standards had not changed since 1990, as part of the Energy and Security Act of 2007, the CAFE standards were increased in 2007 for new light-duty vehicles to 35 miles per gallon (mpg) by 2020. In May 2009, President Obama announced further plans to increase CAFE standards to require light-duty vehicles to meet an average fuel economy of 35.5 mpg by 2016. With improved gas mileage, fewer gallons of transportation fuel would be combusted to travel the same distance, thereby reducing nationwide GHG emissions associated with vehicle travel.

### **3.2.1.4 Mandatory Reporting of GHGs Rule**

Starting January 1, 2010, large emitters of heat-trapping gases began collecting GHG data and reporting their annual GHG emissions to the U.S. EPA. The first reports were generally due March 31, 2011, with extensions available under certain circumstances to September 30, 2011. Under this reporting rule, approximately 10,000 facilities are covered, accounting for nearly 85 percent of the nation's GHG emissions. This mandatory reporting applies to fossil fuel and industrial GHG suppliers, motor vehicle and engine manufacturers, and facilities that emit 25,000 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>E) or more per year. Vehicle and engine manufacturers outside of the light-duty sector were required to begin phasing in their GHG reporting starting with engine/vehicle model year 2011.

### **3.2.2 State**

The State of California has adopted a number of plans and regulations aimed at identifying statewide and regional GHG emissions caps, GHG emissions reduction targets, and actions and timelines to achieve the target GHG reductions.

#### **3.2.2.1 EO S-3-05—Statewide GHG Emission Targets**

This executive order (EO), signed on June 1, 2005, established the following GHG emission reduction targets for the state of California:

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

This EO also directs the secretary of the California EPA (CalEPA) to oversee the efforts made to reach these targets, and to prepare biannual reports on the progress made toward meeting the targets and on the impacts to California related to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. With regard to impacts, the report shall also prepare and report on mitigation and adaptation plans to combat the impacts. The first Climate Action Team Assessment Report was produced in March 2006 and has been updated every 2 years.

#### **3.2.2.2 EO B-30-15 – 2030 Statewide GHG Emission Goal**

This executive order, issued by Governor Brown on April 29, 2015, established an interim GHG emission reduction goal for the state of California: by 2030, reduce GHG emissions to 40 percent below 1990 levels. This EO also directed all state agencies with jurisdiction over GHG emitting sources to implement measures designed to achieve the new interim 2030 goal as well as the pre-existing long-term 2050 goal identified in EO S-3-05 (see discussion above). Additionally, this EO directed CARB to update its Assembly

Bill (AB) 32 (Nuñez) mandated Scoping Plan (see discussion above) to address the 2030 goal. Therefore, in the coming months, CARB is expected to develop statewide inventory projection data for 2030 as well as commence its efforts to identify reduction strategies capable of securing emission reductions that allow for achievement of the EO's new interim goal.

### **3.2.2.3 AB 32—California Global Warming Solutions Act**

In response to Executive Order S-3-05, the California legislature passed AB 32, the California Global Warming Solutions Act of 2006, which was signed on September 27, 2006. It requires the CARB to adopt rules and regulations that would reduce GHG emissions to 1990 levels by 2020. The CARB is also required to publish a list of discrete GHG emission reduction measures. As required by AB 32, CARB has established a statewide GHG emissions cap for 2020, and adopted reporting rules for large industrial sources and a Climate Change Scoping Plan (Scoping Plan).

### **3.2.2.4 Climate Change Scoping Plan**

As directed by AB 32, the Scoping Plan prepared by CARB in December 2008 includes measures to reduce statewide GHG emissions to 1990 levels by 2020. These reductions are what CARB identified as necessary to reduce forecasted BAU 2020 emissions. CARB will update the Scoping Plan at least once every 5 years to allow evaluation of progress made and to correct the Scoping Plan's course where necessary.

The 2008 Scoping Plan estimated annual BAU 2020 emissions to reach 596 MMTCO<sub>2</sub>E. Thus, to achieve 1990 emissions levels of 427 MMTCO<sub>2</sub>E, a 169 MMTCO<sub>2</sub>E reduction was thus determined to be needed by 2020. As indicated in Table 8, the majority of reductions are directed at the sectors with the largest GHG emissions contributions—transportation and electricity generation—and involve statutory mandates affecting vehicle or fuel manufacture, public transit, and public utilities. The Scoping Plan also lists several other recommended measures that will contribute toward achieving the 2020 statewide reduction goal, but whose reductions are not (for various reasons, including the potential for double counting) additive with the measures listed in Table 8. These include state and local government operations. The Scoping Plan reduction measures and complementary regulations are described further in the following sections, and are grouped under the two headings of Transportation-related Measures and Non-Transportation-Related Measures as representative of the sectors to which they apply.

**TABLE 8**  
**CARB SCOPING PLAN-RECOMMENDED GHG REDUCTION MEASURES**

Recommended Reduction Measures	Reductions Counted towards 2020 Target in MMTCO <sub>2</sub> E (% total) <sup>1</sup>	
<b>ESTIMATED REDUCTIONS RESULTING FROM THE COMBINATION OF CAPPED SECTORS AND COMPLEMENTARY MEASURES</b>	<b>146.7</b>	
California Light-duty Vehicle Greenhouse Gas Standards <ul style="list-style-type: none"> <li>• Implement Pavley standards</li> <li>• Develop Pavley II light-duty vehicle standards</li> </ul>	31.7	(22%)
Energy Efficiency <ul style="list-style-type: none"> <li>• Building/appliance efficiency, new programs, etc.</li> <li>• Increase CHP generation by 30,000 GWh</li> <li>• Solar Water Heating (AB 1470 goal)</li> </ul>	26.3	(18%)
Renewables Portfolio Standard (33% by 2020)	21.3	(14%)
Low Carbon Fuel Standard	15.0	(10%)
Regional Transportation-related GHG Targets <sup>1</sup>	5.0	(4%)
Vehicle Efficiency Measures	4.5	(3%)
Goods Movement <ul style="list-style-type: none"> <li>• Ship Electrification at Ports</li> <li>• System-wide efficiency improvements</li> </ul>	3.7	(3%)
Million Solar Roofs	2.1	(2%)
Medium/Heavy-duty Trucks <ul style="list-style-type: none"> <li>• Heavy-duty vehicle greenhouse gas emissions reduction (aerodynamic efficiency)</li> <li>• Medium- and heavy-duty vehicle hybridization</li> </ul>	1.4	(<1%)
High Speed Rail	1.0	(<1%)
Industrial Measures (for sources covered under cap & trade program) <ul style="list-style-type: none"> <li>• Refinery measures</li> <li>• Energy efficiency and Co-benefits audits</li> </ul>	0.3	(<.5%)
Additional Reductions Necessary to Achieve the Cap	34.4	(23%)
<b>ESTIMATED REDUCTIONS RESULTING FROM UNCAPPED SECTORS</b>	<b>27.3</b>	
Industrial Measures (for sources not covered under cap & trade program) <ul style="list-style-type: none"> <li>• Oil and gas extraction and transmission</li> </ul>	1.1	
High Global Warming Potential Gas Measures	20.2	
Sustainable Forests	5.0	
Recycling and Waste (landfill methane capture)	1.0	
<b>TOTAL REDUCTIONS COUNTED TOWARDS 2020 TARGET</b>	<b>174.0<sup>3</sup></b>	

SOURCE: Table 2 of CARB 2008a

MMTCO<sub>2</sub>E = million metric tons of carbon dioxide equivalent

GWh = gigaWatt hours

AB = Assembly Bill

GHG = greenhouse gas

<sup>1</sup> Percentages are relative to the capped sector subtotal of 146.7 MMTCO<sub>2</sub>E, and may not total 100 due to rounding.

<sup>2</sup> This number represents an estimate of what may be achieved from local land use changes. It is not the Senate Bill 375 regional target. CARB will establish regional targets for each Metropolitan Planning Organization following input of the Regional Targets Advisory Committee and a public stakeholders' consultation process per Senate Bill 375.

<sup>3</sup> The total reduction for the recommended measures slightly exceeds the 169 MMTCO<sub>2</sub>E of reductions estimated in the BAU 2020 Emissions Forecast. This is the net effect of adding several measures and adjusting the emissions reduction estimates for some other measures.

Approved in May 2014, the First Update to the Scoping Plan (CARB 2014b) defines CARB's priorities for the next 5 years and sets the groundwork to reach long-term goals set forth in EO S-3-05. The First Update describes advancements in climate science such as the quantification of the impacts of temperature change, further understanding of the mechanisms of climate pollutants (black carbon, methane, and hydrofluorocarbons), and improvements to GHG monitoring. The First Update also describes progress made since the original Scoping Plan including implementation of a more comprehensive Cap-and-Trade Program, the Low Carbon Fuel Standard (LCFS), a 33 percent Renewable Portfolio Standard, and an Advanced Clean Cars program that has been adopted at the federal level.

### **3.2.2.5 Transportation-related Emissions Reductions**

Transportation accounts for the largest share of the state's GHG emissions. Accordingly, a large share of the reduction of GHG emissions from the recommended measures comes from this sector. To address emissions from vehicles, CARB is proposing a comprehensive three-prong strategy: reducing GHG emissions from vehicles, reducing the carbon content of the fuel these vehicles burn, and reducing the miles these vehicles travel.

#### **a. AB 1493—Pavley GHG Vehicle Standards**

AB 1493 (Pavley) directed CARB to adopt vehicle standards that lowered GHG emissions from passenger vehicles and light-duty trucks to the maximum extent technologically feasible, beginning with the 2009 Model Year. CARB has adopted amendments to its regulations that would enforce AB 1493 but provide vehicle manufacturers with new compliance flexibility. Pavley standards are currently divided into two phases. Standards that regulate vehicles model years 2009 through 2016 are termed "Pavley I", standards for Model Years 2017 through 2025 were originally termed "Pavley II".

With these actions, it is expected that Pavley I will reduce GHG emissions from California passenger vehicles by a total of 31.5 MMTCO<sub>2</sub>E counted toward the total pre-economic downturn statewide reduction target on the capped sector of 146.7 MMTCO<sub>2</sub>E (CARB 2012; see Table 8). CARB adopted a second phase of the Pavley regulations, termed "Pavley II," which are now called the Low Emission Vehicle III (LEV III) Standards. LEV III covers Model Years 2017 to 2025. These reductions are to come from improved vehicle technologies such as small engines with superchargers, continuously variable transmissions, and hybrid electric drives.

#### **b. EO S-01-07—Low Carbon Fuel Standard**

This executive order directed that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through a

LCFS. CARB adopted the LCFS as a discrete early action measure pursuant to AB 32 in April 2009 and includes it as a reduction measure in its Scoping Plan (see Table 8).

The LCFS is a performance standard with flexible compliance mechanisms intended to incentivize the development of a diverse set of clean, low-carbon transportation fuel options. Its aim is to accelerate the availability and diversity of low-carbon fuels such as biofuels, electricity, and hydrogen, by taking into consideration the full life cycle of GHG emissions. A 10 percent reduction in the intensity of transportation fuels is expected to equate to a reduction of 16.5 MMTCO<sub>2</sub>E in 2020. However, in order to account for possible overlap of benefits between LCFS and the Pavley GHG standards, CARB has discounted the contribution of LCFS to 15 MMTCO<sub>2</sub>E (CARB 2008a).

### **c. Regional Transportation-related GHG Targets**

The Regional Transportation-related GHG Targets measure included in the Scoping Plan identifies policies to reduce transportation emissions through changes in future land use patterns and community design, as well as through improvements in public transportation, that reduce VMT. By reducing the miles vehicles travel, vehicle emissions will be reduced. Improved planning and the resulting development are seen as essential for meeting the 2050 emissions target (CARB 2008a p. 20). CARB expects that this measure will reduce transportation-related GHG emissions by about 5 MMTCO<sub>2</sub>E or 4 percent of the total statewide reductions attributed to the capped sectors (see Table 8). Specific regional reduction targets established through Senate Bill 375 (SB 375; see discussion below) will determine more accurately what reductions can be achieved through this measure.

### **d. SB 375—Regional Emissions Targets**

The SB 375 was signed in September 2008 and requires CARB to set regional targets for reducing passenger vehicle GHG emissions in accordance with the Scoping Plan measure described above. Its purpose is to align regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation to reduce GHG emissions by promoting high-density, mixed-use developments around mass transit hubs.

The CARB, in consultation with the Metropolitan Planning Organizations (MPOs), was required to provide each affected region with passenger vehicle GHG emissions reduction targets for 2020 and 2035 by September 30, 2010. The San Diego Association of Governments (SANDAG) is the San Diego region's MPO. On August 9, 2010 CARB released the staff report on the proposed reduction target, which was subsequently approved by CARB on September 23, 2010. The San Diego region will be required to reduce GHG emissions from cars and light trucks 7 percent per capita by 2020 and 13 percent by 2035 (SANDAG 2011).



The reduction targets are to be updated every 8 years, but can be updated every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the targets.

Once reduction targets are established, each of California's MPOs must prepare and adopt a Sustainable Communities Strategy (SCS) that demonstrates how the region will meet its GHG reduction targets through integrated land use, housing, and transportation planning. Enhanced public transit service combined with incentives for land use development that provides a better market for public transit will play an important role in the SCS. After the SCS is adopted by the MPO, the SCS will be incorporated into that region's federally enforceable regional transportation plan (RTP). San Diego's MPO, SANDAG, completed and adopted its 2050 RTP in October 2011, the first such plan in the state that included a SCS.

CARB is also required to review each final SCS to determine whether it would, if implemented, achieve the GHG emission reduction target for its region. If the combination of measures in the SCS will not meet the region's target, the MPO must prepare a separate Alternative Planning Strategy (APS) to meet the target. The APS is not a part of the RTP.

### **3.2.2.6 Non-transportation-related Emissions Reductions**

In the energy sector, Scoping Plan measures aim to provide better information and overcome institutional barriers that slow the adoption of cost-effective energy-efficiency technologies. They include enhanced energy-efficiency programs to provide incentives for customers to purchase and install more efficient products and processes and building and appliance standards to ensure that manufacturers and builders bring improved products to market. Over the long term, the recommended measures will increase the amount of electricity from renewable energy sources and improve the energy efficiency of industries, homes, and buildings. While energy efficiency accounts for the largest emissions reductions from this sector, other applicable land development measures such as water conservation, materials use and waste reduction, and green building design and development practices achieve additional emissions reduction.

#### **a. Renewables Portfolio Standard**

The RPS promotes diversification of the state's electricity supply. Originally adopted in 2002 with a goal to achieve a 20 percent renewable energy mix by 2020, the goal has been accelerated and increased, most recently so by EO S-14-08 and EO S-21-09 to a goal of 33 percent by 2020. Its purpose is to achieve a 33 percent renewable energy mix statewide; providing 33 percent of the state's electricity needs met by renewable resources by 2020 (CARB 2008a). The RPS is included in CARB's Scoping Plan list of reduction measures (see Table 8). Increasing the RPS to 33 percent is designed to accelerate the transformation of the electricity sector, including investment in the

transmission infrastructure and systems changes to allow integration of large quantities of intermittent wind and solar generation. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. Increased use of renewables would decrease California's reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector. CARB estimates that full achievement of the RPS would decrease statewide GHG emissions by 21.3 MMTCO<sub>2</sub>E (CARB 2008a).

### **b. Million Solar Roofs Program**

The Million Solar Roofs Program was created by SB 1 in 2006 and includes the California Public Utilities Commission's (CPUC's) California Solar Initiative and California Energy Commission's (CEC's) New Solar Homes Partnership. It requires publicly owned utilities to adopt, implement, and finance solar-incentive programs to lower the cost of solar systems and help achieve the goal of installing 3,000 megaWatts (MW) of new solar capacity by 2020. The Million Solar Roofs Program is one of CARB's GHG reduction measures identified in the 2008 Scoping Plan (see Table 8). Achievement of the program's goal is expected to equate to a reduction of 2.1 MMTCO<sub>2</sub>E in 2020 statewide BAU emissions (CARB 2008a).

### **c. SB 1368—Public Utility Emission Standards**

The SB 1368 (Parata), passed in 2006, requires the CEC to set GHG-emission standards for entities providing electricity in the state. The bill further requires that the CPUC prohibit electricity providers and corporations from entering into long-term contracts if those providers and corporations do not meet the CEC's standards (Union of Concerned Scientists 2007).

### **d. Title 24, Part 6—California Energy Code**

The California Code of Regulations, Title 24, Part 6 is the California Energy Code. This code, originally enacted in 1978 in response to legislative mandates, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy consumption. The Energy Code is updated periodically to incorporate and consider new energy-efficiency technologies and methodologies as they become available. The most recent amendments to the Energy Code, known as 2013 Title 24, or the 2013 Energy Code, became effective July 1, 2014. The 2013 Title 24 requires energy use reductions of 25–30 percent above the former 2008 Title 24 Energy Code. By reducing California's energy consumption, emissions of statewide GHGs may also be reduced.

New construction and major renovations must demonstrate their compliance with the current Energy Code through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. The compliance reports must

demonstrate a building's energy performance through use of CEC-approved energy performance software that shows iterative increases in energy efficiency given selection of various heating, ventilation, and air-conditioning (HVAC); sealing; glazing; insulation; and other components related to the building envelope. Title 24 governs energy consumed by the built environment by the major building envelope systems such as space heating, space cooling, water heating, some aspects of the fixed lighting system, and ventilation. Non-building energy use, or plug-in energy use (such as appliances, equipment, electronics, plug-in lighting), are independent of building design and are not subject to Title 24.

### **e. Title 24, Part 11—California Green Building Standards**

Beginning in 2011, CalGreen instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial and low-rise residential buildings, state-owned buildings, schools, and hospitals. It also includes voluntary tiers (I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory requirements and may adopt CalGreen with amendments for stricter requirements.

The mandatory standards require:

- 20 percent mandatory reduction in indoor water use relative to specified baseline levels;
- 50 percent construction/demolition waste diverted from landfills;
- mandatory inspections of energy systems to ensure optimal working efficiency; and
- requirements for low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

The voluntary standards require:

- Tier I – 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, cool/solar reflective roof; and
- Tier II – 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, 30 percent cement reduction, cool/solar reflective roof.

Similar to the compliance reporting procedure described above for demonstrating code compliance under Title 24, Part 6, in new buildings and major renovations, compliance with the CalGreen water reduction requirements must be demonstrated through completion of water use reporting forms for new low-rise residential and non-residential buildings. The water use compliance forms must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CalGreen or a reduced per-plumbing-fixture water use rate.

The CARB Scoping Plan includes a Green Building Strategy with the goal of expanding the use of green building practices to reduce the carbon footprint of new and existing buildings. Consistent with CalGreen, the Scoping Plan recognized that GHG reductions would be achieved through buildings that exceed minimum energy-efficiency standards, decrease consumption of potable water, reduce solid waste during construction and operation, and incorporate sustainable materials. Green building is thus a vehicle to achieve the Scoping Plan's statewide electricity and natural gas efficiency targets, and lower GHG emissions from waste and water transport sectors.

In the Scoping Plan, CARB projects that an additional 26.3 MMTCO<sub>2</sub>E could be reduced through expanded green building standards (CARB 2008a). However, this reduction is not counted toward the BAU 2020 reduction goal to avoid any double counting, as most of these reductions are accounted for in the electricity, waste, and water sectors. Because of this, CARB has assigned all emissions reductions that occur because of green building strategies to other sectors for meeting AB 32 requirements, but will continue to evaluate and refine the emissions from this sector.

#### **f. SB 97—CEQA GHG Amendments**

SB 97 (Dutton), passed by the legislature and signed on August 24, 2007, required the Office of Planning and Research on or before July 1, 2009 to prepare, develop, and transmit to the Resources Agency amendments to the CEQA guidelines (Guidelines) to assist public agencies in the evaluation and mitigation of GHGs or the effects of GHGs as required under CEQA, including the effects associated with transportation and energy consumption. SB 97 required the Resources Agency to certify and adopt those guidelines by January 1, 2010. Proposed amendments to the state CEQA Guidelines for GHG emissions were submitted on April 13, 2009, adopted on December 30, 2009, and became effective March 18, 2010.

Section 15064.4 of the amended Guidelines includes the following requirements for determining the significance of impacts from GHG emissions:

- (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the



amount of GHG emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
- (2) Rely on a qualitative analysis or performance-based standards.

While the amendments require calculation of a project's contribution, they clearly do not establish a standard by which to judge a significant effect or a means to establish such a standard.

### **3.2.3 Local**

#### **3.2.3.1 San Diego Sustainable Community Program**

In 2002, the San Diego City Council unanimously approved the San Diego Sustainable Community Program (SCP) and requested that an ad hoc advisory committee be established to provide recommendations that would decrease GHG emissions from City operations. Actions identified in the SCP include:

1. Participation in the International Council for Local Environmental Initiatives (ICLEI) Cities for Climate Protection (CCP) Campaign to reduce GHG emissions, and in the California Climate Action Registry;
2. Establishment of a reduction target of 15 percent by 2010, using 1990 as a baseline; and
3. Direction to use the recommendations of the ad hoc advisory committee as a means to expand the GHG Emission Reduction Action Plan for the City organization and broaden its scope to include community actions.

#### **3.2.3.2 Cities for Climate Protection**

As a participant in the ICLEI Cities for Climate Protection Program, the City made a commitment to voluntarily decrease its GHG emissions by 2030. The program includes five milestones: (1) establish a CCP campaign, (2) engage the community to participate, (3) sign the U.S. Mayors Climate Protection Agreement, (4) take initial solution steps, and (5) perform a GHG audit. The City has advanced past Milestone 3 by signing the Mayor's agreement and establishing actions to decrease City operations' emissions.

### **3.2.3.3 Climate Protection Action Plan**

The City developed a Climate Protection Action Plan (CPAP) that identifies policies and actions to decrease GHG emissions from City operations (City of San Diego 2005). Recommendations are included in CPAP for transportation-related measures, such as increasing carpooling and transit ridership, improving bicycle lanes, and converting the City vehicle fleet to low-emission or non-fossil-fueled vehicles. Recommendations in the CPAP for energy and other non-transportation emissions reductions include increasing building energy efficiency (i.e., requiring that all City projects achieve the U.S. Green Building Council's LEED Silver Standard), reducing waste from City operations, continuing use of landfill CH<sub>4</sub> as an energy source; reducing the urban heat island by avoiding dark roofs and roads that absorb and retain heat, and increasing shade-tree and other vegetative cover plantings.

Because of City actions implemented prior to adoption of the CPAP, moderate GHG emissions reductions were reported in the CPAP. City actions taken to capture CH<sub>4</sub> gas from solid waste landfills and sewage treatment plants resulted in the largest decrease in GHG emissions. The 2008 amended City General Plan includes a Policy CE-A.13 to regularly monitor and update the CPAP.

### **3.2.3.4 Sustainable Building Policies**

In several of its policies, the City aims to reduce GHG emissions by requiring sustainable development practices in City operations and incentivizing sustainable development practices in private development. In Council Policy 900-14—Green Building Policy, Council Policy 900-16—Community Energy Partnership, and the updated Council Policy 900-14—Sustainable Buildings Expedite Program, the City establishes a mandate for all City projects to achieve the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver Standard for all new buildings and major renovations over 5,000 square feet. Incentives are also provided to private developers through the Expedite Program, which expedites project review of green building projects and discounts project review fees.

The City has also enacted codes and policies aimed at helping the City achieve the state's 50 percent waste diversion mandate, including: the Refuse and Recyclable Materials Storage Regulations (Municipal Code Chapter 14, Article 2, Division 8), Recycling Ordinance (O-19678 Municipal Code Chapter 6, Article 6, Division 7), and the Construction and Demolition Debris Deposit Ordinance (O-19420 & O-19694 Municipal Code Chapter 6, Article 6, Division 6). In 2011, the target for waste diversion was increased in AB 341 from 50 percent to 75 percent. The goal is a statewide goal, but the state agency imposed requirements on local governments to move toward this goal through mandatory recycling ordinances.



### **3.2.3.5 San Diego General Plan**

The City General Plan includes several climate change-related policies aimed at reducing GHG emissions from future development and City operations (City of San Diego 2008a). 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. 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.

One specific concept introduced in the General Plan is City of Villages Strategy, which proposes growth to be directed into pedestrian-friendly mixed-use activity centers linked to an improved regional transit system. The City of Villages Strategy shifts the focus of land use policies to encourage infill development and reinvest in existing communities. As discussed further in Section 4.2.2, locating different land uses types near one another can decrease mobile emissions. Thus, the development of dense urban “villages” would generate less GHG emissions. The City of Villages Strategy can be seen as an effort to avoid what is commonly referred to as “urban sprawl”.

Cumulative impacts of GHG emissions were qualitatively analyzed and determined to be significant and unavoidable in the Program Environmental Impact Report for the General Plan (City of San Diego 2008b). A Program Environmental Impact Report Mitigation Framework was included that indicated that “for each future project requiring mitigation (measures that go beyond what is required by existing programs, plans, and regulations), project-specific measures will [need to] be identified with the goal of reducing incremental project-level impacts to less than significant; or the incremental contributions of a project may remain significant and unavoidable where no feasible mitigation exists” (City of San Diego 2008a).

### **3.2.3.6 Climate Action Plan**

In September 2014, the City released its Draft Climate Action Plan (CAP). The CAP identifies measures to meet GHG reduction targets for 2020 and 2035. The CAP consists of a 2010 inventory of GHG emissions, a BAU projection for emissions at 2020 and 2035, state targets, and emission reductions with implementation of the CAP. The City identifies GHG reduction strategies focusing on energy- and water-efficient buildings; clean and renewable energy; bicycling, walking, transit, and land use; zero

waste; and climate resiliency. Accounting for future population and economic growth, the City projects GHG emissions will be approximately 14.0 MMTCO<sub>2</sub>E in 2020 and 16.2 MMTCO<sub>2</sub>E in 2035. To achieve its proportional share of the state reduction targets for 2020 (AB 32) and 2050 (EO S-3-05), the City would need to reduce emissions below the 2010 baseline by 15 percent in 2020 and 49 percent by 2035. To meet these goals, the City must implement strategies that reduce emissions to approximately 10.9 MMTCO<sub>2</sub>E in 2020 and 6.6 MMTCO<sub>2</sub>E in 2035. Through implementation of the CAP, the City is projected to reduce emissions even further below targets by 907,653 MTCO<sub>2</sub>E by 2020 and 155,661 MTCO<sub>2</sub>E by 2035 (City of San Diego 2014).

### **3.2.3.7 Climate Action Strategy**

The SANDAG Climate Action Strategy is a long-range policy (year 2030) that focuses on transportation, electricity, and natural gas sectors. It is a complement to the Regional Energy Strategy 2030 Update and feeds into the SANDAG RTP and Regional Comprehensive Plan. It is currently in process of being prepared.

As indicated above, per the requirements of SB 375, the San Diego region will be required to reduce GHG emissions from cars and light trucks 7 percent per capita by 2020 and 13 percent by 2035 (SANDAG 2011). These reduction targets have been incorporated into the 2050 RTP and SCS for the San Diego region.

## **4.0 Significance Criteria and Analysis Methodologies**

### **4.1 Determining Significance**

The CEQA Guidelines, Appendix G Environmental Checklist, includes the following two questions regarding assessment of GHG emissions:

- 1) Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- 2) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs?

As stated in the Guidelines, these questions are “intended to encourage thoughtful assessment of impacts and do not necessarily represent thresholds of significance” (Title 14, Division 6, Chapter 3 Guidelines for Implementation of the CEQA, Appendix G, VII Greenhouse Gas Emissions). The CEQA Guidelines require lead agencies to adopt GHG thresholds of significance. When adopting these thresholds, the Guidelines allow lead agencies to develop their own significance threshold and/or to consider thresholds



of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence.

Section 15064.4 of the amended Guidelines includes the following requirements for determining the significance of impacts from GHG emissions:

- (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
  - (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
  - (2) Rely on a qualitative analysis or performance-based standards.

While the amendments require calculation of a project's contribution, they do not establish a standard by which to judge a significant effect or a means to establish such a standard. The following is a discussion of the City's Guidelines for Determining Significance in accordance with CEQA.

#### **4.1.1 Significance Thresholds**

On August 18, 2010, the City issued a memorandum on addressing GHG emissions from projects subject to CEQA (GHG Memorandum; City of San Diego 2010). The GHG Memorandum cites guidance from the California Air Pollution Control Officers Association (CAPCOA) report *CEQA & Climate Change*, dated January 2008, as interim screening thresholds to determine when a GHG analysis would be required. Although these thresholds are interim guidance, they represent a good faith effort to evaluate whether GHG impacts from a project may be significant, taking into account the type and location of the proposed development, the best available scientific data regarding GHG emissions, and the current statewide goals and strategies for reduction of GHG emissions.

As stated in the GHG Memorandum section of the memorandum, projects that exceed these interim screening thresholds are further required to perform a focused GHG

analysis. The GHG analysis is required to assess project emissions versus the “business-as-usual forecast model which represents the GHG emissions that would be expected to occur without any GHG project reducing features of mitigation.” As discussed below, potential impacts are below a level of significance if the GHG analysis demonstrates a 28.3 percent reduction against 2020 BAU forecasts.

#### 4.1.1.1 900 MTCO<sub>2</sub>E Screening Threshold

Guidance from CAPCOA references 900 MTCO<sub>2</sub>E as a conservative threshold for determining when further GHG analysis is required. This threshold is intended as a bright-line test that would exempt projects that are too small to have significant impacts from further analysis. The CAPCOA guidance identifies project sizes likely to be exempt under the 900 MTCO<sub>2</sub>E annual emission threshold as shown below in Table 9.

**TABLE 9  
PROJECT TYPES THAT REQUIRE GHG ANALYSIS**

Project Type	Project Size that Generates Approximately 900 Metric Tons of GHGs per Year
Single-family Residential	50 units
Apartments/Condominiums	70 units
General Commercial Office Space	35,000 square feet
Retail Space	11,000 square feet
Supermarket/Grocery Space	6,300 square feet

#### 4.1.1.2 28.3 percent Reduction in BAU

The City’s GHG Memorandum (City of San Diego 2010) requires projects that exceed the 900 MTCO<sub>2</sub>E threshold to perform a full analysis of GHG emissions. The full analysis consists of assessing consistency with the CARB Scoping Plan to determine whether a cumulatively significant contribution of GHGs would occur.

As discussed in Section 3.1, the goal of the Scoping Plan is to reduce statewide GHG emissions to 1990 levels (427 MMTCO<sub>2</sub>E) by 2020. When the Scoping Plan was originally developed in 2008, CARB estimated that without any GHG reduction measures statewide GHG emissions in 2020 would be 596 MMTCO<sub>2</sub>E (Table 10). Thus, in order to return to 1990 emissions levels by 2020, a statewide reduction of 169 MMTCO<sub>2</sub>E relative to BAU is required to attain the 1990 levels by 2020. This equates to a 28.3 percent reduction relative to BAU.



**TABLE 10  
CALIFORNIA BAU 2020 GHG EMISSIONS FORECAST**

Sector	Projected 2020 Emissions in MMTCO <sub>2</sub> E (% total)
Transportation	225.4 (38%)
Electricity	139.2 (23%)
Commercial and Residential	46.7 (8%)
Industry	100.5 (17%)
Recycling and Waste	7.7 (1%)
High GWP	46.9 (8%)
Agriculture	29.8 (5%)
Forest Net Emissions	0.0
<b>TOTAL</b>	<b>596.4</b>

SOURCE: CARB 2008

MMTCO<sub>2</sub>E = million metric tons of carbon dioxide equivalent

GWP = global warming potential

Based on CARB’s original BAU forecasts, the City’s GHG Memorandum state, “to reduce potential impacts to below a level of significance, proposed projects must show a 28.3% reduction to the 2020 business-as-usual model, consistent with AB 32”. To assess emissions against the City’s 28.3 percent reduction, BAU emissions are modeled without any GHG reduction measures that were adopted after passage of AB 32 in 2005. Emission estimates of CPU buildout account for the GHG reductions achieved through reduction measures adopted after 2005.

Since 2005, statewide regulations that reduce GHG emissions include Pavley and LCFS measures, and the 2013 update to the Title 24, Parts 6 and 11. Local and CPU specific reduction measures are also accounted for in emissions estimates for buildout of the proposed CPUs.

## **4.1.2 Consistency Review**

### **4.1.2.1 Local Plans**

At a local level the CPUs would be considered to have significant impacts if they conflicted with applicable sections of the General Plan. While the City of San Diego has released a CAP for public review, it has not adopted it. Therefore, the CPUs are not required to demonstrate consistency with the draft CAP at this time. The City of San Diego General Plan Conservation Element outlines city policies to reduce climate change impacts. As stated previously, approval of the CPUs would not permit the construction of any individual project, and no specific development details are available at this time. However, the CPUs would be considered consistent with the General Plan if it can be demonstrated that they would support and continue the Goals and Policies of the General Plan, such reducing vehicle miles traveled by encouraging alternative modes of transportation as identified in General Plan Policy CE A.2. Section 5.2 analyses the consistency of the CPUs with the City’s General Plan.

### **4.1.2.2 State Plans**

The City Guidelines for Determining Significance asserts that a project would be consistent with the CARB Scoping Plan if the project demonstrates that it can reduce its GHG emissions by 28.3 percent relative to the BAU scenario prior to passage of AB 32 in 2005. This assertion is based on CARB's BAU emissions forecasts based on progress through 2005.

As discussed in Section 3.2, the First Update to the Scoping Plan (CARB 2014b) revised the BAU emissions forecast and lowered the target to a 16.1 percent reduction compared to a BAU. However, in the First Update to the Scoping Plan the BAU was based on progress made through 2011 as well as the economic downturn. Therefore, to be consistent with City guidance on GHG emissions, this analysis uses a 28.3 percent reduction target and the BAU approach from the original Scoping Plan as the criterion for assessing consistency with the CARB Scoping Plan.

## **4.2 Methodology and Assumptions**

The CPU land uses are evaluated relative to the 28.3 percent BAU reduction threshold. To evaluate the CPUs' GHG emissions relative to BAU, emissions were quantified and projected to the year 2020 for both BAU and the CPUs. This is because the AB 32, CARB BAU Forecast, and associated Scoping Plan GHG reduction targets (including the overall 28.3 percent reduction in BAU target) are projected to a year 2020 horizon. The CPUs have a time horizon of 20 years, with buildout anticipated to complete by roughly 2035. As discussed in Section 3.2.2.1, Executive Order S-3-05 identified a GHG reduction target for 2050 but did not identify interim targets for the decades between 2020 and 2050. In April 2015, an executive order was issued to establish an interim California GHG reduction target of 40 percent below 1990 levels by 2030. In this analysis, the GHG emissions estimates based on ultimate buildout of the CPUs are compared to the 2020 GHG reduction goals in order to evaluate significance. In other words, for the purpose of this analysis, the CPU buildouts are projected to occur by 2020. By meeting the 2020 GHG reduction goals, projects would be in line with achieving the 2030 and 2050 reduction goals.

GHG emissions were estimated using California Emissions Estimator Model (CalEEMod) Version 2013.2.2 released by CARB in October 2013 (SCAQMD 2013). In brief, 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. All CalEEMod estimates are in terms of total metric tons of CO<sub>2</sub> equivalent (MTCO<sub>2</sub>E).

Emission estimates were calculated for the three GHGs of primary concern (CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O) that would be emitted from construction and the five primary operational sources that would be associated with CPU buildout: mobile sources, area sources,



energy use, water use, and solid waste disposal. To evaluate the reductions in GHG emissions of the CPU relative to the BAU 2020 forecast, emissions were estimated for two scenarios: first, the CPUs' buildout without GHG measures (i.e., CPU buildouts under BAU conditions) and, second, the CPU buildouts with GHG measures. This allowed for a comparison between the CPU buildouts with and without GHG-reducing measures in accordance with the City's 28.3 percent reduction goal.

The reported GHG estimates are provided in Section 5.1. Attachments 1, 2, and 3 include the CalEEMod output files. Attachment 4 includes adjustments to the CalEEMod outputs to account for additional CPU features.

## **4.2.1 Estimating Construction Emissions**

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 indirectly 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. Heavier equipment typically emits more GHGs per hour of use than the lighter equipment because of their greater fuel consumption and engine design.

CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Estimates of the amount and type of construction equipment are based on construction surveys performed by the South Coast Air Quality Management District (SCAQMD) of projects ranging up to 30 acres. As such, CalEEMod construction estimations are not accurate for large projects where project-specific information is required. At a program level, it would be speculative to estimate the schedule and construction requirements of individual projects included in the CPUs. Thus, this analysis relies on the methodology used in the San Diego County Updated Greenhouse Gas Inventory (San Diego County 2013), which forecasts that between 2015 and 2035 construction emissions would comprise roughly 2.1 percent of total GHG emissions within the county. Therefore, construction emissions are estimated at 2.1 percent of the total operational GHG emissions associated with each planning area.

## **4.2.2 Estimating Mobile Emissions**

Transportation-related GHG emissions comprise the largest sector contributing to both inventoried and projected statewide GHG emissions, accounting for 36 percent of the projected total statewide 2020 BAU emissions (CARB 2014b). On-road vehicles alone

account for 33 percent of forecasted 2020 BAU emissions. GHG emissions from vehicles come from the combustion of fossil fuels in vehicle engines.

The vehicle emissions are calculated based on the vehicle type, the trip rate, and trip length for each land use. The vehicle emission factors and fleet mix used in CalEEMod are derived from CARB's Emission Factors 2011 model, which includes GHG reducing effects from the implementation of Pavley I (Clean Car Standards) and the Low Carbon Fuel Standard, and are thus considered in the calculation of BAU and well as the CPU emissions. An average regional trip length of 5.8 miles for urban areas was modeled based on SANDAG regional data (SANDAG 2014). Emission factors that include the effects of the Tire Pressure Program and the Low Emission Vehicles III regulations are not available. Therefore, to account for the effects of the Tire Pressure Program (0.6 percent) and the Low Emission Vehicles III (2.4 percent), a total 3 percent reduction was applied to the vehicle emissions calculated in CalEEMod (CARB 2011; Attachment 4).

By increasing density, especially within proximity of transit, people's travel distances are affected and greater options for the mode of travel are provided. This can result in a substantial reduction in VMT depending on the change in density compared to a typical suburban residential density (CAPCOA 2010). By increasing the diversity of land use, a similar reduction in VMT can occur, because trips between land use types would be shorter and may be accommodated by non-auto modes of transport. By increasing transit accessibility (e.g., by locating a high-density project near transit), a shift in travel mode is facilitated along with reduced VMT. The effectiveness of these land-use strategies ranges from less than 1 percent up to a maximum 30 percent reduction in communitywide VMT and are not additive (CAPCOA 2010). For example, where high-density mixed use development is located within a 5- to 10-minute walk from a transit station with high-frequency transit or bus service and is combined with walkable neighborhood design, a total VMT reduction up to 24 percent can be achieved (CAPCOA 2010). For the Uptown, North Park, and Golden Hill CPU areas, VMT would be reduced by 6.2, 4.7, and 5.0 percent, respectively (see Attachment 4).

The proposed CPUs focus on community walkability, diversity of land uses, and development of higher densities near job centers (downtown San Diego) were included in the CPU emission calculations. Based on a review of mapping, the average distance from areas with increased residential density to the nearest major job center, downtown San Diego, is approximately 1.9 miles for the Uptown planning area, 3.0 miles for the North Park planning area, and 1.7 miles for the Golden Hill planning area. All three of the CPUs propose an increase in multi-family residences. The VMT from residents of these new developments would be less due to the reduced trip lengths. Although this reduction was only counted for new development proposed under the CPUs, this would reduce overall mobile emissions by 6.2, 4.7, and 5.0 percent in the Uptown, North Park, and Golden Hill CPU areas respectively (see Attachment 4).



As discussed in Section 5.1, all three CPUs encourage increased development diversity by increasing commercial and multi-family land uses and decreasing the planned number of single-family residences. Locating different land uses types near one another can decrease VMT, since trips between land use types are shorter and may be accommodated by alternative modes of transportation (CAPCOA 2010). However, due to complexity and size of the CPUs, CalEEMod could not be used to calculate the reduction, and a separate calculation was performed to determine mobile emissions reductions.

### **4.2.3 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 but are associated with a building's operation. Electric power generation accounts for the second largest sector contributing to both inventoried and projected statewide GHG emissions, comprising 20 percent of the projected total 2020 statewide BAU emissions (CARB 2014b). Combustion of fossil fuel emits criteria pollutants and GHGs directly into the atmosphere. When this occurs in a building, this is considered a direct emissions source associated with that building.

Building energy use is typically divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as plug-in appliances. In California, Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or "plug-in energy use," can be further subdivided by specific end-use (refrigeration, cooking, office equipment, etc.). Electricity use is quantified by:

- Calculating energy use from systems covered by Title 24 (i.e., HVAC system, water heating system, and the lighting system);
- Calculating energy use from lighting use; and
- Calculating energy use from office equipment, appliances, plug-in electronics, and other sources not covered by Title 24 or lighting.

Lighting is calculated separately, since it can be both part and not part of Title 24. Natural gas use is distinguished in the model as Title 24 or Non-title 24, similar to electricity consumption.

The energy use values are based on the California Energy Commission-sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies, which identify energy use by building type and climate zone. Typical energy emissions calculated by CalEEMod are based on the 2008 Title 24 Part 6 (California Energy Code). However, all projects under the CPUs would be subject to 2013 Title 24

Part 6 standards. Thus, in order to demonstrate compliance with the 2013 Title 24 Part 6 standards, a 25 percent increase in residential energy efficiency and a 30 percent increase in commercial energy efficiency (Imperial Valley Economic Development Corporation 2013; California Energy Commission 2014) over the 2008 Title 24 Part 6 standards for commercial buildings were included in the energy consumption calculations.

San Diego Gas & Electric (SDG&E) serves all three CPU areas. Existing and projected energy intensity factors for SDG&E are shown in Table 11.

**TABLE 11  
SAN DIEGO GAS & ELECTRIC INTENSITY FACTORS**

GHG	Existing Intensity Factor <sup>1</sup> (lbs/MWh) <sup>3</sup>	Projected 2020 Intensity Factor <sup>2</sup> (lbs/MWh)
Carbon Dioxide (CO <sub>2</sub> )	720.49	539.36
Methane (CH <sub>4</sub> )	0.029	0.0217
Nitrous Oxide (N <sub>2</sub> O)	0.006	0.0045

<sup>1</sup> SOURCE: CalEEMod Version 2013.2.2.

<sup>2</sup> The CalEEMod emission factor is based on a 2009 report, The 2020 factors have been reduced by 22.8 percent to account for the progress of the California Renewable Portfolio Standard between 2009 and 2020.

<sup>3</sup> lbs / MWh = pounds of CO<sub>2</sub>E per megaWatt hour

These energy intensity factors are used to determine the GHG emissions associated with electricity use and are based on SDG&E energy intensity factors in California Climate Action Registry reports (for CO<sub>2</sub>) and E-Grid (for CH<sub>4</sub> and N<sub>2</sub>O) values. The original California RPS was passed in 2002 setting renewable energy targets for 2010. California RPS 2020 targets were added in 2011 as part of Senate Bill 2. Therefore, BAU estimates use 2009 energy intensity factors, and CPU buildout estimates use 2020 projected energy intensity factors adjusted to reflect the regulatory requirements of 33 percent.

#### **4.2.4 Estimating Area Source Emissions**

Area sources include hearths, woodstoves, and landscaping equipment. The use of hearths (fireplaces) and woodstoves directly emits CO<sub>2</sub> 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 features of the residential land use inputs. By default, commercial land uses do not have any hearths or woodstoves in CalEEMod but can be added for those cases where they may occur such as in restaurants or hotels if such information is known. For this analysis, it was assumed that residential uses would be constructed with natural gas fireplaces.



Additionally, the use of landscape equipment emits GHGs associated with the equipment's fuel combustion. Estimates of the number and type of equipment needed based on the number of summer days given the project's location.

## **4.2.5 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 CH<sub>4</sub> and N<sub>2</sub>O.

Standard water consumption rates were assumed for the estimates of BAU and existing conditions, including the existing land uses that would remain within the CPUs' horizon year (refer to explanation in energy discussion above). However, for the future/new land uses of the CPUs, a 20 percent reduction in water use was assumed in accordance 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 2013. New construction and redevelopment that would occur under the CPUs would be constructed in accordance with the current 2013 CalGreen or later water conservation requirements. Because the 2013 CalGreen (i.e., Part 11 of Title 24) requires a minimum 20 percent reduction in water use, a 20 percent reduction in BAU water use was factored into the CPUs emissions.

## **4.2.6 Estimating Solid Waste Emissions**

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. Portions of these emissions are biogenic. Methods for quantifying GHG emissions from solid waste are based on the Intergovernmental Panel on Climate Change (IPCC) method using the degradable organic content of waste.

# **5.0 Impact Analysis**

In accordance with CEQA and the City GHG Memorandum, this analysis evaluates the significance of the CPUs in terms of (1) contribution of GHGs to cumulative statewide emissions and (2) consistency with local and state regulations, plans, and policies aimed at reducing GHG emissions.

## **5.1 GHG Emissions**

Using the estimating methods discussed in Section 4.2, this analysis assesses the proposed buildout of the land use plans under each of the CPUs. The GHG emission

estimates include GHG reduction measures from the State, General Plan policies, and proposed CPU policies. GHG estimates for all scenarios are summarized in Table 12.

**TABLE 12  
SUMMARY OF ESTIMATED CPU GHG EMISSIONS  
(MTCO<sub>2</sub>E PER YEAR)**

Emission Source	BAU (2020)	Buildout (2020)	Buildout vs. BAU Reduction	
			MTCO <sub>2</sub> E	%
<b>Uptown</b>				
Vehicles	530,636	334,165	196,471	37.0%
Energy Use	113,093	80,172	32,921	29.1%
Area Sources	23,655	23,650	5	0.0%
Water Use	17,180	17,180	0	0.0%
Solid Waste Disposal	23,019	15,272	7,747	33.7%
Construction	15,178	10,091	5,087	33.5%
<b>TOTAL</b>	<b>722,761</b>	<b>480,531</b>	<b>242,230</b>	<b>33.5%</b>
<b>North Park</b>				
Vehicles	448,676	285,783	162,893	36.3%
Energy Use	95,457	68,984	26,473	27.7%
Area Sources	25,740	25,735	5	0.0%
Water Use	12,603	12,603	0	0.0%
Solid Waste Disposal	20,775	13,786	6,989	33.6%
Construction	12,940	8,728	4,212	32.6%
<b>TOTAL</b>	<b>616,192</b>	<b>415,619</b>	<b>200,573</b>	<b>32.6%</b>
<b>Golden Hill</b>				
Vehicles	108,766	68,902	39,864	36.7%
Energy Use	24,514	17,776	6,738	27.5%
Area Sources	6,413	6,412	1	0.0%
Water Use	3,349	3,349	0	0.0%
Solid Waste Disposal	5,223	3,462	1,761	33.7%
Construction	3,180	2,143	1,037	32.6%
<b>TOTAL</b>	<b>151,446</b>	<b>102,043</b>	<b>49,403</b>	<b>32.6%</b>

### 5.1.1 Uptown

As shown in Table 12 above, after consideration of the identified reduction measures, buildout of the Uptown CPU is estimated to generate 480,531 MTCO<sub>2</sub>E annually. Under a BAU condition, the same development potential would be estimated to generate 722,761 MTCO<sub>2</sub>E. When comparing the GHG emission estimates under the CPU and the BAU condition, the CPU would achieve a 33.5 percent reduction. As identified in Section 4.2, these reductions are due to a combination of State regulations as well as General Plan and CPU policies including green building practices, planned increased density, planned increased diversity of land uses, the improved walkability of the planning area, and the location of development in proximity to a job center, i.e., downtown San Diego. Based on the CAPCOA methodology, the increased diversity, due to new development proposed under the Uptown CPU area, would result in a 7.1 percent reduction in the total mobile emissions (see Attachment 4). The VMT reductions



associated with the proximity of proposed development to a job center along with the increased land use diversity would reduce total mobile emissions by 12.9 percent.

Because the CPU would achieve a greater than 28.3 percent reduction versus BAU, impacts associated with GHG emissions would be less than significant.

### **5.1.2 North Park**

As shown in Table 12 above, after consideration of the identified reduction measures, buildout of the North Park CPU is estimated to generate 415,619 MTCO<sub>2</sub>E annually. Under a BAU condition, the same development potential would generate 616,192 MTCO<sub>2</sub>E. When comparing the GHG emission estimates under the CPU and the BAU condition, the CPU would achieve a 32.6 percent reduction. As identified in Section 4.2, these reductions are due to a combination of state regulations as well as General Plan and CPU policies including planned increased density, planned increased diversity of land uses, the improved walkability of the planning area, and placement of development in proximity to a job center, i.e., downtown San Diego. The increased diversity due to new development proposed under the North Park CPU area would result in a 7.5 percent reduction in the total mobile emissions (see Attachment 4). The VMT reductions associated with the proximity of proposed development to a job center along with the increased land use diversity would reduce total mobile emissions by 11.9 percent.

Because the CPU would achieve a greater than 28.3 percent reduction versus BAU, impacts associated with GHG emissions would be less than significant.

### **5.1.3 Golden Hill**

As shown in Table 12 above, after consideration of the identified reduction measures, buildout of the Golden Hill CPU is estimated to generate 102,043 MTCO<sub>2</sub>E annually. Under the BAU condition, the same development potential would generate 151,446 MTCO<sub>2</sub>E. When comparing the GHG emissions under the CPU and the BAU condition, the CPU would achieve a 32.6 percent reduction. As identified in Section 4.2, these reductions are due to a combination of state regulations as well as General Plan and CPU policies including planned increased density, planned increased diversity of land uses, the improved walkability of the planning area, and placement of development in proximity to a job center, i.e., downtown San Diego. The increased diversity due to new development proposed under the Golden Hill CPU area would result in a 7.7 percent reduction in the total mobile emissions (see Attachment 4). The VMT reductions associated with the proximity of proposed development to a job center along with the increased land use diversity would reduce total mobile emissions by 12.3 percent.

Because the CPU would achieve a greater than 28.3 percent reduction versus BAU, impacts associated with GHG emissions would be less than significant.

## 5.2 Consistency with Adopted Plans, Policies, and Regulations

As discussed in Section 2.3, new policies within the CPUs have been designed to reflect and implement the GHG reduction recommendations of the General Plan, strategies of other local plans, and state GHG reduction measures identified in the Scoping Plan. Specifically, the CPUs include updated Land Use, Mobility, and Conservation elements that include multiple policies aimed at reducing GHG emissions from target emission sources and adapting to climate change. The CPU policies refine existing General Plan policies with site-specific recommendations applicable to the individual communities. In several cases, these policies are also consistent with key state GHG reduction plans, regulations, and recommended mitigation measures. Tables 13 to 15 below contain a brief overview comparing select policies proposed in each CPU to corresponding General Plan Policies.

The CARB Climate Change Scoping Plan outlined the reduction measures and targets needed to reach state GHG reduction targets identified by AB 32. As discussed in Section 4.1.2, the City asserts that a project would be consistent with the CARB Scoping Plan reduction plan if the project demonstrates that it can reduce its GHG emissions by 28.3 percent relative to a BAU scenario based on the conditions prior to passage of AB 32 in 2005.

### 5.2.1 Uptown

The predominant land use in the Uptown planning area is residential. As discussed in Section 2.3, compared to the existing land uses, the CPU envisions reducing industrial, institutional, recreational, and single-family residential land uses and increasing commercial space and multi-family dwelling units. This would increase the diversity of land uses within the plan area. This would be consistent with the General Plan City of Villages Strategy, which proposes growth to be directed into pedestrian-friendly mixed-use activity centers linked to an improved regional transit system.

As shown in Table 13, the Uptown CPU also supports General Plan concepts including increased walkability, a higher level of alternative transit use, and sustainable development and green building practices. Thus, the Uptown CPU would be consistent with the San Diego General Plan.

The Uptown CPU would result in a 33.5 percent reduction versus BAU. Under the City Guidelines for Determining Significance, the CPU would be consistent with the CARB Scoping Plan, because the CPU achieves a 28.3 percent reduction versus BAU. Thus, impacts would be less than significant.



## **5.2.2 North Park**

As discussed in Section 2.3, compared to the existing land uses, the North Park CPU envisions reducing industrial, institutional, recreational, and single-family residential land uses and increase commercial space and multi-family dwelling units. This would increase the diversity of land uses within the plan area by encouraging “village-like” development consistent with the San Diego General Plan.

As shown in Table 14, similar to the Uptown CPU, the North Park CPU also supports General Plan concepts including increased walkability, a higher level of alternative transit use, and sustainable development and green building practices. Thus, the North Park CPU would be consistent with the San Diego General Plan.

The North Park CPU would result in a 32.6 percent reduction versus BAU. Under the City Guidelines for Determining Significance, the CPU would be consistent with the CARB Scoping Plan, because the CPU achieves a 28.3 percent reduction versus BAU. Thus, impacts would be less than significant.

## **5.2.3 Golden Hill**

The Golden Hill planning area has a well-established land use pattern that includes large amounts of residential land uses and minimal undeveloped areas. As discussed in Section 2.3, compared to the existing land uses, the Golden Hill CPU envisions reducing industrial, institutional, and single-family residential land uses

**TABLE 13  
GENERAL PLAN POLICIES AND RELATED UPTOWN CPU POLICIES**

General Plan Policy No.	General Plan Policy	CPU Policy No.	CPU Policy
CE-A.2	<p>Reduce the City's carbon footprint. Develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:</p> <ul style="list-style-type: none"> <li>• Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;</li> <li>• Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;</li> <li>• Improve energy efficiency, especially in the transportation sector and buildings and appliances;</li> <li>• Reduce the Urban Heat Island effect through sustainable design and building practices, as well as planting trees (consistent with habitat and water conservation policies) for their many environmental benefits, including natural carbon sequestration;</li> <li>• Reduce waste by improving management and recycling programs;</li> </ul>	LU-2.2-7	<p>Concentrate medium and high density housing:</p> <ul style="list-style-type: none"> <li>• On upper floors as part of mixed use development in commercial areas;</li> <li>• Adjacent to commercial areas;</li> <li>• Near transit and higher volume traffic corridors.</li> </ul>
		CE-8.3-1	<p>Implement a pattern of land uses and street designs that foster walking and biking as modes of travel.</p>
		CE-8.2-15	<p>Encourage new development and building retrofits to incorporate as many water-wise practices as possible in their design and construction. Specifically encourage:</p> <ul style="list-style-type: none"> <li>• Use of recycled and/or gray water landscape irrigation systems;</li> <li>• Retrofit public spaces and public rights-of-way with low-water use vegetation and/or alternative permeable surface materials that meet adopted landscape regulations; and</li> <li>• Ensure that any 'community greening' projects utilize water-efficient landscape design.</li> </ul>
LU-I.11	<p>Implement the City of Villages concept for mixed-use, transit-oriented development as a way to minimize the need to drive by increasing opportunities for individuals to live near where they work, offering a convenient mix of local goods and services, and providing access to high quality transit services.</p>	LU-2.2-8	<p>Preserve and provide incentives for mixed residential/commercial development at appropriate locations.</p>
		LU-2.2-9	<p>Locate higher density residential development in appropriate areas that are situated to promote safer and livelier commercial districts.</p>

**TABLE 13**  
**GENERAL PLAN POLICIES AND RELATED UPTOWN CPU POLICIES**  
**(continued)**

General Plan Policy No.	General Plan Policy	CPU Policy No.	CPU Policy
LU-I.11 (continued)		LU-2.3-1	Provide public spaces within each Neighborhood Center to implement the General Plan Urban Design Element requirements for Mixed-Use villages
LU-H.7	Provide a variety of different types of land uses within a community in order to offer opportunities for a diverse mix of uses and to help create a balance of land uses within a community (see also LU-A.7).	LU-2.2-1	Provide a variety of land use types to maintain the existing balance of land uses.
LU-A.8	Determine at the community plan level where commercial uses should be intensified within villages and other areas served by transit, and where commercial uses should be limited or converted to other uses.	LU-2.2-7	Concentrate medium and high density housing: <ul style="list-style-type: none"> <li>• On upper floors as part of mixed use development in commercial areas;</li> <li>• Adjacent to commercial areas;</li> <li>• Near transit and higher volume traffic corridors.</li> </ul>
ME-A.7	<p>Improve walkability through the pedestrian-oriented design of public and private projects in areas where higher levels of pedestrian activity are present or desired.</p> <p>a. Enhance streets and other public rights-of-way with amenities such as street trees, benches, plazas, public art or other measures including, but not limited to those described in the Pedestrian Improvement Toolbox, Table ME-1.</p> <p>b. Design site plans and structures with pedestrian-oriented features.</p> <p>c. Encourage the use of non-contiguous sidewalk design where appropriate to help separate pedestrians from auto traffic. In some areas, contiguous sidewalks with trees planted in grates adjacent to the street may be a preferable design.</p> <p>d. Enhance alleys as secure pathways to provide additional pedestrian connections.</p> <p>e. Implement traffic calming measures to improve walkability in accordance with Policy ME-C.5.</p> <p>When existing sidewalks are repaired or replaced, take care to retain sidewalk stamps and imprints that are indicators of the age of a particular neighborhood, or that contribute to the historic character of a neighborhood.</p>	ME-3.1-3	Visually enhance transportation corridors with street furniture, shade trees and planted medians.
		ME-3.2-2	Consider the use of pedestrian countdown signals and/or pedestrian phasing at signals, and corner bulbouts to enhance and encourage pedestrian activity.
		ME-3.2-3	Install missing sidewalks and curb ramps and address accessibility barriers.
		ME-3.1-1	Reduce the number of conflicts between the different modes of travel by incorporating complete streets concepts to enhance the street landscape and safety for all modes.



**TABLE 14**  
**GENERAL PLAN POLICIES AND RELATED NORTH PARK CPU POLICIES**

General Plan Policy No.	General Plan Policy	CPU Policy No.	CPU Policy
CE-A.2	<p>Reduce the City's carbon footprint. Develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:</p> <ul style="list-style-type: none"> <li>• Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;</li> <li>• Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;</li> <li>• Improve energy efficiency, especially in the transportation sector and buildings and appliances;</li> <li>• Reduce the Urban Heat Island effect through sustainable design and building practices, as well as planting trees (consistent with habitat and water conservation policies) for their many environmental benefits, including natural carbon sequestration;</li> <li>• Reduce waste by improving management and recycling programs;</li> </ul>	LU-2.2-5	Support a diversity of compatible goods and specialty services, along commercial streets like 30th Street and Upas Street, so that that the needs of local residents can be met locally.
		ME-3.1-3	Direct future trips to walking, biking and transit by creating a safe, effective multimodal network.
		ME-3.5-3	Add shade trees, landscaped islands, and patterned paving to surface parking areas, where feasible to contribute to the community character of Washington Street along India Street, Hancock Street, and San Diego Avenue.
		CE-8.1-19	Support North Park businesses in establishing a composting cooperative to facilitate waste recovery and contribute compost to community gardens.
LU-I.11	Implement the City of Villages concept for mixed-use, transit-oriented development as a way to minimize the need to drive by increasing opportunities for individuals to live near where they work, offering a convenient mix of local goods and services, and providing access to high quality transit services.	LU-2.2-6	Along all Neighborhood and Community Commercial designated corridors in the community, encourage mixed-use development at major village centers, commercial nodes and intersections especially where 30th Street intersects with Adams Avenue, El Cajon Boulevard, University Avenue, and Upas Street and where Texas Street intersects with El Cajon Boulevard and University Avenue and allow mixed-use as an option between villages and commercial nodes.
LU-H.7	Provide a variety of different types of land uses within a community in order to offer opportunities for a diverse mix of uses and to help create a balance of land uses within a community (see also LU-A.7).	LU-2.3-2	Continue to promote North Park's Community Village as a premier destination for living, working, shopping, and entertainment.

**TABLE 14**  
**GENERAL PLAN POLICIES AND RELATED NORTH PARK CPU POLICIES**  
**(continued)**

General Plan Policy No.	General Plan Policy	CPU Policy No.	CPU Policy
LU-A.8.	Determine at the community plan level where commercial uses should be intensified within villages and other areas served by transit, and where commercial uses should be limited or converted to other uses.	LU-2.2-7	Encourage mixed-use development to include retail, offices, and housing at medium to very high densities within commercial nodes
ME-A.7.	Improve walkability through the pedestrian-oriented design of public and private projects in areas where higher levels of pedestrian activity are present or desired.	ME-3.1-3	Direct future trips to walking, biking and transit by creating a safe, effective multimodal network.
	f. Enhance streets and other public rights-of-way with amenities such as street trees, benches, plazas, public art or other measures including, but not limited to those described in the Pedestrian Improvement Toolbox, Table ME-1.	ME-3.2-1	Enhance existing pedestrian travel routes based upon infrastructure conditions and level of use.
	g. Design site plans and structures with pedestrian-oriented features.		
	h. Encourage the use of non-contiguous sidewalk design where appropriate to help separate pedestrians from auto traffic. In some areas, contiguous sidewalks with trees planted in grates adjacent to the street may be a preferable design.	ME-3.2-4	Prioritize activities within the sidewalk and make mobility functions such as pedestrian access, bicycle parking and transit stops the main priority.
	i. Enhance alleys as secure pathways to provide additional pedestrian connections.	ME-3.2-6	Include pedestrian mobility enhancements in all mobility improvement recommendations, including construction or implementation of missing facilities.
j. Implement traffic calming measures to improve walkability in accordance with Policy ME-C.5.			
When existing sidewalks are repaired or replaced, take care to retain sidewalk stamps and imprints that are indicators of the age of a particular neighborhood, or that contribute to the historic character of a neighborhood.	ME-3.2-7	Provide pedestrian facilities such as shade trees, landscaping, pathways, street furniture, and signage to encourage place making and create a pedestrian experience within the community.	

**TABLE 15  
GENERAL PLAN POLICIES AND RELATED GOLDEN HILL CPU POLICIES**

General Plan Policy No.	General Plan Policy	CPU Policy No.	CPU Policy
CE-A.2	<p>Reduce the City's carbon footprint. Develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:</p> <ul style="list-style-type: none"> <li>• Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;</li> <li>• Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;</li> <li>• Improve energy efficiency, especially in the transportation sector and buildings and appliances;</li> <li>• Reduce the Urban Heat Island effect through sustainable design and building practices, as well as planting trees (consistent with habitat and water conservation policies) for their many environmental benefits, including natural carbon sequestration;</li> <li>• Reduce waste by improving management and recycling programs;</li> </ul>	LU-2.2-1	Provide a variety of land use types suitable for a predominantly residential community.
		CE-8.3-1	Implement a pattern of land uses and street designs that foster walking and biking as modes of travel.
		ME-3.4-3	Work with MTS to place benches, shade structures and timetables at bus stops, where feasible.
LU-I.11	Implement the City of Villages concept for mixed-use, transit-oriented development as a way to minimize the need to drive by increasing opportunities for individuals to live near where they work, offering a convenient mix of local goods and services, and providing access to high quality transit services.	LU-2.2-8	Support the development of shopkeeper units and live/work units that allow residents to also own and operate commercial uses.
LU-H.7	Provide a variety of different types of land uses within a community in order to offer opportunities for a diverse mix of uses and to help create a balance of land uses within a community (see also LU-A.7).	LU-2.2-1	Provide a variety of land use types suitable for a predominantly residential community.
LU-A.8	Determine at the community plan level where commercial uses should be intensified within villages and other areas served by transit, and where commercial uses should be limited or converted to other uses.	LU-2.2-7	Promote new development that serves the retail, service and employment needs of local community residents.



**TABLE 15**  
**GENERAL PLAN POLICIES AND RELATED GOLDEN HILL CPU POLICIES**  
**(continued)**

General Plan Policy No.	General Plan Policy	CPU Policy No.	CPU Policy
ME-A.7	<p>Improve walkability through the pedestrian-oriented design of public and private projects in areas where higher levels of pedestrian activity are present or desired.</p> <ul style="list-style-type: none"> <li>k. Enhance streets and other public rights-of-way with amenities such as street trees, benches, plazas, public art or other measures including, but not limited to those described in the Pedestrian Improvement Toolbox, Table ME-1.</li> <li>l. Design site plans and structures with pedestrian-oriented features.</li> <li>m. Encourage the use of non-contiguous sidewalk design where appropriate to help separate pedestrians from auto traffic. In some areas, contiguous sidewalks with trees planted in grates adjacent to the street may be a preferable design.</li> <li>n. Enhance alleys as secure pathways to provide additional pedestrian connections.</li> <li>o. Implement traffic calming measures to improve walkability in accordance with Policy ME-C.5.</li> </ul> <p>When existing sidewalks are repaired or replaced, take care to retain sidewalk stamps and imprints that are indicators of the age of a particular neighborhood, or that contribute to the historic character of a neighborhood.</p>	LU-2.2-22	Promote walkability within neighborhood centers and between adjacent neighborhoods by addressing sidewalk and other infrastructure maintenance deficits.
		ME-3.1-2	Establish different mode priorities on streets that are not able to accommodate all modes of transportation.
		ME-3.1-3	Implement traffic calming features, diagonal parking, bike facilities and improved pedestrian facilities where feasible.
		ME-3.2-2	Expand sidewalk/landscape buffers to enhance pedestrian circulation where feasible.
		LU-2.2-10	Ensure sidewalk maintenance as well as needed mobility and nighttime safety improvements occurs within commercial districts and along associated neighborhood access routes.

and increase commercial space and multi-family dwelling units. This would increase land use density and diversity and would support the General Plan City of Villages Strategy.

As shown in Table 15, the Golden Hill CPU supports other General Plan concepts such as increased walkability, a higher level of alternative transit use, and sustainable development and green building practices. Thus, the Golden Hill CPU would be consistent with the San Diego General Plan.

The Golden Hill CPU would result in a 32.6 percent reduction versus BAU. Under the City Guidelines for Determining Significance, the CPU would be consistent with the CARB Scoping Plan because the CPU achieves a 28.3 percent reduction versus BAU. Thus, impacts would be less than significant.

## 6.0 Conclusions

The CPUs would update the adopted 1988 Uptown Community Plan, 1986 North Park Community Plan, and 1988 Golden Hill Community Plan. The CPUs provide a long-range, comprehensive policy framework for growth and development in the three communities through 2035.

Following CEQA and City guidelines, this analysis evaluates the significance of the CPUs in terms of (1) contribution of GHGs to cumulative statewide emissions and (2) consistency with local and state regulations, plans, and policies aimed at reducing GHG emissions. As discussed in Section 4.1, for the first criteria, cumulative emissions, the CPUs were assessed for whether buildout of land uses proposed under each of CPU would achieve a reduction equal to or greater than 28.3 percent relative to BAU.

As discussed in Section 5.1, the Uptown, North Park, and Golden Hill CPUs would result in 33.5, 32.6, and 32.6 percent reductions versus BAU, respectively. As discussed in Section 4.1, the Guidelines for Determining Significance assert that projects that demonstrate at least a 28.3 percent reduction in GHG emissions relative to the project's BAU would not result in a significant impact to global climate change. All three CPUs exceed the City requirement to demonstrating a 28.3 percent reduction in GHG emissions relative to BAU. Thus, GHG emissions associated with adoption of the three CPUs would not significant impact on the environment.

The Uptown, North Park and Golden Hill CPUs would also be consistent with the goals, strategies, and reduction targets of relevant local plans and regulations aimed at reducing GHG emissions from land use and development. All three CPUs propose increasing the number of multi-family residences and decreasing the number of single-family residences. Additionally, the CPUs propose increasing amount commercial land uses. As discussed in Section 5.2, CPU policies support the policies of the San Diego General Plan.

Under the City Guidelines for Determining Significance, consistency with the CARB Scoping Plan is demonstrated by the same 28.3 percent reduction criterion that is used to assess contribution to cumulative emissions. Thus, all three CPUs would also be consistent with the state Scoping Plan. As the CPUs do not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs, impacts would be less than significant.

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Greenhouse Gas Analysis for  
Uptown, North Park, and Golden Hill CPUs

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## **ATTACHMENTS**

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## **ATTACHMENT 1**

CalEEMod Output – Existing CPU Land Uses



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## Uptown - Existing San Diego County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	2,375.49	1000sqft	54.53	2,375,490.00	0
General Light Industry	19.71	1000sqft	0.45	19,710.00	0
Racquet Club	31.11	1000sqft	0.71	31,110.00	0
Apartments Low Rise	15,034.00	Dwelling Unit	939.63	15,034,000.00	42997
Single Family Housing	7,542.00	Dwelling Unit	2,448.70	13,575,600.00	21570
Strip Mall	4,184.16	1000sqft	96.06	4,184,160.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13	<b>Operational Year</b>	2015		
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	720.49	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	150

tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	155,000.00	10.00
tblConstructionPhase	NumDays	10,000.00	10.00
tblConstructionPhase	NumDays	15,500.00	10.00
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblFireplaces	NumberGas	8,268.70	13,530.60
tblFireplaces	NumberGas	4,148.10	6,787.80
tblFireplaces	NumberWood	5,261.90	0.00
tblFireplaces	NumberWood	2,639.70	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblWoodstoves	NumberCatalytic	751.70	0.00
tblWoodstoves	NumberCatalytic	377.10	0.00
tblWoodstoves	NumberNoncatalytic	751.70	0.00
tblWoodstoves	NumberNoncatalytic	377.10	0.00

## 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	176.0872	2.0125	170.9237	8.8600e-003		2.0319	2.0319		2.0201	2.0201	0.0000	16,277.7217	16,277.7217	0.5918	0.2934	16,381.1049
Energy	2.3230	20.0283	9.7445	0.1267		1.6050	1.6050		1.6050	1.6050	0.0000	89,375.3039	89,375.3039	3.1127	0.9743	89,742.7088



Mobile	267.3135	571.5869	2,624.1126	4.6402	316.6947	7.2278	323.9225	84.7008	6.6383	91.3391	0.0000	377,554.4687	377,554.4687	17.6517	0.0000	377,925.1541
Waste						0.0000	0.0000		0.0000	0.0000	6,880.3320	0.0000	6,880.3320	406.6160	0.0000	15,419.2674
Water						0.0000	0.0000		0.0000	0.0000	716.7274	14,724.5054	15,441.2328	74.2074	1.8608	17,576.4450
<b>Total</b>	<b>445.7237</b>	<b>593.6277</b>	<b>2,804.7808</b>	<b>4.7758</b>	<b>316.6947</b>	<b>10.8647</b>	<b>327.5594</b>	<b>84.7008</b>	<b>10.2634</b>	<b>94.9642</b>	<b>7,597.0594</b>	<b>497,931.9996</b>	<b>505,529.0591</b>	<b>502.1796</b>	<b>3.1286</b>	<b>517,044.6802</b>

### Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive 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	176.0872	2.0125	170.9237	8.8600e-003		2.0319	2.0319		2.0201	2.0201	0.0000	16,277.7217	16,277.7217	0.5918	0.2934	16,381.1049
Energy	2.3230	20.0283	9.7445	0.1267		1.6050	1.6050		1.6050	1.6050	0.0000	89,375.3039	89,375.3039	3.1127	0.9743	89,742.7088
Mobile	267.3135	571.5869	2,624.1126	4.6402	316.6947	7.2278	323.9225	84.7008	6.6383	91.3391	0.0000	377,554.4687	377,554.4687	17.6517	0.0000	377,925.1541
Waste						0.0000	0.0000		0.0000	0.0000	6,880.3320	0.0000	6,880.3320	406.6160	0.0000	15,419.2674
Water						0.0000	0.0000		0.0000	0.0000	716.7274	14,724.5054	15,441.2328	74.1940	1.8581	17,575.3015
<b>Total</b>	<b>445.7237</b>	<b>593.6277</b>	<b>2,804.7808</b>	<b>4.7758</b>	<b>316.6947</b>	<b>10.8647</b>	<b>327.5594</b>	<b>84.7008</b>	<b>10.2634</b>	<b>94.9642</b>	<b>7,597.0594</b>	<b>497,931.9996</b>	<b>505,529.0591</b>	<b>502.1662</b>	<b>3.1258</b>	<b>517,043.5368</b>

	ROG	NOx	CO	SO2	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	0.09	0.00

## 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	267.3135	571.5869	2,624.1126	4.6402	316.6947	7.2278	323.9225	84.7008	6.6383	91.3391	0.0000	377,554.4687	377,554.4687	17.6517	0.0000	377,925.1541
Unmitigated	267.3135	571.5869	2,624.1126	4.6402	316.6947	7.2278	323.9225	84.7008	6.6383	91.3391	0.0000	377,554.4687	377,554.4687	17.6517	0.0000	377,925.1541

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	99,074.06	107,643.44	91,256.38	283,193,115	283,193,115
General Light Industry	137.38	26.02	13.40	302,926	302,926
Government (Civic Center)	66,323.68	0.00	0.00	90,562,002	90,562,002
Racquet Club	1,024.45	649.27	831.57	1,604,519	1,604,519
Single Family Housing	72,176.94	76,023.36	66,143.34	205,194,908	205,194,908
Strip Mall	185,441.97	175,902.09	85,482.39	261,496,363	261,496,363
Total	424,178.48	360,244.17	243,727.08	842,353,832	842,353,832

#### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.509603	0.073619	0.192430	0.134105	0.036943	0.005309	0.012459	0.020989	0.001832	0.002087	0.006541	0.000614	0.003471

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	66,385.2304	66,385.2304	2.6720	0.5528	66,612.7216
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	66,385.2304	66,385.2304	2.6720	0.5528	66,612.7216
NaturalGas Mitigated	2.3230	20.0283	9.7445	0.1267		1.6050	1.6050		1.6050	1.6050	0.0000	22,990.0735	22,990.0735	0.4406	0.4215	23,129.9872
NaturalGas Unmitigated	2.3230	20.0283	9.7445	0.1267		1.6050	1.6050		1.6050	1.6050	0.0000	22,990.0735	22,990.0735	0.4406	0.4215	23,129.9872

### 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					
General Light Industry	232381	1.2500e-003	0.0114	9.5700e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4007	12.4007	2.4000e-004	2.3000e-004	12.4762
Government (Civic Center)	4.99566e+007	0.2694	2.4489	2.0570	0.0147		0.1861	0.1861		0.1861	0.1861	0.0000	2,665.8720	2,665.8720	0.0511	0.0489	2,682.0961
Racquet Club	366787	1.9800e-003	0.0180	0.0151	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	19.5732	19.5732	3.8000e-004	3.6000e-004	19.6923



Single Family Housing	2.08563e+008	1.1246	9.6102	4.0895	0.0613		0.7770	0.7770		0.7770	0.7770	0.0000	11,129.6957	11,129.6957	0.2133	0.2040	11,197.4292
Strip Mall	9.58173e+006	0.0517	0.4697	0.3945	2.8200e-003		0.0357	0.0357		0.0357	0.0357	0.0000	511.3174	511.3174	9.8000e-003	9.3700e-003	514.4292
Apartments Low Rise	1.62118e+008	0.8742	7.4701	3.1788	0.0477		0.6040	0.6040		0.6040	0.6040	0.0000	8,651.2144	8,651.2144	0.1658	0.1586	8,703.8643
<b>Total</b>		<b>2.3230</b>	<b>20.0283</b>	<b>9.7445</b>	<b>0.1267</b>		<b>1.6050</b>	<b>1.6050</b>		<b>1.6050</b>	<b>1.6050</b>	<b>0.0000</b>	<b>22,990.0735</b>	<b>22,990.0735</b>	<b>0.4407</b>	<b>0.4215</b>	<b>23,129.9872</b>

**Mitigated**

	Natural Gas 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					
General Light Industry	232381	1.2500e-003	0.0114	9.5700e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4007	12.4007	2.4000e-004	2.3000e-004	12.4762
Government (Civic Center)	4.99566e+007	0.2694	2.4489	2.0570	0.0147		0.1861	0.1861		0.1861	0.1861	0.0000	2,665.8720	2,665.8720	0.0511	0.0489	2,682.0961
Racquet Club	366787	1.9800e-003	0.0180	0.0151	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	19.5732	19.5732	3.8000e-004	3.6000e-004	19.6923
Single Family Housing	2.08563e+008	1.1246	9.6102	4.0895	0.0613		0.7770	0.7770		0.7770	0.7770	0.0000	11,129.6957	11,129.6957	0.2133	0.2040	11,197.4292
Strip Mall	9.58173e+006	0.0517	0.4697	0.3945	2.8200e-003		0.0357	0.0357		0.0357	0.0357	0.0000	511.3174	511.3174	9.8000e-003	9.3700e-003	514.4292
Apartments Low Rise	1.62118e+008	0.8742	7.4701	3.1788	0.0477		0.6040	0.6040		0.6040	0.6040	0.0000	8,651.2144	8,651.2144	0.1658	0.1586	8,703.8643
<b>Total</b>		<b>2.3230</b>	<b>20.0283</b>	<b>9.7445</b>	<b>0.1267</b>		<b>1.6050</b>	<b>1.6050</b>		<b>1.6050</b>	<b>1.6050</b>	<b>0.0000</b>	<b>22,990.0735</b>	<b>22,990.0735</b>	<b>0.4407</b>	<b>0.4215</b>	<b>23,129.9872</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Apartments Low Rise	5.45889e+007	17,840.1327	0.7181	0.1486	17,901.2679
General Light Industry	177390	57.9726	2.3300e-003	4.8000e-004	58.1713
Government (Civic Center)	3.56086e+007	11,637.2011	0.4684	0.0969	11,677.0798
Racquet Club	279990	91.5032	3.6800e-003	7.6000e-004	91.8168
Single Family Housing	5.37312e+007	17,559.8417	0.7068	0.1462	17,620.0164
Strip Mall	5.87456e+007	19,198.5792	0.7728	0.1599	19,264.3695
<b>Total</b>		<b>66,385.2304</b>	<b>2.6720</b>	<b>0.5528</b>	<b>66,612.7216</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	5.45889e+007	17,840.1327	0.7181	0.1486	17,901.2679
General Light Industry	177390	57.9726	2.3300e-003	4.8000e-004	58.1713
Government (Civic Center)	3.56086e+007	11,637.2011	0.4684	0.0969	11,677.0798
Racquet Club	279990	91.5032	3.6800e-003	7.6000e-004	91.8168
Single Family Housing	5.37312e+007	17,559.8417	0.7068	0.1462	17,620.0164
Strip Mall	5.87456e+007	19,198.5792	0.7728	0.1599	19,264.3695
<b>Total</b>		<b>66,385.2304</b>	<b>2.6720</b>	<b>0.5528</b>	<b>66,612.7216</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	176.0872	2.0125	170.9237	8.8600e-003		2.0319	2.0319		2.0201	2.0201	0.0000	16,277.7217	16,277.7217	0.5918	0.2934	16,381.1049
Unmitigated	176.0872	2.0125	170.9237	8.8600e-003		2.0319	2.0319		2.0201	2.0201	0.0000	16,277.7217	16,277.7217	0.5918	0.2934	16,381.1049

## 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	31.4485					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	137.5520					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6171	7.0000e-005	0.0882	0.0000		1.1173	1.1173		1.1055	1.1055	0.0000	16,003.7839	16,003.7839	0.3067	0.2934	16,101.1803
Landscaping	5.4696	2.0124	170.8355	8.8600e-003		0.9146	0.9146		0.9146	0.9146	0.0000	273.9378	273.9378	0.2851	0.0000	279.9247
<b>Total</b>	<b>176.0872</b>	<b>2.0125</b>	<b>170.9237</b>	<b>8.8600e-003</b>		<b>2.0319</b>	<b>2.0319</b>		<b>2.0201</b>	<b>2.0201</b>	<b>0.0000</b>	<b>16,277.7217</b>	<b>16,277.7217</b>	<b>0.5918</b>	<b>0.2934</b>	<b>16,381.1049</b>



**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	31.4485					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	137.5520					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6171	7.0000e-005	0.0882	0.0000		1.1173	1.1173		1.1055	1.1055	0.0000	16,003.7839	16,003.7839	0.3067	0.2934	16,101.1803
Landscaping	5.4696	2.0124	170.8355	8.8600e-003		0.9146	0.9146		0.9146	0.9146	0.0000	273.9378	273.9378	0.2851	0.0000	279.9247
<b>Total</b>	<b>176.0872</b>	<b>2.0125</b>	<b>170.9237</b>	<b>8.8600e-003</b>		<b>2.0319</b>	<b>2.0319</b>		<b>2.0201</b>	<b>2.0201</b>	<b>0.0000</b>	<b>16,277.7217</b>	<b>16,277.7217</b>	<b>0.5918</b>	<b>0.2934</b>	<b>16,381.1049</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	15,441.2328	74.1940	1.8581	17,575.3015
Unmitigated	15,441.2328	74.2074	1.8608	17,576.4450

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	979.526 / 617.527	6,721.1542	32.1759	0.8070	7,647.0280
General Light Industry	4.55794 / 0	20.8418	0.1493	3.6700e-003	25.1143
Government (Civic Center)	471.914 / 289.238	3,208.0662	15.5004	0.3886	3,654.0291
Racquet Club	1.83994 / 1.12771	12.5079	0.0604	1.5100e-003	14.2467
Single Family Housing	491.392 / 309.79	3,371.7537	16.1414	0.4049	3,836.2302
Strip Mall	309.931 / 189.958	2,106.9090	10.1800	0.2552	2,399.7968
<b>Total</b>		<b>15,441.2328</b>	<b>74.2074</b>	<b>1.8608</b>	<b>17,576.4450</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	979.526 / 617.527	6,721.1542	32.1701	0.8058	7,646.5322
General Light Industry	4.55794 / 0	20.8418	0.1493	3.6600e-003	25.1120
Government (Civic Center)	471.914 / 289.238	3,208.0662	15.4976	0.3880	3,653.7902
Racquet Club	1.83994 / 1.12771	12.5079	0.0604	1.5100e-003	14.2457
Single Family Housing	491.392 / 309.79	3,371.7537	16.1385	0.4043	3,835.9815
Strip Mall	309.931 / 189.958	2,106.9090	10.1781	0.2548	2,399.6399
<b>Total</b>		<b>15,441.2328</b>	<b>74.1940</b>	<b>1.8580</b>	<b>17,575.3015</b>

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6,880.3320	406.6160	0.0000	15,419.2674
Unmitigated	6,880.3320	406.6160	0.0000	15,419.2674

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	6915.64	1,403.8124	82.9629	0.0000	3,146.0341
General Light Industry	24.44	4.9611	0.2932	0.0000	11.1181
Government (Civic Center)	13540.3	2,748.5565	162.4350	0.0000	6,159.6923
Racquet Club	177.33	35.9964	2.1273	0.0000	80.6702
Single Family Housing	8843.7	1,795.1912	106.0928	0.0000	4,023.1391
Strip Mall	4393.37	891.8144	52.7047	0.0000	1,998.6136
<b>Total</b>		<b>6,880.3320</b>	<b>406.6160</b>	<b>0.0000</b>	<b>15,419.2674</b>



## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	6915.64	1,403.8124	82.9629	0.0000	3,146.0341
General Light Industry	24.44	4.9611	0.2932	0.0000	11.1181
Government (Civic Center)	13540.3	2,748.5565	162.4350	0.0000	6,159.6923
Racquet Club	177.33	35.9964	2.1273	0.0000	80.6702
Single Family Housing	8843.7	1,795.1912	106.0928	0.0000	4,023.1391
Strip Mall	4393.37	891.8144	52.7047	0.0000	1,998.6136
<b>Total</b>		<b>6,880.3320</b>	<b>406.6160</b>	<b>0.0000</b>	<b>15,419.2674</b>

## 9.0 Operational Offroad

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

**North Park - Existing  
San Diego County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	921.31	1000sqft	21.15	921,310.00	0
General Light Industry	42.85	1000sqft	0.98	42,850.00	0
Racquet Club	72.43	1000sqft	1.66	72,430.00	0
Apartments Low Rise	19,234.00	Dwelling Unit	1,202.13	19,234,000.00	55009
Single Family Housing	5,797.00	Dwelling Unit	1,882.14	10,434,600.00	16579
Strip Mall	2,290.20	1000sqft	52.58	2,290,200.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13	<b>Operational Year</b>	2015		
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	720.49	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	150

tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	155,000.00	10.00
tblConstructionPhase	NumDays	10,000.00	10.00
tblConstructionPhase	NumDays	15,500.00	10.00
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblFireplaces	NumberGas	10,578.70	17,310.80
tblFireplaces	NumberGas	3,188.35	5,217.30
tblFireplaces	NumberWood	6,731.90	0.00
tblFireplaces	NumberWood	2,028.95	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblWoodstoves	NumberCatalytic	961.70	0.00
tblWoodstoves	NumberCatalytic	289.85	0.00
tblWoodstoves	NumberNoncatalytic	961.70	0.00
tblWoodstoves	NumberNoncatalytic	289.85	0.00

## 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	166.8766	2.2310	189.4725	9.8200e-003		2.2527	2.2527		2.2396	2.2396	0.0000	18,047.9090	18,047.9090	0.6560	0.3253	18,162.5311
Energy	2.1229	18.2172	8.2798	0.1158		1.4667	1.4667		1.4667	1.4667	0.0000	72,690.8757	72,690.8757	2.4829	0.8156	72,995.8382



Mobile	209.0858	469.0514	2,121.2123	3.8575	264.1803	5.9833	270.1636	70.6557	5.4955	76.1512	0.0000	313,927.4294	313,927.4294	14.5441	0.0000	314,232.8545
Waste						0.0000	0.0000		0.0000	0.0000	4,824.5248	0.0000	4,824.5248	285.1213	0.0000	10,812.0710
Water						0.0000	0.0000		0.0000	0.0000	633.7880	13,028.5253	13,662.3133	65.6205	1.6456	15,550.4667
<b>Total</b>	<b>378.0852</b>	<b>489.4995</b>	<b>2,318.9646</b>	<b>3.9831</b>	<b>264.1803</b>	<b>9.7027</b>	<b>273.8830</b>	<b>70.6557</b>	<b>9.2019</b>	<b>79.8576</b>	<b>5,458.3127</b>	<b>417,694.7394</b>	<b>423,153.0522</b>	<b>368.4247</b>	<b>2.7864</b>	<b>431,753.7615</b>

### 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	166.8766	2.2310	189.4725	9.8200e-003		2.2527	2.2527		2.2396	2.2396	0.0000	18,047.9090	18,047.9090	0.6560	0.3253	18,162.5311
Energy	2.1229	18.2172	8.2798	0.1158		1.4667	1.4667		1.4667	1.4667	0.0000	72,690.8757	72,690.8757	2.4829	0.8156	72,995.8382
Mobile	209.0858	469.0514	2,121.2123	3.8575	264.1803	5.9833	270.1636	70.6557	5.4955	76.1512	0.0000	313,927.4294	313,927.4294	14.5441	0.0000	314,232.8545
Waste						0.0000	0.0000		0.0000	0.0000	4,824.5248	0.0000	4,824.5248	285.1213	0.0000	10,812.0710
Water						0.0000	0.0000		0.0000	0.0000	633.7880	13,028.5253	13,662.3133	65.6086	1.6431	15,549.4555
<b>Total</b>	<b>378.0852</b>	<b>489.4995</b>	<b>2,318.9646</b>	<b>3.9831</b>	<b>264.1803</b>	<b>9.7027</b>	<b>273.8830</b>	<b>70.6557</b>	<b>9.2019</b>	<b>79.8576</b>	<b>5,458.3127</b>	<b>417,694.7394</b>	<b>423,153.0522</b>	<b>368.4128</b>	<b>2.7840</b>	<b>431,752.7504</b>

	ROG	NOx	CO	SO2	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	0.09	0.00

## 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	209.0858	469.0514	2,121.2123	3.8575	264.1803	5.9833	270.1636	70.6557	5.4955	76.1512	0.0000	313,927.4294	313,927.4294	14.5441	0.0000	314,232.8545
Unmitigated	209.0858	469.0514	2,121.2123	3.8575	264.1803	5.9833	270.1636	70.6557	5.4955	76.1512	0.0000	313,927.4294	313,927.4294	14.5441	0.0000	314,232.8545

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	126,752.06	137,715.44	116,750.38	362,307,861	362,307,861
General Light Industry	298.66	56.56	29.14	658,568	658,568
Government (Civic Center)	25,722.98	0.00	0.00	35,123,565	35,123,565
Racquet Club	2,385.12	1,511.61	1936.05	3,735,625	3,735,625
Single Family Housing	55,477.29	58,433.76	50,839.69	157,718,759	157,718,759
Strip Mall	101,501.66	96,280.01	46,788.79	143,130,036	143,130,036
Total	312,137.77	293,997.38	216,344.05	702,674,413	702,674,413

#### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.509603	0.073619	0.192430	0.134105	0.036943	0.005309	0.012459	0.020989	0.001832	0.002087	0.006541	0.000614	0.003471

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	51,681.8616	51,681.8616	2.0802	0.4304	51,858.9668
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	51,681.8616	51,681.8616	2.0802	0.4304	51,858.9668
NaturalGas Mitigated	2.1229	18.2172	8.2798	0.1158		1.4667	1.4667		1.4667	1.4667	0.0000	21,009.0141	21,009.0141	0.4027	0.3852	21,136.8715
NaturalGas Unmitigated	2.1229	18.2172	8.2798	0.1158		1.4667	1.4667		1.4667	1.4667	0.0000	21,009.0141	21,009.0141	0.4027	0.3852	21,136.8715

### 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					
General Light Industry	505201	2.7200e-003	0.0248	0.0208	1.5000e-004		1.8800e-003	1.8800e-003		1.8800e-003	1.8800e-003	0.0000	26.9595	26.9595	5.2000e-004	4.9000e-004	27.1236
Government (Civic Center)	1.93751e+007	0.1045	0.9498	0.7978	5.7000e-003		0.0722	0.0722		0.0722	0.0722	0.0000	1,033.9318	1,033.9318	0.0198	0.0190	1,040.2241
Racquet Club	853950	4.6000e-003	0.0419	0.0352	2.5000e-004		3.1800e-003	3.1800e-003		3.1800e-003	3.1800e-003	0.0000	45.5700	45.5700	8.7000e-004	8.4000e-004	45.8473

Single Family Housing	1.60307e+008	0.8644	7.3867	3.1433	0.0472		0.5972	0.5972		0.5972	0.5972	0.0000	8,554.6070	8,554.6070	0.1640	0.1568	8,606.6689
Strip Mall	5.24456e+006	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.8696	279.8696	5.3600e-003	5.1300e-003	281.5728
Apartments Low Rise	2.07408e+008	1.1184	9.5570	4.0668	0.0610		0.7727	0.7727		0.7727	0.7727	0.0000	11,068.0762	11,068.0762	0.2121	0.2029	11,135.4347
<b>Total</b>		<b>2.1229</b>	<b>18.2172</b>	<b>8.2798</b>	<b>0.1158</b>		<b>1.4667</b>	<b>1.4667</b>		<b>1.4667</b>	<b>1.4667</b>	<b>0.0000</b>	<b>21,009.0141</b>	<b>21,009.0141</b>	<b>0.4027</b>	<b>0.3852</b>	<b>21,136.8715</b>

**Mitigated**

	Natural Gas 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					
General Light Industry	505201	2.7200e-003	0.0248	0.0208	1.5000e-004		1.8800e-003	1.8800e-003		1.8800e-003	1.8800e-003	0.0000	26.9595	26.9595	5.2000e-004	4.9000e-004	27.1236
Government (Civic Center)	1.93751e+007	0.1045	0.9498	0.7978	5.7000e-003		0.0722	0.0722		0.0722	0.0722	0.0000	1,033.9318	1,033.9318	0.0198	0.0190	1,040.2241
Racquet Club	853950	4.6000e-003	0.0419	0.0352	2.5000e-004		3.1800e-003	3.1800e-003		3.1800e-003	3.1800e-003	0.0000	45.5700	45.5700	8.7000e-004	8.4000e-004	45.8473
Single Family Housing	1.60307e+008	0.8644	7.3867	3.1433	0.0472		0.5972	0.5972		0.5972	0.5972	0.0000	8,554.6070	8,554.6070	0.1640	0.1568	8,606.6689
Strip Mall	5.24456e+006	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.8696	279.8696	5.3600e-003	5.1300e-003	281.5728
Apartments Low Rise	2.07408e+008	1.1184	9.5570	4.0668	0.0610		0.7727	0.7727		0.7727	0.7727	0.0000	11,068.0762	11,068.0762	0.2121	0.2029	11,135.4347
<b>Total</b>		<b>2.1229</b>	<b>18.2172</b>	<b>8.2798</b>	<b>0.1158</b>		<b>1.4667</b>	<b>1.4667</b>		<b>1.4667</b>	<b>1.4667</b>	<b>0.0000</b>	<b>21,009.0141</b>	<b>21,009.0141</b>	<b>0.4027</b>	<b>0.3852</b>	<b>21,136.8715</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			



Apartments Low Rise	6.98392e+007	22,824.0730	0.9187	0.1901	22,902.2873
General Light Industry	385650	126.0338	5.0700e-003	1.0500e-003	126.4657
Government (Civic Center)	1.38104e+007	4,513.3719	0.1817	0.0376	4,528.8384
Racquet Club	651870	213.0368	8.5700e-003	1.7700e-003	213.7669
Single Family Housing	4.12994e+007	13,497.0038	0.5433	0.1124	13,543.2558
Strip Mall	3.21544e+007	10,508.3424	0.4230	0.0875	10,544.3528
<b>Total</b>		<b>51,681.8616</b>	<b>2.0802</b>	<b>0.4304</b>	<b>51,858.9668</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	6.98392e+007	22,824.0730	0.9187	0.1901	22,902.2873
General Light Industry	385650	126.0338	5.0700e-003	1.0500e-003	126.4657
Government (Civic Center)	1.38104e+007	4,513.3719	0.1817	0.0376	4,528.8384
Racquet Club	651870	213.0368	8.5700e-003	1.7700e-003	213.7669
Single Family Housing	4.12994e+007	13,497.0038	0.5433	0.1124	13,543.2558
Strip Mall	3.21544e+007	10,508.3424	0.4230	0.0875	10,544.3528
<b>Total</b>		<b>51,681.8616</b>	<b>2.0802</b>	<b>0.4304</b>	<b>51,858.9668</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	166.8766	2.2310	189.4725	9.8200e-003		2.2527	2.2527		2.2396	2.2396	0.0000	18,047.9090	18,047.9090	0.6560	0.3253	18,162.5311
Unmitigated	166.8766	2.2310	189.4725	9.8200e-003		2.2527	2.2527		2.2396	2.2396	0.0000	18,047.9090	18,047.9090	0.6560	0.3253	18,162.5311

## 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	30.1595					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	128.8635					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7930	8.0000e-005	0.0978	0.0000		1.2388	1.2388		1.2257	1.2257	0.0000	17,744.2537	17,744.2537	0.3401	0.3253	17,852.2423
Landscaping	6.0606	2.2309	189.3747	9.8200e-003		1.0139	1.0139		1.0139	1.0139	0.0000	303.6553	303.6553	0.3159	0.0000	310.2889
<b>Total</b>	<b>166.8766</b>	<b>2.2310</b>	<b>189.4725</b>	<b>9.8200e-003</b>		<b>2.2527</b>	<b>2.2527</b>		<b>2.2396</b>	<b>2.2396</b>	<b>0.0000</b>	<b>18,047.9090</b>	<b>18,047.9090</b>	<b>0.6560</b>	<b>0.3253</b>	<b>18,162.5312</b>

**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	30.1595					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	128.8635					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7930	8.0000e-005	0.0978	0.0000		1.2388	1.2388		1.2257	1.2257	0.0000	17,744.2537	17,744.2537	0.3401	0.3253	17,852.2423
Landscaping	6.0606	2.2309	189.3747	9.8200e-003		1.0139	1.0139		1.0139	1.0139	0.0000	303.6553	303.6553	0.3159	0.0000	310.2889
<b>Total</b>	<b>166.8766</b>	<b>2.2310</b>	<b>189.4725</b>	<b>9.8200e-003</b>		<b>2.2527</b>	<b>2.2527</b>		<b>2.2396</b>	<b>2.2396</b>	<b>0.0000</b>	<b>18,047.9090</b>	<b>18,047.9090</b>	<b>0.6560</b>	<b>0.3253</b>	<b>18,162.5312</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13,662.3133	65.6086	1.6431	15,549.4555
Unmitigated	13,662.3133	65.6205	1.6456	15,550.4667

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1253.17 / 790.044	8,598.8213	41.1648	1.0325	9,783.3535
General Light Industry	9.90906 / 0	45.3105	0.3246	7.9800e-003	54.5991
Government (Civic Center)	183.027 / 112.178	1,244.2163	6.0117	0.1507	1,417.1786
Racquet Club	4.28374 / 2.62552	29.1208	0.1407	3.5300e-003	33.1690
Single Family Housing	377.698 / 238.114	2,591.6277	12.4068	0.3112	2,948.6378
Strip Mall	169.641 / 103.973	1,153.2167	5.5720	0.1397	1,313.5288
<b>Total</b>		<b>13,662.3133</b>	<b>65.6205</b>	<b>1.6456</b>	<b>15,550.4667</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1253.17 / 790.044	8,598.8213	41.1573	1.0310	9,782.7192
General Light Industry	9.90906 / 0	45.3105	0.3245	7.9600e-003	54.5941
Government (Civic Center)	183.027 / 112.178	1,244.2163	6.0106	0.1505	1,417.0859
Racquet Club	4.28374 / 2.62552	29.1208	0.1407	3.5200e-003	33.1668
Single Family Housing	377.698 / 238.114	2,591.6277	12.4045	0.3107	2,948.4467
Strip Mall	169.641 / 103.973	1,153.2167	5.5710	0.1395	1,313.4429
<b>Total</b>		<b>13,662.3133</b>	<b>65.6086</b>	<b>1.6431</b>	<b>15,549.4555</b>



## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4,824.5248	285.1213	0.0000	10,812.0710
Unmitigated	4,824.5248	285.1213	0.0000	10,812.0710

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	8847.64	1,795.9910	106.1400	0.0000	4,024.9315
General Light Industry	53.13	10.7849	0.6374	0.0000	24.1697
Government (Civic Center)	5251.47	1,066.0010	62.9989	0.0000	2,388.9768
Racquet Club	412.85	83.8048	4.9527	0.0000	187.8120
Single Family Housing	6797.39	1,379.8087	81.5444	0.0000	3,092.2403
Strip Mall	2404.71	488.1344	28.8479	0.0000	1,093.9406
<b>Total</b>		<b>4,824.5248</b>	<b>285.1213</b>	<b>0.0000</b>	<b>10,812.0710</b>

## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	8847.64	1,795.9910	106.1400	0.0000	4,024.9315
General Light Industry	53.13	10.7849	0.6374	0.0000	24.1697
Government (Civic Center)	5251.47	1,066.0010	62.9989	0.0000	2,388.9768
Racquet Club	412.85	83.8048	4.9527	0.0000	187.8120
Single Family Housing	6797.39	1,379.8087	81.5444	0.0000	3,092.2403
Strip Mall	2404.71	488.1344	28.8479	0.0000	1,093.9406
<b>Total</b>		<b>4,824.5248</b>	<b>285.1213</b>	<b>0.0000</b>	<b>10,812.0710</b>

## 9.0 Operational Offroad

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

**Golden Hills - Existing  
San Diego County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	236.11	1000sqft	5.42	236,110.00	0
General Light Industry	112.75	1000sqft	2.59	112,750.00	0
Racquet Club	2.25	1000sqft	0.05	2,250.00	0
Apartments Low Rise	4,155.00	Dwelling Unit	259.69	4,155,000.00	11883
Single Family Housing	3,092.00	Dwelling Unit	1,003.90	5,565,600.00	8843
Strip Mall	268.81	1000sqft	6.17	268,810.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2015
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	720.49	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	150

tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	155,000.00	10.00
tblConstructionPhase	NumDays	10,000.00	10.00
tblConstructionPhase	NumDays	15,500.00	10.00
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblFireplaces	NumberGas	2,285.25	3,739.50
tblFireplaces	NumberGas	1,700.60	2,782.80
tblFireplaces	NumberWood	1,454.25	0.00
tblFireplaces	NumberWood	1,082.20	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblWoodstoves	NumberCatalytic	207.75	0.00
tblWoodstoves	NumberCatalytic	154.60	0.00
tblWoodstoves	NumberNoncatalytic	207.75	0.00
tblWoodstoves	NumberNoncatalytic	154.60	0.00

## 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	52.2130	0.6459	54.8530	2.8400e-003		0.6522	0.6522		0.6484	0.6484	0.0000	5,225.1968	5,225.1968	0.1899	0.0942	5,258.3817
Energy	0.7401	6.3445	2.8407	0.0404		0.5113	0.5113		0.5113	0.5113	0.0000	22,181.8805	22,181.8805	0.7384	0.2580	22,277.3686



Mobile	53.2412	125.0121	557.5695	1.0401	71.4486	1.6073	73.0559	19.1091	1.4763	20.5854	0.0000	84,660.0630	84,660.0630	3.8905	0.0000	84,741.7641
Waste						0.0000	0.0000		0.0000	0.0000	1,485.4168	0.0000	1,485.4168	87.7856	0.0000	3,328.9148
Water						0.0000	0.0000		0.0000	0.0000	179.3102	3,634.9095	3,814.2197	18.5632	0.4651	4,348.2377
<b>Total</b>	<b>106.1942</b>	<b>132.0025</b>	<b>615.2632</b>	<b>1.0833</b>	<b>71.4486</b>	<b>2.7708</b>	<b>74.2193</b>	<b>19.1091</b>	<b>2.6360</b>	<b>21.7451</b>	<b>1,664.7270</b>	<b>115,702.0497</b>	<b>117,366.7768</b>	<b>111.1676</b>	<b>0.8173</b>	<b>119,954.6669</b>

### 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	52.2130	0.6459	54.8530	2.8400e-003		0.6522	0.6522		0.6484	0.6484	0.0000	5,225.1968	5,225.1968	0.1899	0.0942	5,258.3817
Energy	0.7401	6.3445	2.8407	0.0404		0.5113	0.5113		0.5113	0.5113	0.0000	22,181.8805	22,181.8805	0.7384	0.2580	22,277.3686
Mobile	53.2412	125.0121	557.5695	1.0401	71.4486	1.6073	73.0559	19.1091	1.4763	20.5854	0.0000	84,660.0630	84,660.0630	3.8905	0.0000	84,741.7641
Waste						0.0000	0.0000		0.0000	0.0000	1,485.4168	0.0000	1,485.4168	87.7856	0.0000	3,328.9148
Water						0.0000	0.0000		0.0000	0.0000	179.3102	3,634.9095	3,814.2197	18.5598	0.4644	4,347.9517
<b>Total</b>	<b>106.1942</b>	<b>132.0025</b>	<b>615.2632</b>	<b>1.0833</b>	<b>71.4486</b>	<b>2.7708</b>	<b>74.2193</b>	<b>19.1091</b>	<b>2.6360</b>	<b>21.7451</b>	<b>1,664.7270</b>	<b>115,702.0497</b>	<b>117,366.7768</b>	<b>111.1643</b>	<b>0.8166</b>	<b>119,954.3808</b>

	ROG	NOx	CO	SO2	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	0.08	0.00

## 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	53.2412	125.0121	557.5695	1.0401	71.4486	1.6073	73.0559	19.1091	1.4763	20.5854	0.0000	84,660.0630	84,660.0630	3.8905	0.0000	84,741.7641
Unmitigated	53.2412	125.0121	557.5695	1.0401	71.4486	1.6073	73.0559	19.1091	1.4763	20.5854	0.0000	84,660.0630	84,660.0630	3.8905	0.0000	84,741.7641

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	27,381.45	29,749.80	25,220.85	78,267,088	78,267,088
General Light Industry	785.87	148.83	76.67	1,732,871	1,732,871
Government (Civic Center)	6,592.19	0.00	0.00	9,001,340	9,001,340
Racquet Club	74.09	46.96	60.14	116,045	116,045
Single Family Housing	29,590.44	31,167.36	27,116.84	84,123,927	84,123,927
Strip Mall	11,913.66	11,300.77	5,491.79	16,799,749	16,799,749
Total	76,337.70	72,413.72	57,966.29	190,041,019	190,041,019

#### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.509603	0.073619	0.192430	0.134105	0.036943	0.005309	0.012459	0.020989	0.001832	0.002087	0.006541	0.000614	0.003471

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	14,857.8879	14,857.8879	0.5980	0.1237	14,908.8035
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	14,857.8879	14,857.8879	0.5980	0.1237	14,908.8035
NaturalGas Mitigated	0.7401	6.3445	2.8407	0.0404		0.5113	0.5113		0.5113	0.5113	0.0000	7,323.9925	7,323.9925	0.1404	0.1343	7,368.5651
NaturalGas Unmitigated	0.7401	6.3445	2.8407	0.0404		0.5113	0.5113		0.5113	0.5113	0.0000	7,323.9925	7,323.9925	0.1404	0.1343	7,368.5651

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	4.4805e+07	0.2416	2.0646	0.8785	0.0132		0.1669	0.1669		0.1669	0.1669	0.0000	2,390.9669	2,390.9669	0.0458	0.0438	2,405.5179
General Light Industry	1.32932e+06	7.1700e-003	0.0652	0.0547	3.9000e-004		4.9500e-003	4.9500e-003		4.9500e-003	4.9500e-003	0.0000	70.9377	70.9377	1.3600e-003	1.3000e-003	71.3694
Government (Civic Center)	4.96539e+06	0.0268	0.2434	0.2045	1.4600e-003		0.0185	0.0185		0.0185	0.0185	0.0000	264.9723	264.9723	5.0800e-003	4.8600e-003	266.5849

Racquet Club	26527.5	1.4000e-004	1.3000e-003	1.0900e-003	1.0000e-005	1.0000e-004	1.0000e-004	1.0000e-004	1.0000e-004	1.0000e-004	0.0000	1.4156	1.4156	3.0000e-005	3.0000e-005	1.4242
Single Family Housing	8.55046e+007	0.4611	3.9399	1.6766	0.0252	0.3186	0.3186	0.3186	0.3186	0.3186	0.0000	4,562.8506	4,562.8506	0.0875	0.0837	4,590.6194
Strip Mall	615575	3.3200e-003	0.0302	0.0254	1.8000e-004	2.2900e-003	2.2900e-003	2.2900e-003	2.2900e-003	2.2900e-003	0.0000	32.8494	32.8494	6.3000e-004	6.0000e-004	33.0493
<b>Total</b>		<b>0.7401</b>	<b>6.3445</b>	<b>2.8407</b>	<b>0.0404</b>	<b>0.5113</b>	<b>0.5113</b>	<b>0.5113</b>	<b>0.5113</b>	<b>0.5113</b>	<b>0.0000</b>	<b>7,323.9925</b>	<b>7,323.9925</b>	<b>0.1404</b>	<b>0.1343</b>	<b>7,368.5651</b>

**Mitigated**

	Natural Gas 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					
General Light Industry	1.32932e+006	7.1700e-003	0.0652	0.0547	3.9000e-004	4.9500e-003	4.9500e-003	4.9500e-003	4.9500e-003	4.9500e-003	4.9500e-003	0.0000	70.9377	70.9377	1.3600e-003	1.3000e-003	71.3694
Government (Civic Center)	4.96539e+006	0.0268	0.2434	0.2045	1.4600e-003	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185	0.0000	264.9723	264.9723	5.0800e-003	4.8600e-003	266.5849
Racquet Club	26527.5	1.4000e-004	1.3000e-003	1.0900e-003	1.0000e-005	1.0000e-004	1.0000e-004	1.0000e-004	1.0000e-004	1.0000e-004	1.0000e-004	0.0000	1.4156	1.4156	3.0000e-005	3.0000e-005	1.4242
Single Family Housing	8.55046e+007	0.4611	3.9399	1.6766	0.0252	0.3186	0.3186	0.3186	0.3186	0.3186	0.3186	0.0000	4,562.8506	4,562.8506	0.0875	0.0837	4,590.6194
Strip Mall	615575	3.3200e-003	0.0302	0.0254	1.8000e-004	2.2900e-003	2.2900e-003	2.2900e-003	2.2900e-003	2.2900e-003	2.2900e-003	0.0000	32.8494	32.8494	6.3000e-004	6.0000e-004	33.0493
Apartments Low Rise	4.4805e+007	0.2416	2.0646	0.8785	0.0132	0.1669	0.1669	0.1669	0.1669	0.1669	0.1669	0.0000	2,390.9669	2,390.9669	0.0458	0.0438	2,405.5179
<b>Total</b>		<b>0.7401</b>	<b>6.3445</b>	<b>2.8407</b>	<b>0.0404</b>	<b>0.5113</b>	<b>0.5113</b>	<b>0.5113</b>	<b>0.5113</b>	<b>0.5113</b>	<b>0.5113</b>	<b>0.0000</b>	<b>7,323.9925</b>	<b>7,323.9925</b>	<b>0.1404</b>	<b>0.1343</b>	<b>7,368.5651</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			



Apartments Low Rise	1.50869e+007	4,930.5409	0.1985	0.0411	4,947.4370
General Light Industry	1.01475e+006	331.6292	0.0134	2.7600e-003	332.7656
Government (Civic Center)	3.53929e+006	1,156.6706	0.0466	9.6300e-003	1,160.6344
Racquet Club	20250	6.6179	2.7000e-004	6.0000e-005	6.6406
Single Family Housing	2.20282e+007	7,199.0229	0.2898	0.0600	7,223.6927
Strip Mall	3.77409e+006	1,233.4065	0.0497	0.0103	1,237.6332
<b>Total</b>		<b>14,857.8879</b>	<b>0.5981</b>	<b>0.1237</b>	<b>14,908.8035</b>

### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.50869e+007	4,930.5409	0.1985	0.0411	4,947.4370
General Light Industry	1.01475e+006	331.6292	0.0134	2.7600e-003	332.7656
Government (Civic Center)	3.53929e+006	1,156.6706	0.0466	9.6300e-003	1,160.6344
Racquet Club	20250	6.6179	2.7000e-004	6.0000e-005	6.6406
Single Family Housing	2.20282e+007	7,199.0229	0.2898	0.0600	7,223.6927
Strip Mall	3.77409e+006	1,233.4065	0.0497	0.0103	1,237.6332
<b>Total</b>		<b>14,857.8879</b>	<b>0.5981</b>	<b>0.1237</b>	<b>14,908.8035</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	52.2130	0.6459	54.8530	2.8400e-003		0.6522	0.6522		0.6484	0.6484	0.0000	5,225.1968	5,225.1968	0.1899	0.0942	5,258.3817
Unmitigated	52.2130	0.6459	54.8530	2.8400e-003		0.6522	0.6522		0.6484	0.6484	0.0000	5,225.1968	5,225.1968	0.1899	0.0942	5,258.3817

## 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	9.5546					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	40.3849					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.5191	2.0000e-005	0.0283	0.0000		0.3587	0.3587		0.3549	0.3549	0.0000	5,137.2884	5,137.2884	0.0985	0.0942	5,168.5530
Landscaping	1.7543	0.6459	54.8247	2.8400e-003		0.2935	0.2935		0.2935	0.2935	0.0000	87.9085	87.9085	0.0914	0.0000	89.8286
<b>Total</b>	<b>52.2130</b>	<b>0.6459</b>	<b>54.8530</b>	<b>2.8400e-003</b>		<b>0.6522</b>	<b>0.6522</b>		<b>0.6484</b>	<b>0.6484</b>	<b>0.0000</b>	<b>5,225.1968</b>	<b>5,225.1968</b>	<b>0.1899</b>	<b>0.0942</b>	<b>5,258.3817</b>

**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	9.5546					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	40.3849					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.5191	2.0000e-005	0.0283	0.0000		0.3587	0.3587		0.3549	0.3549	0.0000	5,137.2884	5,137.2884	0.0985	0.0942	5,168.5530
Landscaping	1.7543	0.6459	54.8247	2.8400e-003		0.2935	0.2935		0.2935	0.2935	0.0000	87.9085	87.9085	0.0914	0.0000	89.8286
<b>Total</b>	<b>52.2130</b>	<b>0.6459</b>	<b>54.8530</b>	<b>2.8400e-003</b>		<b>0.6522</b>	<b>0.6522</b>		<b>0.6484</b>	<b>0.6484</b>	<b>0.0000</b>	<b>5,225.1968</b>	<b>5,225.1968</b>	<b>0.1899</b>	<b>0.0942</b>	<b>5,258.3817</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3,814.2197	18.5598	0.4644	4,347.9517
Unmitigated	3,814.2197	18.5632	0.4651	4,348.2377

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	270.715 / 170.668	1,857.5493	8.8926	0.2230	2,113.4363
General Light Industry	26.0734 / 0	119.2242	0.8541	0.0210	143.6650
Government (Civic Center)	46.9055 / 28.7486	318.8633	1.5407	0.0386	363.1894
Racquet Club	0.133072 / 0.0815603	0.9046	4.3700e-003	1.1000e-004	1.0304
Single Family Housing	201.456 / 127.005	1,382.3207	6.6175	0.1660	1,572.7425
Strip Mall	19.9114 / 12.2038	135.3577	0.6540	0.0164	154.1742
<b>Total</b>		<b>3,814.2197</b>	<b>18.5632</b>	<b>0.4651</b>	<b>4,348.2377</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	270.715 / 170.668	1,857.5493	8.8910	0.2227	2,113.2993
General Light Industry	26.0734 / 0	119.2242	0.8539	0.0210	143.6518
Government (Civic Center)	46.9055 / 28.7486	318.8633	1.5404	0.0386	363.1657
Racquet Club	0.133072 / 0.0815603	0.9046	4.3700e-003	1.1000e-004	1.0303
Single Family Housing	201.456 / 127.005	1,382.3207	6.6163	0.1657	1,572.6405
Strip Mall	19.9114 / 12.2038	135.3577	0.6539	0.0164	154.1641
<b>Total</b>		<b>3,814.2197</b>	<b>18.5598</b>	<b>0.4644</b>	<b>4,347.9516</b>



## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1,485.4168	87.7856	0.0000	3,328.9148
Unmitigated	1,485.4168	87.7856	0.0000	3,328.9148

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1911.3	387.9766	22.9288	0.0000	869.4806
General Light Industry	139.81	28.3802	1.6772	0.0000	63.6018
Government (Civic Center)	1345.83	273.1913	16.1451	0.0000	612.2394
Racquet Club	12.83	2.6044	0.1539	0.0000	5.8366
Single Family Housing	3625.63	735.9701	43.4946	0.0000	1,649.3565
Strip Mall	282.25	57.2942	3.3860	0.0000	128.4000
<b>Total</b>		<b>1,485.4168</b>	<b>87.7856</b>	<b>0.0000</b>	<b>3,328.9148</b>

## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1911.3	387.9766	22.9288	0.0000	869.4806
General Light Industry	139.81	28.3802	1.6772	0.0000	63.6018
Government (Civic Center)	1345.83	273.1913	16.1451	0.0000	612.2394
Racquet Club	12.83	2.6044	0.1539	0.0000	5.8366
Single Family Housing	3625.63	735.9701	43.4946	0.0000	1,649.3565
Strip Mall	282.25	57.2942	3.3860	0.0000	128.4000
<b>Total</b>		<b>1,485.4168</b>	<b>87.7856</b>	<b>0.0000</b>	<b>3,328.9148</b>

## 9.0 Operational Offroad

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

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## **ATTACHMENT 2**

CalEEMod Output – CPU Emissions without GHG Reduction  
Measures (BAU)

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## Uptown - 2020 BAU San Diego County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	2,372.79	1000sqft	54.47	2,372,790.00	0
Hotel	220.00	Room	7.33	319,440.00	0
Racquet Club	31.11	1000sqft	0.71	31,110.00	0
Apartments Low Rise	27,084.00	Dwelling Unit	1,692.75	27,084,000.00	77460
Single Family Housing	5,510.00	Dwelling Unit	1,788.96	9,918,000.00	15759
Strip Mall	4,784.44	1000sqft	109.84	4,784,440.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2005
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	720.49	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150

tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	155,000.00	10.00
tblConstructionPhase	NumDays	10,000.00	10.00
tblConstructionPhase	NumDays	15,500.00	10.00
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblFireplaces	NumberGas	14,896.20	24,375.60
tblFireplaces	NumberGas	3,030.50	4,959.00
tblFireplaces	NumberWood	9,479.40	0.00
tblFireplaces	NumberWood	1,928.50	0.00
tblProjectCharacteristics	OperationalYear	2014	2005
tblWoodstoves	NumberCatalytic	1,354.20	0.00
tblWoodstoves	NumberCatalytic	275.50	0.00
tblWoodstoves	NumberNoncatalytic	1,354.20	0.00
tblWoodstoves	NumberNoncatalytic	275.50	0.00

## 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	254.0343	3.8169	280.8935	0.0128		2.7986	2.7986		2.7816	2.7816	0.0000	23,500.8504	23,500.8504	1.0765	0.4236	23,654.7734
Energy	3.0313	26.1615	12.9101	0.1654		2.0944	2.0944		2.0944	2.0944	0.0000	112,627.4352	112,627.4352	3.9008	1.2381	113,093.1604
Mobile	751.0888	1,473.6988	7,897.4111	11.6942	360.5959	43.7983	404.3943	104.8236	43.7983	148.6219	0.0000	545,821.8789	545,821.8789	54.4887	0.0000	546,966.1405
Waste						0.0000	0.0000		0.0000	0.0000	7,666.1912	0.0000	7,666.1912	453.0589	0.0000	17,180.4286

Water						0.0000	0.0000		0.0000	0.0000	938.0639	19,287.40	20,225.465	97.1245	2.4356	23,020.117
												13	2			8
<b>Total</b>	<b>1,008.1544</b>	<b>1,503.6772</b>	<b>8,191.214</b>	<b>11.8723</b>	<b>360.5959</b>	<b>48.6913</b>	<b>409.2873</b>	<b>104.8236</b>	<b>48.6743</b>	<b>153.4979</b>	<b>8,604.255</b>	<b>701,237.5</b>	<b>709,841.82</b>	<b>609.6494</b>	<b>4.0973</b>	<b>723,914.62</b>
			<b>7</b>								<b>1</b>	<b>657</b>	<b>08</b>			<b>06</b>

### 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	228.2713	3.8169	280.8935	0.0128		2.7986	2.7986		2.7816	2.7816	0.0000	23,500.85	23,500.850	1.0765	0.4236	23,654.773
												04	4			4
Energy	3.0313	26.1615	12.9101	0.1654		2.0944	2.0944		2.0944	2.0944	0.0000	112,627.4	112,627.43	3.9008	1.2381	113,093.16
												352	52			04
Mobile	751.0888	1,473.6988	7,897.411	11.6942	360.5959	43.7983	404.3943	104.8236	43.7983	148.6219	0.0000	545,821.8	545,821.87	54.4887	0.0000	546,966.14
			<b>1</b>									789	89			05
Waste						0.0000	0.0000		0.0000	0.0000	7,666.191	0.0000	7,666.1912	453.0589	0.0000	17,180.428
											2					6
Water						0.0000	0.0000		0.0000	0.0000	938.0639	19,287.40	20,225.465	97.1069	2.4320	23,018.621
												13	2			2
<b>Total</b>	<b>982.3914</b>	<b>1,503.6772</b>	<b>8,191.214</b>	<b>11.8723</b>	<b>360.5959</b>	<b>48.6913</b>	<b>409.2873</b>	<b>104.8236</b>	<b>48.6743</b>	<b>153.4979</b>	<b>8,604.255</b>	<b>701,237.5</b>	<b>709,841.82</b>	<b>609.6318</b>	<b>4.0937</b>	<b>723,913.12</b>
			<b>7</b>								<b>1</b>	<b>657</b>	<b>08</b>			<b>40</b>

	ROG	NOx	CO	SO2	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	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00

## 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	751.0888	1,473.6988	7,897.4111	11.6942	360.5959	43.7983	404.3943	104.8236	43.7983	148.6219	0.0000	545,821.8789	545,821.8789	54.4887	0.0000	546,966.1405
Unmitigated	751.0888	1,473.6988	7,897.4111	11.6942	360.5959	43.7983	404.3943	104.8236	43.7983	148.6219	0.0000	545,821.8789	545,821.8789	54.4887	0.0000	546,966.1405

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	178,483.56	193,921.44	164,399.88	510,177,087	510,177,087
Government (Civic Center)	66,248.30	0.00	0.00	90,459,068	90,459,068
Hotel	1,797.40	1,801.80	1,309.00	3,283,569	3,283,569
Racquet Club	1,024.45	649.27	831.57	1,604,519	1,604,519
Single Family Housing	52,730.70	55,540.80	48,322.70	149,910,361	149,910,361
Strip Mall	212,046.38	201,137.86	97,746.11	299,011,907	299,011,907
<b>Total</b>	<b>512,330.79</b>	<b>453,051.16</b>	<b>312,609.26</b>	<b>1,054,446,510</b>	<b>1,054,446,510</b>

## 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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.477891	0.088801	0.251806	0.106955	0.021373	0.005547	0.013268	0.017971	0.001099	0.001361	0.008804	0.001096	0.004028

## 5.0 Energy Detail

### 4.4 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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	82,627.5613	82,627.5613	3.3258	0.6881	82,910.7123
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	82,627.5613	82,627.5613	3.3258	0.6881	82,910.7123
NaturalGas Mitigated	3.0313	26.1615	12.9101	0.1654		2.0944	2.0944		2.0944	2.0944	0.0000	29,999.8739	29,999.8739	0.5750	0.5500	30,182.4481
NaturalGas Unmitigated	3.0313	26.1615	12.9101	0.1654		2.0944	2.0944		2.0944	2.0944	0.0000	29,999.8739	29,999.8739	0.5750	0.5500	30,182.4481

### 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					
Government (Civic Center)	5.59029e+007	0.3014	2.7403	2.3019	0.0164		0.2083	0.2083		0.2083	0.2083	0.0000	2,983.1934	2,983.1934	0.0572	0.0547	3,001.3486
Hotel	1.96743e+007	0.1061	0.9644	0.8101	5.7900e-003		0.0733	0.0733		0.0733	0.0733	0.0000	1,049.8961	1,049.8961	0.0201	0.0193	1,056.2856
Racquet Club	382342	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.4032	20.4032	3.9000e-004	3.7000e-004	20.5274
Single Family Housing	1.65738e+008	0.8937	7.6370	3.2498	0.0488		0.6175	0.6175		0.6175	0.6175	0.0000	8,844.4280	8,844.4280	0.1695	0.1622	8,898.2537
Strip Mall	1.15305e+007	0.0622	0.5652	0.4748	3.3900e-003		0.0430	0.0430		0.0430	0.0430	0.0000	615.3114	615.3114	0.0118	0.0113	619.0561

Apartments Low Rise	3.08948e+008	1.6659	14.2358	6.0578	0.0909		1.1510	1.1510		1.1510	1.1510	0.0000	16,486.6419	16,486.6419	0.3160	0.3023	16,586.9768
<b>Total</b>		<b>3.0314</b>	<b>26.1615</b>	<b>12.9101</b>	<b>0.1654</b>		<b>2.0944</b>	<b>2.0944</b>		<b>2.0944</b>	<b>2.0944</b>	<b>0.0000</b>	<b>29,999.8739</b>	<b>29,999.8739</b>	<b>0.5750</b>	<b>0.5500</b>	<b>30,182.4481</b>

**Mitigated**

	Natural Gas 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					
Government (Civic Center)	5.59029e+007	0.3014	2.7403	2.3019	0.0164		0.2083	0.2083		0.2083	0.2083	0.0000	2,983.1934	2,983.1934	0.0572	0.0547	3,001.3486
Hotel	1.96743e+007	0.1061	0.9644	0.8101	5.7900e-003		0.0733	0.0733		0.0733	0.0733	0.0000	1,049.8961	1,049.8961	0.0201	0.0193	1,056.2856
Racquet Club	382342	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.4032	20.4032	3.9000e-004	3.7000e-004	20.5274
Single Family Housing	1.65738e+008	0.8937	7.6370	3.2498	0.0488		0.6175	0.6175		0.6175	0.6175	0.0000	8,844.4280	8,844.4280	0.1695	0.1622	8,898.2537
Strip Mall	1.15305e+007	0.0622	0.5652	0.4748	3.3900e-003		0.0430	0.0430		0.0430	0.0430	0.0000	615.3114	615.3114	0.0118	0.0113	619.0561
Apartments Low Rise	3.08948e+008	1.6659	14.2358	6.0578	0.0909		1.1510	1.1510		1.1510	1.1510	0.0000	16,486.6419	16,486.6419	0.3160	0.3023	16,586.9768
<b>Total</b>		<b>3.0314</b>	<b>26.1615</b>	<b>12.9101</b>	<b>0.1654</b>		<b>2.0944</b>	<b>2.0944</b>		<b>2.0944</b>	<b>2.0944</b>	<b>0.0000</b>	<b>29,999.8739</b>	<b>29,999.8739</b>	<b>0.5750</b>	<b>0.5500</b>	<b>30,182.4481</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9.95705e+007	32,540.5235	1.3098	0.2710	32,652.0345
Government (Civic Center)	3.73477e+007	12,205.5606	0.4913	0.1016	12,247.3870

Hotel	4.91618e+006	1,606.6513	0.0647	0.0134	1,612.1570
Racquet Club	291812	95.3667	3.8400e-003	7.9000e-004	95.6935
Single Family Housing	3.99434e+007	13,053.8607	0.5254	0.1087	13,098.5941
Strip Mall	7.07619e+007	23,125.5987	0.9308	0.1926	23,204.8463
<b>Total</b>		<b>82,627.5613</b>	<b>3.3258</b>	<b>0.6881</b>	<b>82,910.7123</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9.95705e+007	32,540.5235	1.3098	0.2710	32,652.0345
Government (Civic Center)	3.73477e+007	12,205.5606	0.4913	0.1016	12,247.3870
Hotel	4.91618e+006	1,606.6513	0.0647	0.0134	1,612.1570
Racquet Club	291812	95.3667	3.8400e-003	7.9000e-004	95.6935
Single Family Housing	3.99434e+007	13,053.8607	0.5254	0.1087	13,098.5941
Strip Mall	7.07619e+007	23,125.5987	0.9308	0.1926	23,204.8463
<b>Total</b>		<b>82,627.5613</b>	<b>3.3258</b>	<b>0.6881</b>	<b>82,910.7123</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	228.2713	3.8169	280.8935	0.0128		2.7986	2.7986		2.7816	2.7816	0.0000	23,500.8504	23,500.8504	1.0765	0.4236	23,654.7734
Unmitigated	254.0343	3.8169	280.8935	0.0128		2.7986	2.7986		2.7816	2.7816	0.0000	23,500.8504	23,500.8504	1.0765	0.4236	23,654.7734

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	65.7124					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	173.8330					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.3347	1.1000e-004	0.1274	0.0000		1.6131	1.6131		1.5961	1.5961	0.0000	23,105.3921	23,105.3921	0.4429	0.4236	23,246.0077
Landscaping	12.1543	3.8168	280.7662	0.0128		1.1856	1.1856		1.1856	1.1856	0.0000	395.4583	395.4583	0.6337	0.0000	408.7657
<b>Total</b>	<b>254.0343</b>	<b>3.8169</b>	<b>280.8935</b>	<b>0.0128</b>		<b>2.7986</b>	<b>2.7986</b>		<b>2.7816</b>	<b>2.7816</b>	<b>0.0000</b>	<b>23,500.8504</b>	<b>23,500.8504</b>	<b>1.0765</b>	<b>0.4236</b>	<b>23,654.7734</b>

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	39.9494					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	173.8330					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.3347	1.1000e-004	0.1274	0.0000		1.6131	1.6131		1.5961	1.5961	0.0000	23,105.3921	23,105.3921	0.4429	0.4236	23,246.0077
Landscaping	12.1543	3.8168	280.7662	0.0128		1.1856	1.1856		1.1856	1.1856	0.0000	395.4583	395.4583	0.6337	0.0000	408.7657
<b>Total</b>	<b>228.2713</b>	<b>3.8169</b>	<b>280.8935</b>	<b>0.0128</b>		<b>2.7986</b>	<b>2.7986</b>		<b>2.7816</b>	<b>2.7816</b>	<b>0.0000</b>	<b>23,500.8504</b>	<b>23,500.8504</b>	<b>1.0765</b>	<b>0.4236</b>	<b>23,654.7734</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	20,225.4652	97.1069	2.4320	23,018.6212
Unmitigated	20,225.4652	97.1245	2.4356	23,020.1178

### 7.2 Water by Land Use

#### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			



Apartments Low Rise	1764.63 / 1112.49	12,108.270 6	57.9654	1.4539	13,776.24 75
Government (Civic Center)	471.378 / 288.909	3,204.4199	15.4828	0.3881	3,649.875 9
Hotel	5.58069 / 0.620077	27.7698	0.1829	4.5100e-003	33.0088
Racquet Club	1.83994 / 1.12771	12.5079	0.0604	1.5100e-003	14.2467
Single Family Housing	358.999 / 226.325	2,463.3204	11.7925	0.2958	2,802.655 6
Strip Mall	354.396 / 217.21	2,409.1765	11.6404	0.2918	2,744.083 3
<b>Total</b>		<b>20,225.465 2</b>	<b>97.1245</b>	<b>2.4356</b>	<b>23,020.11 77</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1764.63 / 1112.49	12,108.270 6	57.9549	1.4517	13,775.35 44
Government (Civic Center)	471.378 / 288.909	3,204.4199	15.4800	0.3875	3,649.637 3
Hotel	5.58069 / 0.620077	27.7698	0.1829	4.5000e-003	33.0060
Racquet Club	1.83994 / 1.12771	12.5079	0.0604	1.5100e-003	14.2457
Single Family Housing	358.999 / 226.325	2,463.3204	11.7904	0.2953	2,802.473 9
Strip Mall	354.396 / 217.21	2,409.1765	11.6383	0.2914	2,743.903 9
<b>Total</b>		<b>20,225.465 2</b>	<b>97.1069</b>	<b>2.4320</b>	<b>23,018.62 12</b>

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7,666.1912	453.0589	0.0000	17,180.4286
Unmitigated	7,666.1912	453.0589	0.0000	17,180.4286

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	12458.6	2,528.9913	149.4591	0.0000	5,667.6326
Government (Civic Center)	13524.9	2,745.4325	162.2504	0.0000	6,152.6911
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.33	35.9964	2.1273	0.0000	80.6702
Single Family Housing	6461.19	1,311.5632	77.5112	0.0000	2,939.2976
Strip Mall	5023.66	1,019.7576	60.2660	0.0000	2,285.3425
<b>Total</b>		<b>7,666.1912</b>	<b>453.0589</b>	<b>0.0000</b>	<b>17,180.4286</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	12458.6	2,528.9913	149.4591	0.0000	5,667.6326
Government (Civic Center)	13524.9	2,745.4325	162.2504	0.0000	6,152.6911
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.33	35.9964	2.1273	0.0000	80.6702
Single Family Housing	6461.19	1,311.5632	77.5112	0.0000	2,939.2976
Strip Mall	5023.66	1,019.7576	60.2660	0.0000	2,285.3425
<b>Total</b>		<b>7,666.1912</b>	<b>453.0589</b>	<b>0.0000</b>	<b>17,180.4286</b>

## 9.0 Operational Offroad

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

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## Greater North Park - 2020 BAU San Diego County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	882.37	1000sqft	20.26	882,370.00	0
Hotel	205.00	Room	6.83	297,660.00	0
Racquet Club	27.46	1000sqft	0.63	27,460.00	0
Apartments Low Rise	30,352.00	Dwelling Unit	1,897.00	30,352,000.00	86807
Single Family Housing	5,116.00	Dwelling Unit	1,661.04	9,208,800.00	14632
Strip Mall	2,328.27	1000sqft	53.45	2,328,270.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2005
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	720.49	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	150

tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	155,000.00	10.00
tblConstructionPhase	NumDays	10,000.00	10.00
tblConstructionPhase	NumDays	15,500.00	10.00
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblFireplaces	NumberGas	16,693.60	27,316.80
tblFireplaces	NumberGas	2,813.80	4,604.40
tblFireplaces	NumberWood	10,623.20	0.00
tblFireplaces	NumberWood	1,790.60	0.00
tblProjectCharacteristics	OperationalYear	2014	2005
tblWoodstoves	NumberCatalytic	1,517.60	0.00
tblWoodstoves	NumberCatalytic	255.80	0.00
tblWoodstoves	NumberNoncatalytic	1,517.60	0.00
tblWoodstoves	NumberNoncatalytic	255.80	0.00

## 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	242.2283	4.1528	305.6075	0.0139		3.0452	3.0452		3.0267	3.0267	0.0000	25,572.9727	25,572.9727	1.1711	0.4610	25,740.4599



Energy	2.9397	25.2538	11.6620	0.1604		2.0311	2.0311		2.0311	2.0311	0.0000	95,054.2657	95,054.2657	3.2126	1.0827	95,457.3594
Mobile	599.9295	1,233.0549	6,543.1949	9.8758	305.9154	36.8803	342.7957	88.9282	36.8803	125.8085	0.0000	461,527.3272	461,527.3272	45.5309	0.0000	462,483.4767
Waste						0.0000	0.0000		0.0000	0.0000	5,623.6596	0.0000	5,623.6596	332.3488	0.0000	12,602.9836
Water						0.0000	0.0000		0.0000	0.0000	845.6273	17,411.7564	18,257.3837	87.5549	2.1958	20,776.7373
<b>Total</b>	<b>845.0976</b>	<b>1,262.4615</b>	<b>6,860.4644</b>	<b>10.0501</b>	<b>305.9154</b>	<b>41.9566</b>	<b>347.8720</b>	<b>88.9282</b>	<b>41.9381</b>	<b>130.8663</b>	<b>6,469.2869</b>	<b>599,566.3220</b>	<b>606,035.6089</b>	<b>469.8182</b>	<b>3.7394</b>	<b>617,061.0168</b>

### 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	223.6627	4.1528	305.6075	0.0139		3.0452	3.0452		3.0267	3.0267	0.0000	25,572.9727	25,572.9727	1.1711	0.4610	25,740.4599
Energy	2.9397	25.2538	11.6620	0.1604		2.0311	2.0311		2.0311	2.0311	0.0000	95,054.2657	95,054.2657	3.2126	1.0827	95,457.3594
Mobile	599.9295	1,233.0549	6,543.1949	9.8758	305.9154	36.8803	342.7957	88.9282	36.8803	125.8085	0.0000	461,527.3272	461,527.3272	45.5309	0.0000	462,483.4767
Waste						0.0000	0.0000		0.0000	0.0000	5,623.6596	0.0000	5,623.6596	332.3488	0.0000	12,602.9836
Water						0.0000	0.0000		0.0000	0.0000	845.6273	17,411.7564	18,257.3837	87.5390	2.1925	20,775.3882
<b>Total</b>	<b>826.5319</b>	<b>1,262.4615</b>	<b>6,860.4644</b>	<b>10.0501</b>	<b>305.9154</b>	<b>41.9566</b>	<b>347.8720</b>	<b>88.9282</b>	<b>41.9381</b>	<b>130.8663</b>	<b>6,469.2869</b>	<b>599,566.3220</b>	<b>606,035.6089</b>	<b>469.8024</b>	<b>3.7362</b>	<b>617,059.6678</b>

	ROG	NOx	CO	SO2	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	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00

## 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	599.9295	1,233.0549	6,543.1949	9.8758	305.9154	36.8803	342.7957	88.9282	36.8803	125.8085	0.0000	461,527.3272	461,527.3272	45.5309	0.0000	462,483.4767
Unmitigated	599.9295	1,233.0549	6,543.1949	9.8758	305.9154	36.8803	342.7957	88.9282	36.8803	125.8085	0.0000	461,527.3272	461,527.3272	45.5309	0.0000	462,483.4767

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	200,019.68	217,320.32	184,236.64	571,735,894	571,735,894
Government (Civic Center)	24,635.77	0.00	0.00	33,639,036	33,639,036
Hotel	1,674.85	1,678.95	1,219.75	3,059,689	3,059,689
Racquet Club	904.26	573.09	734.01	1,416,267	1,416,267
Single Family Housing	48,960.12	51,569.28	44,867.32	139,190,818	139,190,818
Strip Mall	103,188.93	97,880.47	47,566.56	145,509,287	145,509,287
Total	379,383.60	369,022.11	278,624.27	894,550,991	894,550,991

#### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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0.477891	0.088801	0.251806	0.106955	0.021373	0.005547	0.013268	0.017971	0.001099	0.001361	0.008804	0.001096	0.004028
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## 5.0 Energy Detail

### 4.4 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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	65,961.2096	65,961.2096	2.6550	0.5493	66,187.2477
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	65,961.2096	65,961.2096	2.6550	0.5493	66,187.2477
NaturalGas Mitigated	2.9397	25.2538	11.6620	0.1604		2.0311	2.0311		2.0311	2.0311	0.0000	29,093.0562	29,093.0562	0.5576	0.5334	29,270.1117
NaturalGas Unmitigated	2.9397	25.2538	11.6620	0.1604		2.0311	2.0311		2.0311	2.0311	0.0000	29,093.0562	29,093.0562	0.5576	0.5334	29,270.1117

### 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					
Government (Civic Center)	2.07886e+007	0.1121	1.0191	0.8560	6.1100e-003		0.0775	0.0775		0.0775	0.0775	0.0000	1,109.3609	1,109.3609	0.0213	0.0203	1,116.1122
Hotel	1.83329e+007	0.0989	0.8987	0.7549	5.3900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	978.3123	978.3123	0.0188	0.0179	984.2661
Racquet Club	337483	1.8200e-003	0.0165	0.0139	1.0000e-004		1.2600e-003	1.2600e-003		1.2600e-003	1.2600e-003	0.0000	18.0094	18.0094	3.5000e-004	3.3000e-004	18.1190

Single Family Housing	1.53887e+008	0.8298	7.0909	3.0174	0.0453		0.5733	0.5733		0.5733	0.5733	0.0000	8,211.9952	8,211.9952	0.1574	0.1506	8,261.9720
Strip Mall	5.61113e+006	0.0303	0.2751	0.2311	1.6500e-003		0.0209	0.0209		0.0209	0.0209	0.0000	299.4313	299.4313	5.7400e-003	5.4900e-003	301.2536
Apartments Low Rise	3.46226e+008	1.8669	15.9536	6.7888	0.1018		1.2899	1.2899		1.2899	1.2899	0.0000	18,475.9472	18,475.9472	0.3541	0.3387	18,588.3887
<b>Total</b>		<b>2.9397</b>	<b>25.2538</b>	<b>11.6620</b>	<b>0.1603</b>		<b>2.0311</b>	<b>2.0311</b>		<b>2.0311</b>	<b>2.0311</b>	<b>0.0000</b>	<b>29,093.0562</b>	<b>29,093.0562</b>	<b>0.5576</b>	<b>0.5334</b>	<b>29,270.1117</b>

**Mitigated**

	Natural Gas 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					
Government (Civic Center)	2.07886e+007	0.1121	1.0191	0.8560	6.1100e-003		0.0775	0.0775		0.0775	0.0775	0.0000	1,109.3609	1,109.3609	0.0213	0.0203	1,116.1122
Hotel	1.83329e+007	0.0989	0.8987	0.7549	5.3900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	978.3123	978.3123	0.0188	0.0179	984.2661
Racquet Club	337483	1.8200e-003	0.0165	0.0139	1.0000e-004		1.2600e-003	1.2600e-003		1.2600e-003	1.2600e-003	0.0000	18.0094	18.0094	3.5000e-004	3.3000e-004	18.1190
Single Family Housing	1.53887e+008	0.8298	7.0909	3.0174	0.0453		0.5733	0.5733		0.5733	0.5733	0.0000	8,211.9952	8,211.9952	0.1574	0.1506	8,261.9720
Strip Mall	5.61113e+006	0.0303	0.2751	0.2311	1.6500e-003		0.0209	0.0209		0.0209	0.0209	0.0000	299.4313	299.4313	5.7400e-003	5.4900e-003	301.2536
Apartments Low Rise	3.46226e+008	1.8669	15.9536	6.7888	0.1018		1.2899	1.2899		1.2899	1.2899	0.0000	18,475.9472	18,475.9472	0.3541	0.3387	18,588.3887
<b>Total</b>		<b>2.9397</b>	<b>25.2538</b>	<b>11.6620</b>	<b>0.1603</b>		<b>2.0311</b>	<b>2.0311</b>		<b>2.0311</b>	<b>2.0311</b>	<b>0.0000</b>	<b>29,093.0562</b>	<b>29,093.0562</b>	<b>0.5576</b>	<b>0.5334</b>	<b>29,270.1117</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Apartments Low Rise	1.11585e+008	36,466.9166	1.4678	0.3037	36,591.8827
Government (Civic Center)	1.38885e+007	4,538.8848	0.1827	0.0378	4,554.4388
Hotel	4.58099e+006	1,497.1068	0.0603	0.0125	1,502.2372
Racquet Club	257575	84.1777	3.3900e-003	7.0000e-004	84.4662
Single Family Housing	3.70872e+007	12,120.4267	0.4879	0.1009	12,161.9614
Strip Mall	3.44351e+007	11,253.6969	0.4530	0.0937	11,292.2615
<b>Total</b>		<b>65,961.2096</b>	<b>2.6550</b>	<b>0.5493</b>	<b>66,187.2477</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.11585e+008	36,466.9166	1.4678	0.3037	36,591.8827
Government (Civic Center)	1.38885e+007	4,538.8848	0.1827	0.0378	4,554.4388
Hotel	4.58099e+006	1,497.1068	0.0603	0.0125	1,502.2372
Racquet Club	257575	84.1777	3.3900e-003	7.0000e-004	84.4662
Single Family Housing	3.70872e+007	12,120.4267	0.4879	0.1009	12,161.9614
Strip Mall	3.44351e+007	11,253.6969	0.4530	0.0937	11,292.2615
<b>Total</b>		<b>65,961.2096</b>	<b>2.6550</b>	<b>0.5493</b>	<b>66,187.2477</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**



- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	223.6627	4.1528	305.6075	0.0139		3.0452	3.0452		3.0267	3.0267	0.0000	25,572.977	25,572.977	1.1711	0.4610	25,740.4599
Unmitigated	242.2283	4.1528	305.6075	0.0139		3.0452	3.0452		3.0267	3.0267	0.0000	25,572.977	25,572.977	1.1711	0.4610	25,740.4599

## 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	58.1552					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	168.3136					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.5406	1.2000e-004	0.1386	0.0000		1.7553	1.7553		1.7368	1.7368	0.0000	25,142.7271	25,142.7271	0.4819	0.4610	25,295.7416
Landscaping	13.2190	4.1527	305.4689	0.0139		1.2899	1.2899		1.2899	1.2899	0.0000	430.2456	430.2456	0.6892	0.0000	444.7183
<b>Total</b>	<b>242.2283</b>	<b>4.1528</b>	<b>305.6075</b>	<b>0.0139</b>		<b>3.0452</b>	<b>3.0452</b>		<b>3.0267</b>	<b>3.0267</b>	<b>0.0000</b>	<b>25,572.977</b>	<b>25,572.977</b>	<b>1.1711</b>	<b>0.4610</b>	<b>25,740.4599</b>

**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	39.5895						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	168.3136						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	2.5406	1.2000e-004	0.1386	0.0000			1.7553	1.7553		1.7368	1.7368	0.0000	25,142.7271	25,142.7271	0.4819	0.4610	25,295.7416
Landscaping	13.2190	4.1527	305.4689	0.0139			1.2899	1.2899		1.2899	1.2899	0.0000	430.2456	430.2456	0.6892	0.0000	444.7183
<b>Total</b>	<b>223.6627</b>	<b>4.1528</b>	<b>305.6075</b>	<b>0.0139</b>			<b>3.0452</b>	<b>3.0452</b>		<b>3.0267</b>	<b>3.0267</b>	<b>0.0000</b>	<b>25,572.9727</b>	<b>25,572.9727</b>	<b>1.1711</b>	<b>0.4610</b>	<b>25,740.4599</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	18,257.3837	87.5390	2.1925	20,775.3882
Unmitigated	18,257.3837	87.5549	2.1958	20,776.7373

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1977.55 / 1246.72	13,569.274 4	64.9596	1.6293	15,438.51 22
Government (Civic Center)	175.291 / 107.437	1,191.6284	5.7576	0.1443	1,357.280 2
Hotel	5.20019 / 0.577799	25.8764	0.1704	4.2000e-003	30.7582
Racquet Club	1.62407 / 0.995398	11.0404	0.0533	1.3400e-003	12.5752
Single Family Housing	333.328 / 210.142	2,287.1774	10.9493	0.2746	2,602.247 9
Strip Mall	172.461 / 105.702	1,172.3866	5.6646	0.1420	1,335.363 6
<b>Total</b>		<b>18,257.383 7</b>	<b>87.5549</b>	<b>2.1958</b>	<b>20,776.73 73</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1977.55 / 1246.72	13,569.274 4	64.9478	1.6269	15,437.51 13
Government (Civic Center)	175.291 / 107.437	1,191.6284	5.7566	0.1441	1,357.191 5
Hotel	5.20019 / 0.577799	25.8764	0.1704	4.2000e-003	30.7556
Racquet Club	1.62407 / 0.995398	11.0404	0.0533	1.3400e-003	12.5744
Single Family Housing	333.328 / 210.142	2,287.1774	10.9473	0.2742	2,602.079 2
Strip Mall	172.461 / 105.702	1,172.3866	5.6636	0.1418	1,335.276 3
<b>Total</b>		<b>18,257.383 7</b>	<b>87.5390</b>	<b>2.1925</b>	<b>20,775.38 82</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5,623.6596	332.3488	0.0000	12,602.9836
Unmitigated	5,623.6596	332.3488	0.0000	12,602.9836

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13961.9	2,834.1436	167.4931	0.0000	6,351.4984
Government (Civic Center)	5029.51	1,020.9451	60.3361	0.0000	2,288.0037
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.52	31.7722	1.8777	0.0000	71.2034
Single Family Housing	5999.12	1,217.7671	71.9680	0.0000	2,729.0947
Strip Mall	2444.68	496.2480	29.3274	0.0000	1,112.1236
<b>Total</b>		<b>5,623.6596</b>	<b>332.3488</b>	<b>0.0000</b>	<b>12,602.9836</b>

## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13961.9	2,834.1436	167.4931	0.0000	6,351.4984
Government (Civic Center)	5029.51	1,020.9451	60.3361	0.0000	2,288.0037
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.52	31.7722	1.8777	0.0000	71.2034
Single Family Housing	5999.12	1,217.7671	71.9680	0.0000	2,729.0947
Strip Mall	2444.68	496.2480	29.3274	0.0000	1,112.1236
<b>Total</b>		<b>5,623.6596</b>	<b>332.3488</b>	<b>0.0000</b>	<b>12,602.9836</b>

## 9.0 Operational Offroad

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

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## Golden Hills - 2020 BAU San Diego County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	222.29	1000sqft	5.10	222,290.00	0
Office Park	37.16	1000sqft	0.85	37,160.00	0
General Light Industry	102.56	1000sqft	2.35	102,560.00	0
Apartments Low Rise	6,740.00	Dwelling Unit	421.25	6,740,000.00	19276
Single Family Housing	2,097.00	Dwelling Unit	680.84	3,774,600.00	5997
Strip Mall	356.81	1000sqft	8.19	356,810.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2005
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	720.49	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	150

tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	155,000.00	10.00
tblConstructionPhase	NumDays	10,000.00	10.00
tblConstructionPhase	NumDays	15,500.00	10.00
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblFireplaces	NumberGas	3,707.00	6,066.00
tblFireplaces	NumberGas	1,153.35	1,887.30
tblFireplaces	NumberWood	2,359.00	0.00
tblFireplaces	NumberWood	733.95	0.00
tblProjectCharacteristics	OperationalYear	2014	2005
tblWoodstoves	NumberCatalytic	337.00	0.00
tblWoodstoves	NumberCatalytic	104.85	0.00
tblWoodstoves	NumberNoncatalytic	337.00	0.00
tblWoodstoves	NumberNoncatalytic	104.85	0.00

## 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	58.1671	1.0347	76.1418	3.4700e-003		0.7587	0.7587		0.7541	0.7541	0.0000	6,371.6102	6,371.6102	0.2918	0.1149	6,413.3401
Energy	0.8019	6.8787	3.1051	0.0437		0.5541	0.5541		0.5541	0.5541	0.0000	24,408.9971	24,408.9971	0.8151	0.2827	24,513.7455

Mobile	141.8578	297.5875	1,572.5035	2.3928	74.2620	8.9248	83.1868	21.5876	8.9248	30.5124	0.0000	111,882.5308	111,882.5308	10.9823	0.0000	112,113.1597
Waste						0.0000	0.0000		0.0000	0.0000	1,494.5413	0.0000	1,494.5413	88.3249	0.0000	3,349.3633
Water						0.0000	0.0000		0.0000	0.0000	214.6786	4,369.2386	4,583.9172	22.2254	0.5570	5,223.3280
<b>Total</b>	<b>200.8269</b>	<b>305.5008</b>	<b>1,651.7503</b>	<b>2.4400</b>	<b>74.2620</b>	<b>10.2376</b>	<b>84.4995</b>	<b>21.5876</b>	<b>10.2330</b>	<b>31.8206</b>	<b>1,709.2198</b>	<b>147,032.3767</b>	<b>148,741.5965</b>	<b>122.6395</b>	<b>0.9546</b>	<b>151,612.9366</b>

### 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	58.1671	1.0347	76.1418	3.4700e-003		0.7587	0.7587		0.7541	0.7541	0.0000	6,371.6102	6,371.6102	0.2918	0.1149	6,413.3401
Energy	0.8019	6.8787	3.1051	0.0437		0.5541	0.5541		0.5541	0.5541	0.0000	24,408.9971	24,408.9971	0.8151	0.2827	24,513.7455
Mobile	141.8578	297.5875	1,572.5035	2.3928	74.2620	8.9248	83.1868	21.5876	8.9248	30.5124	0.0000	111,882.5308	111,882.5308	10.9823	0.0000	112,113.1597
Waste						0.0000	0.0000		0.0000	0.0000	1,494.5413	0.0000	1,494.5413	88.3249	0.0000	3,349.3633
Water						0.0000	0.0000		0.0000	0.0000	214.6786	4,369.2386	4,583.9172	22.2214	0.5562	5,222.9855
<b>Total</b>	<b>200.8269</b>	<b>305.5008</b>	<b>1,651.7503</b>	<b>2.4400</b>	<b>74.2620</b>	<b>10.2376</b>	<b>84.4995</b>	<b>21.5876</b>	<b>10.2330</b>	<b>31.8206</b>	<b>1,709.2198</b>	<b>147,032.3767</b>	<b>148,741.5965</b>	<b>122.6355</b>	<b>0.9537</b>	<b>151,612.9341</b>

	ROG	NOx	CO	SO2	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	0.09	0.00

## 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	141.8578	297.5875	1,572.5035	2.3928	74.2620	8.9248	83.1868	21.5876	8.9248	30.5124	0.0000	111,882.5308	111,882.5308	10.9823	0.0000	112,113.1597
Unmitigated	141.8578	297.5875	1,572.5035	2.3928	74.2620	8.9248	83.1868	21.5876	8.9248	30.5124	0.0000	111,882.5308	111,882.5308	10.9823	0.0000	112,113.1597

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	44,416.60	48,258.40	40,911.80	126,960,330	126,960,330
General Light Industry	714.84	135.38	69.74	1,576,259	1,576,259
Government (Civic Center)	6,206.34	0.00	0.00	8,474,474	8,474,474
Office Park	424.37	60.94	28.24	791,623	791,623
Single Family Housing	20,068.29	21,137.76	18,390.69	57,052,999	57,052,999
Strip Mall	15,813.82	15,000.29	7,289.63	22,299,462	22,299,462
Total	87,644.26	84,592.77	66,690.10	217,155,147	217,155,147

#### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Office Park	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.477891	0.088801	0.251806	0.106955	0.021373	0.005547	0.013268	0.017971	0.001099	0.001361	0.008804	0.001096	0.004028

## 5.0 Energy Detail

### 4.4 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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	16,472.6049	16,472.6049	0.6630	0.1372	16,529.0538
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	16,472.6049	16,472.6049	0.6630	0.1372	16,529.0538
NaturalGas Mitigated	0.8019	6.8787	3.1051	0.0437		0.5541	0.5541		0.5541	0.5541	0.0000	7,936.3922	7,936.3922	0.1521	0.1455	7,984.6918
NaturalGas Unmitigated	0.8019	6.8787	3.1051	0.0437		0.5541	0.5541		0.5541	0.5541	0.0000	7,936.3922	7,936.3922	0.1521	0.1455	7,984.6918

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	7.68834e+007	0.4146	3.5427	1.5075	0.0226		0.2864	0.2864		0.2864	0.2864	0.0000	4,102.7901	4,102.7901	0.0786	0.0752	4,127.7590
General Light Industry	1.26046e+006	6.8000e-003	0.0618	0.0519	3.7000e-004		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	67.2631	67.2631	1.2900e-003	1.2300e-003	67.6724
Government (Civic Center)	5.23715e+006	0.0282	0.2567	0.2157	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.4744	279.4744	5.3600e-003	5.1200e-003	281.1752



Office Park	1.40465e+006	7.5700e-003	0.0689	0.0578	4.1000e-004	5.2300e-003	5.2300e-003	5.2300e-003	5.2300e-003	0.0000	74.9574	74.9574	1.4400e-003	1.3700e-003	75.4135
Single Family Housing	6.30768e+007	0.3401	2.9065	1.2368	0.0186	0.2350	0.2350	0.2350	0.2350	0.0000	3,366.0191	3,366.0191	0.0645	0.0617	3,386.5042
Strip Mall	859912	4.6400e-003	0.0422	0.0354	2.5000e-004	3.2000e-003	3.2000e-003	3.2000e-003	3.2000e-003	0.0000	45.8882	45.8882	8.8000e-004	8.4000e-004	46.1675
<b>Total</b>		<b>0.8019</b>	<b>6.8787</b>	<b>3.1051</b>	<b>0.0437</b>	<b>0.5541</b>	<b>0.5541</b>	<b>0.5541</b>	<b>0.5541</b>	<b>0.0000</b>	<b>7,936.3922</b>	<b>7,936.3922</b>	<b>0.1521</b>	<b>0.1455</b>	<b>7,984.6918</b>

**Mitigated**

	Natural Gas 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					
General Light Industry	1.26046e+006	6.8000e-003	0.0618	0.0519	3.7000e-004		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	67.2631	67.2631	1.2900e-003	1.2300e-003	67.6724
Government (Civic Center)	5.23715e+006	0.0282	0.2567	0.2157	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.4744	279.4744	5.3600e-003	5.1200e-003	281.1752
Office Park	1.40465e+006	7.5700e-003	0.0689	0.0578	4.1000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003	0.0000	74.9574	74.9574	1.4400e-003	1.3700e-003	75.4135
Single Family Housing	6.30768e+007	0.3401	2.9065	1.2368	0.0186		0.2350	0.2350		0.2350	0.2350	0.0000	3,366.0191	3,366.0191	0.0645	0.0617	3,386.5042
Strip Mall	859912	4.6400e-003	0.0422	0.0354	2.5000e-004		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	45.8882	45.8882	8.8000e-004	8.4000e-004	46.1675
Apartments Low Rise	7.68834e+007	0.4146	3.5427	1.5075	0.0226		0.2864	0.2864		0.2864	0.2864	0.0000	4,102.7901	4,102.7901	0.0786	0.0752	4,127.7590
<b>Total</b>		<b>0.8019</b>	<b>6.8787</b>	<b>3.1051</b>	<b>0.0437</b>		<b>0.5541</b>	<b>0.5541</b>		<b>0.5541</b>	<b>0.5541</b>	<b>0.0000</b>	<b>7,936.3922</b>	<b>7,936.3922</b>	<b>0.1521</b>	<b>0.1455</b>	<b>7,984.6918</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Apartments Low Rise	2.47787e+007	8,097.8854	0.3259	0.0674	8,125.6355
General Light Industry	962013	314.3942	0.0127	2.6200e-003	315.4716
Government (Civic Center)	3.49884e+006	1,143.4531	0.0460	9.5200e-003	1,147.3715
Office Park	685974	224.1822	9.0200e-003	1.8700e-003	224.9504
Single Family Housing	1.52017e+007	4,968.0483	0.2000	0.0414	4,985.0729
Strip Mall	5.27722e+006	1,724.6417	0.0694	0.0144	1,730.5518
<b>Total</b>		<b>16,472.6049</b>	<b>0.6630</b>	<b>0.1372</b>	<b>16,529.0538</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.47787e+007	8,097.8854	0.3259	0.0674	8,125.6355
General Light Industry	962013	314.3942	0.0127	2.6200e-003	315.4716
Government (Civic Center)	3.49884e+006	1,143.4531	0.0460	9.5200e-003	1,147.3715
Office Park	685974	224.1822	9.0200e-003	1.8700e-003	224.9504
Single Family Housing	1.52017e+007	4,968.0483	0.2000	0.0414	4,985.0729
Strip Mall	5.27722e+006	1,724.6417	0.0694	0.0144	1,730.5518
<b>Total</b>		<b>16,472.6049</b>	<b>0.6630</b>	<b>0.1372</b>	<b>16,529.0538</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	58.1671	1.0347	76.1418	3.4700e-003		0.7587	0.7587		0.7541	0.7541	0.0000	6,371.6102	6,371.6102	0.2918	0.1149	6,413.3401
Unmitigated	58.1671	1.0347	76.1418	3.4700e-003		0.7587	0.7587		0.7541	0.7541	0.0000	6,371.6102	6,371.6102	0.2918	0.1149	6,413.3401

## 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	10.3686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	43.8721					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6330	3.0000e-005	0.0345	0.0000		0.4373	0.4373		0.4327	0.4327	0.0000	6,264.4152	6,264.4152	0.1201	0.1149	6,302.5394
Landscaping	3.2934	1.0346	76.1072	3.4700e-003		0.3214	0.3214		0.3214	0.3214	0.0000	107.1950	107.1950	0.1717	0.0000	110.8007
<b>Total</b>	<b>58.1671</b>	<b>1.0347</b>	<b>76.1418</b>	<b>3.4700e-003</b>		<b>0.7587</b>	<b>0.7587</b>		<b>0.7541</b>	<b>0.7541</b>	<b>0.0000</b>	<b>6,371.6102</b>	<b>6,371.6102</b>	<b>0.2918</b>	<b>0.1149</b>	<b>6,413.3401</b>

**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	10.3686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	43.8721					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6330	3.0000e-005	0.0345	0.0000		0.4373	0.4373		0.4327	0.4327	0.0000	6,264.4152	6,264.4152	0.1201	0.1149	6,302.5394
Landscaping	3.2934	1.0346	76.1072	3.4700e-003		0.3214	0.3214		0.3214	0.3214	0.0000	107.1950	107.1950	0.1717	0.0000	110.8007
<b>Total</b>	<b>58.1671</b>	<b>1.0347</b>	<b>76.1418</b>	<b>3.4700e-003</b>		<b>0.7587</b>	<b>0.7587</b>		<b>0.7541</b>	<b>0.7541</b>	<b>0.0000</b>	<b>6,371.6102</b>	<b>6,371.6102</b>	<b>0.2918</b>	<b>0.1149</b>	<b>6,413.3401</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4,583.9172	22.2214	0.5562	5,222.9855
Unmitigated	4,583.9172	22.2254	0.5570	5,223.3280

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	439.138 / 276.848	3,013.2087	14.4250	0.3618	3,428.2938
General Light Industry	23.717 / 0	108.4491	0.7769	0.0191	130.6810
Government (Civic Center)	44.1601 / 27.0658	300.1996	1.4505	0.0364	341.9312
Office Park	6.60459 / 4.04797	44.8979	0.2169	5.4400e-003	51.1393
Single Family Housing	136.628 / 86.135	937.4924	4.4880	0.1126	1,066.6368
Strip Mall	26.4298 / 16.1989	179.6696	0.8681	0.0218	204.6460
<b>Total</b>		<b>4,583.9171</b>	<b>22.2254</b>	<b>0.5570</b>	<b>5,223.3280</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	439.138 / 276.848	3,013.2087	14.4224	0.3613	3,428.0715
General Light Industry	23.717 / 0	108.4491	0.7767	0.0191	130.6690
Government (Civic Center)	44.1601 / 27.0658	300.1996	1.4502	0.0363	341.9088
Office Park	6.60459 / 4.04797	44.8979	0.2169	5.4300e-003	51.1359
Single Family Housing	136.628 / 86.135	937.4924	4.4872	0.1124	1,066.5677
Strip Mall	26.4298 / 16.1989	179.6696	0.8680	0.0217	204.6326
<b>Total</b>		<b>4,583.9171</b>	<b>22.2214</b>	<b>0.5562</b>	<b>5,222.9855</b>



## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1,494.5413	88.3249	0.0000	3,349.3633
Unmitigated	1,494.5413	88.3249	0.0000	3,349.3633

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3100.4	629.3532	37.1937	0.0000	1,410.4210
General Light Industry	127.17	25.8144	1.5256	0.0000	57.8517
Government (Civic Center)	1267.05	257.1997	15.2001	0.0000	576.4011
Office Park	34.56	7.0154	0.4146	0.0000	15.7219
Single Family Housing	2458.77	499.1081	29.4964	0.0000	1,118.5334
Strip Mall	374.65	76.0506	4.4945	0.0000	170.4342
<b>Total</b>		<b>1,494.5413</b>	<b>88.3249</b>	<b>0.0000</b>	<b>3,349.3633</b>

## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3100.4	629.3532	37.1937	0.0000	1,410.4210
General Light Industry	127.17	25.8144	1.5256	0.0000	57.8517
Government (Civic Center)	1267.05	257.1997	15.2001	0.0000	576.4011
Office Park	34.56	7.0154	0.4146	0.0000	15.7219
Single Family Housing	2458.77	499.1081	29.4964	0.0000	1,118.5334
Strip Mall	374.65	76.0506	4.4945	0.0000	170.4342
<b>Total</b>		<b>1,494.5413</b>	<b>88.3249</b>	<b>0.0000</b>	<b>3,349.3633</b>

## 9.0 Operational Offroad

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

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## **ATTACHMENT 3**

CalEEMod Output – CPU Emissions with GHG Reduction Measures

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## Uptown - 2020 CPU Buildout San Diego County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	2,372.79	1000sqft	54.47	2,372,787.00	0
Hotel	220.00	Room	7.33	319,440.00	0
Racquet Club	31.11	1000sqft	0.71	31,111.00	0
Apartments Low Rise	27,084.00	Dwelling Unit	1,692.75	27,084,000.00	77460
Single Family Housing	5,510.00	Dwelling Unit	1,788.96	9,918,000.00	15759
Strip Mall	4,784.44	1000sqft	109.84	4,784,437.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2020
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	539.36	<b>CH4 Intensity (lb/MWhr)</b>	0.022	<b>N2O Intensity (lb/MWhr)</b>	0.005

#### 1.3 User Entered Comments & Non-Default Data

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	150

tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	155,000.00	10.00
tblConstructionPhase	NumDays	10,000.00	10.00
tblConstructionPhase	NumDays	15,500.00	10.00
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblFireplaces	NumberGas	14,896.20	24,375.60
tblFireplaces	NumberGas	3,030.50	4,959.00
tblFireplaces	NumberWood	9,479.40	0.00
tblFireplaces	NumberWood	1,928.50	0.00
tblLandUse	LandUseSquareFeet	2,372,790.00	2,372,787.00
tblLandUse	LandUseSquareFeet	31,110.00	31,111.00
tblLandUse	LandUseSquareFeet	4,784,440.00	4,784,437.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	539.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblWoodstoves	NumberCatalytic	1,354.20	0.00
tblWoodstoves	NumberCatalytic	275.50	0.00
tblWoodstoves	NumberNoncatalytic	1,354.20	0.00
tblWoodstoves	NumberNoncatalytic	275.50	0.00

## 2.0 Emissions Summary

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### 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	223.5175	2.8092	243.0145	0.0128		2.9485	2.9485		2.9315	2.9315	0.0000	23,500.8505	23,500.8505	0.8287	0.4236	23,649.5686
Energy	2.8314	24.4325	12.0356	0.1544		1.9562	1.9562		1.9562	1.9562	0.0000	88,028.3425	88,028.3425	2.9847	1.0700	88,422.7213
Mobile	239.4278	466.7285	2,270.5877	5.8056	396.4956	6.7563	403.2518	106.0430	6.2346	112.2776	0.0000	402,897.0236	402,897.0236	15.8533	0.0000	403,229.9418
Waste						0.0000	0.0000		0.0000	0.0000	7,666.1912	0.0000	7,666.1912	453.0589	0.0000	17,180.4286
Water						0.0000	0.0000		0.0000	0.0000	938.0639	14,438.5803	15,376.6442	96.9371	2.4088	18,159.0630
<b>Total</b>	<b>465.7767</b>	<b>493.9702</b>	<b>2,525.6378</b>	<b>5.9728</b>	<b>396.4956</b>	<b>11.6610</b>	<b>408.1565</b>	<b>106.0430</b>	<b>11.1223</b>	<b>117.1653</b>	<b>8,604.2551</b>	<b>528,864.7969</b>	<b>537,469.0520</b>	<b>569.6627</b>	<b>3.9024</b>	<b>550,641.7232</b>

**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	223.5175	2.8092	243.0145	0.0128		2.9485	2.9485		2.9315	2.9315	0.0000	23,500.8505	23,500.8505	0.8287	0.4236	23,649.5686
Energy	2.2660	19.5541	9.6362	0.1236		1.5656	1.5656		1.5656	1.5656	0.0000	79,821.3732	79,821.3732	2.7710	0.9432	80,171.9570
Mobile	238.0561	459.2922	2,241.8224	5.6938	388.5657	6.6353	395.2010	103.9221	6.1230	110.0452	0.0000	395,131.2166	395,131.2166	15.5746	0.0000	395,458.2835
Waste						0.0000	0.0000		0.0000	0.0000	7,666.1912	0.0000	7,666.1912	453.0589	0.0000	17,180.4286
Water						0.0000	0.0000		0.0000	0.0000	750.4511	12,293.1993	13,043.6504	77.5800	1.9340	15,272.3546
<b>Total</b>	<b>463.8395</b>	<b>481.6555</b>	<b>2,494.4731</b>	<b>5.8302</b>	<b>388.5657</b>	<b>11.1494</b>	<b>399.7150</b>	<b>103.9221</b>	<b>10.6201</b>	<b>114.5422</b>	<b>8,416.6423</b>	<b>510,746.6395</b>	<b>519,163.2819</b>	<b>549.8131</b>	<b>3.3008</b>	<b>531,732.5923</b>



Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

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

### 4.4 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					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	57,396.1320	57,396.1320	2.3411	0.5321	57,610.2395
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	60,007.5869	60,007.5869	2.4477	0.5563	60,231.4360
NaturalGas Mitigated	2.2660	19.5541	9.6362	0.1236		1.5656	1.5656		1.5656	1.5656	0.0000	22,425.2412	22,425.2412	0.4298	0.4111	22,561.7175
NaturalGas Unmitigated	2.8314	24.4325	12.0356	0.1544		1.9562	1.9562		1.9562	1.9562	0.0000	28,020.7556	28,020.7556	0.5371	0.5137	28,191.2853

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	Natural Gas 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					
Government (Civic Center)	4.98997e+007	0.2691	2.4461	2.0547	0.0147		0.1859	0.1859		0.1859	0.1859	0.0000	2,662.8386	2,662.8386	0.0510	0.0488	2,679.0442
Hotel	1.94379e+007	0.1048	0.9528	0.8004	5.7200e-003		0.0724	0.0724		0.0724	0.0724	0.0000	1,037.2817	1,037.2817	0.0199	0.0190	1,043.5944
Racquet Club	366799	1.9800e-003	0.0180	0.0151	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	19.5738	19.5738	3.8000e-004	3.6000e-004	19.6929
Single Family Housing	1.52371e+008	0.8216	7.0210	2.9877	0.0448		0.5677	0.5677		0.5677	0.5677	0.0000	8,131.0824	8,131.0824	0.1559	0.1491	8,180.5668
Strip Mall	1.09564e+007	0.0591	0.5371	0.4511	3.2200e-003		0.0408	0.0408		0.0408	0.0408	0.0000	584.6731	584.6731	0.0112	0.0107	588.2314
Apartments Low Rise	2.92058e+008	1.5748	13.4576	5.7266	0.0859		1.0881	1.0881		1.0881	1.0881	0.0000	15,585.3061	15,585.3061	0.2987	0.2857	15,680.1556
<b>Total</b>		<b>2.8314</b>	<b>24.4325</b>	<b>12.0356</b>	<b>0.1544</b>		<b>1.9562</b>	<b>1.9562</b>		<b>1.9562</b>	<b>1.9562</b>	<b>0.0000</b>	<b>28,020.7556</b>	<b>28,020.7556</b>	<b>0.5371</b>	<b>0.5137</b>	<b>28,191.2853</b>

**Mitigated**

	Natural Gas 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					
Government (Civic Center)	3.95967e+007	0.2135	1.9410	1.6305	0.0117		0.1475	0.1475		0.1475	0.1475	0.0000	2,113.0327	2,113.0327	0.0405	0.0387	2,125.8923
Hotel	1.53378e+007	0.0827	0.7519	0.6316	4.5100e-003		0.0571	0.0571		0.0571	0.0571	0.0000	818.4809	818.4809	0.0157	0.0150	823.4620
Racquet Club	330358	1.7800e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	17.6292	17.6292	3.4000e-004	3.2000e-004	17.7364
Single Family Housing	1.21331e+008	0.6542	5.5908	2.3790	0.0357		0.4520	0.4520		0.4520	0.4520	0.0000	6,474.6979	6,474.6979	0.1241	0.1187	6,514.1018
Strip Mall	9.4751e+006	0.0511	0.4645	0.3902	2.7900e-003		0.0353	0.0353		0.0353	0.0353	0.0000	505.6274	505.6274	9.6900e-003	9.2700e-003	508.7045
Apartments Low Rise	2.34162e+008	1.2626	10.7898	4.5914	0.0689		0.8724	0.8724		0.8724	0.8724	0.0000	12,495.7733	12,495.7733	0.2395	0.2291	12,571.8205

Total		2.2660	19.5541	9.6362	0.1236		1.5656	1.5656		1.5656	1.5656	0.0000	22,425.241 2	22,425.24 12	0.4298	0.4111	22,561.717 5
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### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9.83428e+007	24,059.5288	0.9814	0.2230	24,149.2792
Government (Civic Center)	3.55681e+007	8,701.7152	0.3549	0.0807	8,734.1756
Hotel	4.66063e+006	1,140.2211	0.0465	0.0106	1,144.4745
Racquet Club	279999	68.5016	2.7900e-003	6.4000e-004	68.7572
Single Family Housing	3.92547e+007	9,603.6527	0.3917	0.0890	9,639.4776
Strip Mall	6.71735e+007	16,433.9675	0.6703	0.1524	16,495.2719
<b>Total</b>		<b>60,007.5869</b>	<b>2.4477</b>	<b>0.5563</b>	<b>60,231.4360</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9.70518e+007	23,743.6930	0.9685	0.2201	23,832.2652
Government (Civic Center)	3.20848e+007	7,849.5276	0.3202	0.0728	7,878.8090
Hotel	4.17932e+006	1,022.4696	0.0417	9.4800e-003	1,026.2838

Racquet Club	268120	65.5953	2.6800e-003	6.1000e-004	65.8400
Single Family Housing	3.86497e+007	9,455.6267	0.3857	0.0877	9,490.8995
Strip Mall	6.23717e+007	15,259.2198	0.6224	0.1415	15,316.1419
<b>Total</b>		<b>57,396.1320</b>	<b>2.3412</b>	<b>0.5321</b>	<b>57,610.2395</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	223.5175	2.8092	243.0145	0.0128		2.9485	2.9485		2.9315	2.9315	0.0000	23,500.8505	23,500.8505	0.8287	0.4236	23,649.5686
Unmitigated	223.5175	2.8092	243.0145	0.0128		2.9485	2.9485		2.9315	2.9315	0.0000	23,500.8505	23,500.8505	0.8287	0.4236	23,649.5686

### 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	39.9494				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	173.8329				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	2.3347	1.1000e-004	0.1274	0.0000	1.6131	1.6131		1.5961	1.5961	0.0000	23,105.3921	23,105.3921	0.4429	0.4236	23,246.0077	
Landscaping	7.4005	2.8091	242.8872	0.0128	1.3354	1.3354		1.3354	1.3354	0.0000	395.4584	395.4584	0.3858	0.0000	403.5610	
<b>Total</b>	<b>223.5175</b>	<b>2.8092</b>	<b>243.0145</b>	<b>0.0128</b>		<b>2.9485</b>	<b>2.9485</b>		<b>2.9315</b>	<b>2.9315</b>	<b>0.0000</b>	<b>23,500.8505</b>	<b>23,500.8505</b>	<b>0.8287</b>	<b>0.4236</b>	<b>23,649.5686</b>

**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	39.9494					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	173.8329					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.3347	1.1000e-004	0.1274	0.0000	1.6131	1.6131		1.5961	1.5961	0.0000	23,105.3921	23,105.3921	0.4429	0.4236	23,246.0077	
Landscaping	7.4005	2.8091	242.8872	0.0128	1.3354	1.3354		1.3354	1.3354	0.0000	395.4584	395.4584	0.3858	0.0000	403.5610	
<b>Total</b>	<b>223.5175</b>	<b>2.8092</b>	<b>243.0145</b>	<b>0.0128</b>		<b>2.9485</b>	<b>2.9485</b>		<b>2.9315</b>	<b>2.9315</b>	<b>0.0000</b>	<b>23,500.8505</b>	<b>23,500.8505</b>	<b>0.8287</b>	<b>0.4236</b>	<b>23,649.5686</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
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Category	MT/yr			
Mitigated	13,043.650	77.5800	1.9340	15,272.354
	4			6
Unmitigated	15,376.644	96.9371	2.4088	18,159.063
	2			0

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1764.63 / 1112.49	9,205.0132	57.8532	1.4379	10,865.6651
Government (Civic Center)	471.378 / 288.909	2,436.4297	15.4531	0.3839	2,879.9480
Hotel	5.58069 / 0.620077	21.2336	0.1826	4.4700e-003	26.4561
Racquet Club	1.83994 / 1.12771	9.5102	0.0603	1.5000e-003	11.2414
Single Family Housing	358.999 / 226.325	1,872.6784	11.7697	0.2925	2,210.5234
Strip Mall	354.396 / 217.21	1,831.7790	11.6181	0.2886	2,165.2291
<b>Total</b>		<b>15,376.6442</b>	<b>96.9371</b>	<b>2.4088</b>	<b>18,159.0630</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Apartments Low Rise	1411.71 / 1112.49	7,812.6833	46.3008	1.1544	9,142.878
Government (Civic Center)	377.102 / 288.909	2,064.5032	12.3672	0.3082	2,419.748
Hotel	4.46455 / 0.620077	16.8304	0.1461	3.5800e-003	21.0078
Racquet Club	1.47195 / 1.12771	8.0584	0.0483	1.2000e-003	9.4451
Single Family Housing	287.199 / 226.325	1,589.4213	9.4195	0.2349	1,860.037
Strip Mall	283.516 / 217.21	1,552.1538	9.2980	0.2317	1,819.237
<b>Total</b>		<b>13,043.650</b>	<b>77.5800</b>	<b>1.9339</b>	<b>15,272.35</b>
		<b>4</b>			<b>46</b>

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7,666.1912	453.0589	0.0000	17,180.4286
Unmitigated	7,666.1912	453.0589	0.0000	17,180.4286

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
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Land Use	tons	MT/yr			
Apartments Low Rise	12458.6	2,528.9913	149.4591	0.0000	5,667.6326
Government (Civic Center)	13524.9	2,745.4325	162.2504	0.0000	6,152.6911
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.33	35.9964	2.1273	0.0000	80.6702
Single Family Housing	6461.19	1,311.5632	77.5112	0.0000	2,939.2976
Strip Mall	5023.66	1,019.7576	60.2660	0.0000	2,285.3425
<b>Total</b>		<b>7,666.1912</b>	<b>453.0589</b>	<b>0.0000</b>	<b>17,180.4286</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	12458.6	2,528.9913	149.4591	0.0000	5,667.6326
Government (Civic Center)	13524.9	2,745.4325	162.2504	0.0000	6,152.6911
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.33	35.9964	2.1273	0.0000	80.6702
Single Family Housing	6461.19	1,311.5632	77.5112	0.0000	2,939.2976
Strip Mall	5023.66	1,019.7576	60.2660	0.0000	2,285.3425
<b>Total</b>		<b>7,666.1912</b>	<b>453.0589</b>	<b>0.0000</b>	<b>17,180.4286</b>

**9.0 Operational Offroad**

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

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## Greater North Park - 2020 Project Buildout San Diego County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	882.37	1000sqft	20.26	882,374.00	0
Hotel	205.00	Room	6.83	297,660.00	0
Racquet Club	27.46	1000sqft	0.63	27,463.00	0
Apartments Low Rise	30,352.00	Dwelling Unit	1,897.00	30,352,000.00	86807
Single Family Housing	5,116.00	Dwelling Unit	1,661.04	9,208,800.00	14632
Strip Mall	2,328.27	1000sqft	53.45	2,328,274.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2020
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	539.36	<b>CH4 Intensity (lb/MWhr)</b>	0.022	<b>N2O Intensity (lb/MWhr)</b>	0.005

#### 1.3 User Entered Comments & Non-Default Data

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	150



tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	155,000.00	10.00
tblConstructionPhase	NumDays	10,000.00	10.00
tblConstructionPhase	NumDays	15,500.00	10.00
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblFireplaces	NumberGas	16,693.60	27,316.80
tblFireplaces	NumberGas	2,813.80	4,604.40
tblFireplaces	NumberWood	10,623.20	0.00
tblFireplaces	NumberWood	1,790.60	0.00
tblLandUse	LandUseSquareFeet	882,370.00	882,374.00
tblLandUse	LandUseSquareFeet	27,460.00	27,463.00
tblLandUse	LandUseSquareFeet	2,328,270.00	2,328,274.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	539.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblWoodstoves	NumberCatalytic	1,517.60	0.00
tblWoodstoves	NumberCatalytic	255.80	0.00
tblWoodstoves	NumberNoncatalytic	1,517.60	0.00
tblWoodstoves	NumberNoncatalytic	255.80	0.00

## 2.0 Emissions Summary

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### 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	218.4927	3.0565	264.3998	0.0139		3.2083	3.2083		3.1898	3.1898	0.0000	25,572.9728	25,572.9728	0.9015	0.4610	25,734.7996
Energy	2.7559	23.6751	10.9344	0.1503		1.9041	1.9041		1.9041	1.9041	0.0000	75,509.8476	75,509.8476	2.4903	0.9472	75,855.7693
Mobile	188.8371	388.0184	1,856.6865	4.9072	336.3713	5.6724	342.0437	89.9627	5.2342	95.1969	0.0000	340,580.7344	340,580.7344	13.2886	0.0000	340,859.7946
Waste						0.0000	0.0000		0.0000	0.0000	5,623.6596	0.0000	5,623.6596	332.3488	0.0000	12,602.9836
Water						0.0000	0.0000		0.0000	0.0000	845.6273	13,034.4695	13,880.0968	87.3857	2.1716	16,388.4063
<b>Total</b>	<b>410.0857</b>	<b>414.7499</b>	<b>2,132.0207</b>	<b>5.0714</b>	<b>336.3713</b>	<b>10.7848</b>	<b>347.1561</b>	<b>89.9627</b>	<b>10.3282</b>	<b>100.2909</b>	<b>6,469.2869</b>	<b>454,698.0243</b>	<b>461,167.3112</b>	<b>436.4148</b>	<b>3.5798</b>	<b>471,441.7534</b>

**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	218.4927	3.0565	264.3998	0.0139		3.2083	3.2083		3.1898	3.1898	0.0000	25,572.9728	25,572.9728	0.9015	0.4610	25,734.7996
Energy	2.2139	19.0188	8.7849	0.1208		1.5296	1.5296		1.5296	1.5296	0.0000	68,676.4209	68,676.4209	2.3275	0.8352	68,984.2161
Mobile	187.6733	381.7097	1,832.2832	4.8123	329.6438	5.5698	335.2136	88.1635	5.1396	93.3030	0.0000	333,992.5288	333,992.5288	13.0522	0.0000	334,266.6251
Waste						0.0000	0.0000		0.0000	0.0000	5,623.6596	0.0000	5,623.6596	332.3488	0.0000	12,602.9836
Water						0.0000	0.0000		0.0000	0.0000	676.5018	11,100.4938	11,776.9957	69.9360	1.7436	13,786.1535
<b>Total</b>	<b>408.3800</b>	<b>403.7849</b>	<b>2,105.4678</b>	<b>4.9470</b>	<b>329.6438</b>	<b>10.3077</b>	<b>339.9515</b>	<b>88.1635</b>	<b>9.8590</b>	<b>98.0225</b>	<b>6,300.1614</b>	<b>439,342.4164</b>	<b>445,642.5778</b>	<b>418.5660</b>	<b>3.0397</b>	<b>455,374.7779</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Percent Reduction	0.42	2.64	1.25	2.45	2.00	4.42	2.08	2.00	4.54	2.26	2.61	3.38	3.37	4.09	15.09	3.41
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## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	187.6733	381.7097	1,832.2832	4.8123	329.6438	5.5698	335.2136	88.1635	5.1396	93.3030	0.0000	333,992.5288	333,992.5288	13.0522	0.0000	334,266.6251
Unmitigated	188.8371	388.0184	1,856.6865	4.9072	336.3713	5.6724	342.0437	89.9627	5.2342	95.1969	0.0000	340,580.7344	340,580.7344	13.2886	0.0000	340,859.7946

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	200,019.68	217,320.32	184,236.64	571,735,894	560,301,176
Government (Civic Center)	24,635.77	0.00	0.00	33,639,036	32,966,255
Hotel	1,674.85	1,678.95	1,219.75	3,059,689	2,998,495
Racquet Club	904.26	573.09	734.01	1,416,267	1,387,942
Single Family Housing	48,960.12	51,569.28	44,867.32	139,190,818	136,407,001
Strip Mall	103,188.93	97,880.47	47,566.56	145,509,287	142,599,101
Total	379,383.60	369,022.11	278,624.27	894,550,991	876,659,971

### 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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16

Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

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

### 4.4 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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46,766.62	46,766.622	1.9076	0.4335	46,941.077
												21	1			9
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	48,235.73	48,235.739	1.9675	0.4472	48,415.675
												95	5			5
NaturalGas Mitigated	2.2139	19.0188	8.7849	0.1208		1.5296	1.5296		1.5296	1.5296	0.0000	21,909.79	21,909.798	0.4199	0.4017	22,043.138
												88	8			2
NaturalGas Unmitigated	2.7559	23.6751	10.9344	0.1503		1.9041	1.9041		1.9041	1.9041	0.0000	27,274.10	27,274.108	0.5228	0.5000	27,440.093
												81	1			8

### 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					
Government (Civic Center)	1.85563e+007	0.1001	0.9096	0.7641	5.4600e-003		0.0691	0.0691		0.0691	0.0691	0.0000	990.2362	990.2362	0.0190	0.0182	996.2626
Hotel	1.81126e+007	0.0977	0.8879	0.7458	5.3300e-003		0.0675	0.0675		0.0675	0.0675	0.0000	966.5579	966.5579	0.0185	0.0177	972.4402
Racquet Club	323789	1.7500e-003	0.0159	0.0133	1.0000e-004		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	17.2786	17.2786	3.3000e-004	3.2000e-004	17.3838
Single Family Housing	1.41475e+008	0.7629	6.5190	2.7740	0.0416		0.5271	0.5271		0.5271	0.5271	0.0000	7,549.6584	7,549.6584	0.1447	0.1384	7,595.6043
Strip Mall	5.33175e+006	0.0288	0.2614	0.2195	1.5700e-003		0.0199	0.0199		0.0199	0.0199	0.0000	284.5224	284.5224	5.4500e-003	5.2200e-003	286.2539
Apartments Low Rise	3.27298e+008	1.7648	15.0814	6.4176	0.0963		1.2193	1.2193		1.2193	1.2193	0.0000	17,465.8547	17,465.8547	0.3348	0.3202	17,572.1490
<b>Total</b>		<b>2.7559</b>	<b>23.6751</b>	<b>10.9344</b>	<b>0.1503</b>		<b>1.9041</b>	<b>1.9041</b>		<b>1.9041</b>	<b>1.9041</b>	<b>0.0000</b>	<b>27,274.1081</b>	<b>27,274.1081</b>	<b>0.5228</b>	<b>0.5000</b>	<b>27,440.0938</b>

**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					
Government (Civic Center)	1.47843e+007	0.0797	0.7247	0.6088	4.3500e-003		0.0551	0.0551		0.0551	0.0551	0.0000	788.9484	788.9484	0.0151	0.0145	793.7498
Hotel	1.43512e+007	0.0774	0.7035	0.5909	4.2200e-003		0.0535	0.0535		0.0535	0.0535	0.0000	765.8363	765.8363	0.0147	0.0140	770.4971
Racquet Club	292120	1.5800e-003	0.0143	0.0120	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	15.5886	15.5886	3.0000e-004	2.9000e-004	15.6835
Single Family Housing	1.13102e+008	0.6099	5.2116	2.2177	0.0333		0.4214	0.4214		0.4214	0.4214	0.0000	6,035.5599	6,035.5599	0.1157	0.1107	6,072.2913
Strip Mall	4.62209e+006	0.0249	0.2266	0.1903	1.3600e-003		0.0172	0.0172		0.0172	0.0172	0.0000	246.6523	246.6523	4.7300e-003	4.5200e-003	248.1534
Apartments Low Rise	2.63422e+008	1.4204	12.1381	5.1651	0.0775		0.9814	0.9814		0.9814	0.9814	0.0000	14,057.2133	14,057.2133	0.2694	0.2577	14,142.7631
<b>Total</b>		<b>2.2139</b>	<b>19.0188</b>	<b>8.7849</b>	<b>0.1208</b>		<b>1.5296</b>	<b>1.5296</b>		<b>1.5296</b>	<b>1.5296</b>	<b>0.0000</b>	<b>21,909.7988</b>	<b>21,909.7988</b>	<b>0.4199</b>	<b>0.4017</b>	<b>22,043.1382</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.10209e+008	26,962.5912	1.0998	0.2500	27,063.1710
Government (Civic Center)	1.32268e+007	3,235.9277	0.1320	0.0300	3,247.9989
Hotel	4.34286e+006	1,062.4787	0.0433	9.8500e-003	1,066.4422
Racquet Club	247167	60.4693	2.4700e-003	5.6000e-004	60.6949
Single Family Housing	3.64478e+007	8,916.9305	0.3637	0.0827	8,950.1938
Strip Mall	3.2689e+007	7,997.3421	0.3262	0.0741	8,027.1749
<b>Total</b>		<b>48,235.7395</b>	<b>1.9675</b>	<b>0.4472</b>	<b>48,415.6755</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.08785e+008	26,614.1336	1.0856	0.2467	26,713.4135
Government (Civic Center)	1.19515e+007	2,923.9359	0.1193	0.0271	2,934.8432
Hotel	3.90132e+006	954.4569	0.0389	8.8500e-003	958.0174
Racquet Club	236843	57.9436	2.3600e-003	5.4000e-004	58.1597
Single Family Housing	3.58947e+007	8,781.6202	0.3582	0.0814	8,814.3787





Hearth	2.5406	1.2000e-004	0.1386	0.0000		1.7553	1.7553		1.7368	1.7368	0.0000	25,142.7271	25,142.7271	0.4819	0.4610	25,295.7416
Landscaping	8.0490	3.0564	264.2612	0.0139		1.4530	1.4530		1.4530	1.4530	0.0000	430.2457	430.2457	0.4196	0.0000	439.0581
<b>Total</b>	<b>218.4927</b>	<b>3.0565</b>	<b>264.3998</b>	<b>0.0139</b>		<b>3.2083</b>	<b>3.2083</b>		<b>3.1898</b>	<b>3.1898</b>	<b>0.0000</b>	<b>25,572.9728</b>	<b>25,572.9728</b>	<b>0.9015</b>	<b>0.4610</b>	<b>25,734.7996</b>

**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	39.5895						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	168.3137						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.5406	1.2000e-004	0.1386	0.0000		1.7553	1.7553		1.7368	1.7368	0.0000	25,142.7271	25,142.7271	0.4819	0.4610	25,295.7416
Landscaping	8.0490	3.0564	264.2612	0.0139		1.4530	1.4530		1.4530	1.4530	0.0000	430.2457	430.2457	0.4196	0.0000	439.0581
<b>Total</b>	<b>218.4927</b>	<b>3.0565</b>	<b>264.3998</b>	<b>0.0139</b>		<b>3.2083</b>	<b>3.2083</b>		<b>3.1898</b>	<b>3.1898</b>	<b>0.0000</b>	<b>25,572.9728</b>	<b>25,572.9728</b>	<b>0.9015</b>	<b>0.4610</b>	<b>25,734.7996</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11,776.9957	69.9360	1.7436	13,786.1535

Unmitigated	13,880.096 8	87.3857	2.1716	16,388.406 3
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## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1977.55 / 1246.72	10,315.705 2	64.8338	1.6114	12,176.73 41
Government (Civic Center)	175.291 / 107.437	906.0357	5.7466	0.1428	1,070.967 0
Hotel	5.20019 / 0.577799	19.7859	0.1702	4.1700e-003	24.6523
Racquet Club	1.62407 / 0.995398	8.3944	0.0532	1.3200e-003	9.9225
Single Family Housing	333.328 / 210.142	1,738.7700	10.9281	0.2716	2,052.456 9
Strip Mall	172.461 / 105.702	891.4055	5.6538	0.1405	1,053.673 5
<b>Total</b>		<b>13,880.096 8</b>	<b>87.3857</b>	<b>2.1716</b>	<b>16,388.40 63</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1582.04 / 1246.72	8,755.3745	51.8876	1.2937	10,246.07 33
Government (Civic Center)	140.233 / 107.437	767.7273	4.5990	0.1146	899.8324

Hotel	4.16015 / 0.577799	15.6828	0.1361	3.3300e- 003	19.5754
Racquet Club	1.29926 / 0.995398	7.1130	0.0426	1.0600e- 003	8.3369
Single Family Housing	266.662 / 210.142	1,475.7675	8.7459	0.2181	1,727.033 2
Strip Mall	137.969 / 105.702	755.3304	4.5247	0.1128	885.3023
<b>Total</b>		<b>11,776.995 7</b>	<b>69.9360</b>	<b>1.7436</b>	<b>13,786.15 35</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5,623.6596	332.3488	0.0000	12,602.983 6
Unmitigated	5,623.6596	332.3488	0.0000	12,602.983 6

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13961.9	2,834.1436	167.4931	0.0000	6,351.498 4

Government (Civic Center)	5029.51	1,020.9451	60.3361	0.0000	2,288.0037
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.52	31.7722	1.8777	0.0000	71.2034
Single Family Housing	5999.12	1,217.7671	71.9680	0.0000	2,729.0947
Strip Mall	2444.68	496.2480	29.3274	0.0000	1,112.1236
<b>Total</b>		<b>5,623.6596</b>	<b>332.3488</b>	<b>0.0000</b>	<b>12,602.9836</b>

**Mitigated**

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
		MT/yr			
Apartments Low Rise	13961.9	2,834.1436	167.4931	0.0000	6,351.4984
Government (Civic Center)	5029.51	1,020.9451	60.3361	0.0000	2,288.0037
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.52	31.7722	1.8777	0.0000	71.2034
Single Family Housing	5999.12	1,217.7671	71.9680	0.0000	2,729.0947
Strip Mall	2444.68	496.2480	29.3274	0.0000	1,112.1236
<b>Total</b>		<b>5,623.6596</b>	<b>332.3488</b>	<b>0.0000</b>	<b>12,602.9836</b>

**9.0 Operational Offroad**

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





## Golden Hills - 2020 CPU Buildout San Diego County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	222.29	1000sqft	5.10	222,290.00	0
Office Park	37.16	1000sqft	0.85	37,160.00	0
General Light Industry	102.56	1000sqft	2.35	102,560.00	0
Apartments Low Rise	6,740.00	Dwelling Unit	421.25	6,740,000.00	19276
Single Family Housing	2,097.00	Dwelling Unit	680.84	3,774,600.00	5997
Strip Mall	356.81	1000sqft	8.19	356,810.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2020
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	539.36	<b>CH4 Intensity (lb/MWhr)</b>	0.022	<b>N2O Intensity (lb/MWhr)</b>	0.005

#### 1.3 User Entered Comments & Non-Default Data

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	150

tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	155,000.00	10.00
tblConstructionPhase	NumDays	10,000.00	10.00
tblConstructionPhase	NumDays	15,500.00	10.00
tblConstructionPhase	NumDays	11,000.00	10.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblConstructionPhase	PhaseEndDate	4/8/2015	1/14/2016
tblConstructionPhase	PhaseStartDate	3/26/2015	1/1/2016
tblFireplaces	NumberGas	3,707.00	6,066.00
tblFireplaces	NumberGas	1,153.35	1,887.30
tblFireplaces	NumberWood	2,359.00	0.00
tblFireplaces	NumberWood	733.95	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	539.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2020
tblWoodstoves	NumberCatalytic	337.00	0.00
tblWoodstoves	NumberCatalytic	104.85	0.00
tblWoodstoves	NumberNoncatalytic	337.00	0.00
tblWoodstoves	NumberNoncatalytic	104.85	0.00

## 2.0 Emissions Summary

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### 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	56.8791	0.7615	65.8750	3.4700e-003		0.7994	0.7994		0.7948	0.7948	0.0000	6,371.6103	6,371.6103	0.2246	0.1149	6,411.9299
Energy	0.7475	6.4109	2.8896	0.0408		0.5164	0.5164		0.5164	0.5164	0.0000	19,466.3401	19,466.3401	0.6341	0.2475	19,556.3808
Mobile	44.3930	93.3884	443.6632	1.1894	81.6552	1.3710	83.0262	21.8387	1.2651	23.1038	0.0000	82,553.2919	82,553.2919	3.2096	0.0000	82,620.6927
Waste						0.0000	0.0000		0.0000	0.0000	1,494.5413	0.0000	1,494.5413	88.3249	0.0000	3,349.3633
Water						0.0000	0.0000		0.0000	0.0000	214.6786	3,270.8192	3,485.4978	22.1830	0.5510	4,122.1373
<b>Total</b>	<b>102.0196</b>	<b>100.5608</b>	<b>512.4278</b>	<b>1.2336</b>	<b>81.6552</b>	<b>2.6868</b>	<b>84.3420</b>	<b>21.8387</b>	<b>2.5763</b>	<b>24.4150</b>	<b>1,709.2198</b>	<b>111,662.0615</b>	<b>113,371.2813</b>	<b>114.5761</b>	<b>0.9133</b>	<b>116,060.5040</b>

**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	56.8791	0.7615	65.8750	3.4700e-003		0.7994	0.7994		0.7948	0.7948	0.0000	6,371.6103	6,371.6103	0.2246	0.1149	6,411.9299
Energy	0.6011	5.1562	2.3267	0.0328		0.4153	0.4153		0.4153	0.4153	0.0000	17,695.7178	17,695.7178	0.5932	0.2180	17,775.7422
Mobile	44.1105	91.8569	437.7392	1.1664	80.0221	1.3461	81.3682	21.4020	1.2421	22.6441	0.0000	80,953.9837	80,953.9837	3.1522	0.0000	81,020.1795
Waste						0.0000	0.0000		0.0000	0.0000	1,494.5413	0.0000	1,494.5413	88.3249	0.0000	3,349.3633
Water						0.0000	0.0000		0.0000	0.0000	171.7429	2,779.8427	2,951.5855	17.7530	0.4423	3,461.5059
<b>Total</b>	<b>101.5907</b>	<b>97.7746</b>	<b>505.9409</b>	<b>1.2026</b>	<b>80.0221</b>	<b>2.5608</b>	<b>82.5829</b>	<b>21.4020</b>	<b>2.4522</b>	<b>23.8541</b>	<b>1,666.2841</b>	<b>107,801.1544</b>	<b>109,467.4386</b>	<b>110.0479</b>	<b>0.7751</b>	<b>112,018.7207</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Percent Reduction	0.42	2.77	1.27	2.51	2.00	4.69	2.09	2.00	4.82	2.30	2.51	3.46	3.44	3.95	15.13	3.48
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## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	44.1105	91.8569	437.7392	1.1664	80.0221	1.3461	81.3682	21.4020	1.2421	22.6441	0.0000	80,953.9837	80,953.9837	3.1522	0.0000	81,020.1795
Unmitigated	44.3930	93.3884	443.6632	1.1894	81.6552	1.3710	83.0262	21.8387	1.2651	23.1038	0.0000	82,553.2919	82,553.2919	3.2096	0.0000	82,620.6927

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	44,416.60	48,258.40	40911.80	126,960,330	124,421,123
General Light Industry	714.84	135.38	69.74	1,576,259	1,544,734
Government (Civic Center)	6,206.34	0.00	0.00	8,474,474	8,304,984
Office Park	424.37	60.94	28.24	791,623	775,791
Single Family Housing	20,068.29	21,137.76	18390.69	57,052,999	55,911,939
Strip Mall	15,813.82	15,000.29	7289.63	22,299,462	21,853,473
Total	87,644.26	84,592.77	66,690.10	217,155,147	212,812,044

### 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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Office Park	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
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

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

### 4.4 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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11,746.5567	11,746.5567	0.4791	0.1089	11,790.3755
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	12,068.9386	12,068.9386	0.4923	0.1119	12,113.9599
NaturalGas Mitigated	0.6011	5.1562	2.3267	0.0328		0.4153	0.4153		0.4153	0.4153	0.0000	5,949.1611	5,949.1611	0.1140	0.1091	5,985.3667
NaturalGas Unmitigated	0.7475	6.4109	2.8896	0.0408		0.5164	0.5164		0.5164	0.5164	0.0000	7,397.4015	7,397.4015	0.1418	0.1356	7,442.4209

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	Natural Gas 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					
Government (Civic Center)	4.67476e+006	0.0252	0.2292	0.1925	1.3700e-003		0.0174	0.0174		0.0174	0.0174	0.0000	249.4629	249.4629	4.7800e-003	4.5700e-003	250.9811
Office Park	1.25155e+006	6.7500e-003	0.0614	0.0515	3.7000e-004		4.6600e-003	4.6600e-003		4.6600e-003	4.6600e-003	0.0000	66.7874	66.7874	1.2800e-003	1.2200e-003	67.1939
Single Family Housing	5.79894e+007	0.3127	2.6721	1.1371	0.0171		0.2160	0.2160		0.2160	0.2160	0.0000	3,094.5335	3,094.5335	0.0593	0.0567	3,113.3664
Strip Mall	817095	4.4100e-003	0.0401	0.0337	2.4000e-004		3.0400e-003	3.0400e-003		3.0400e-003	3.0400e-003	0.0000	43.6033	43.6033	8.4000e-004	8.0000e-004	43.8687
Apartments Low Rise	7.26801e+007	0.3919	3.3490	1.4251	0.0214		0.2708	0.2708		0.2708	0.2708	0.0000	3,878.4878	3,878.4878	0.0743	0.0711	3,902.0916
General Light Industry	1.20918e+006	6.5200e-003	0.0593	0.0498	3.6000e-004		4.5000e-003	4.5000e-003		4.5000e-003	4.5000e-003	0.0000	64.5266	64.5266	1.2400e-003	1.1800e-003	64.9193
<b>Total</b>		<b>0.7475</b>	<b>6.4109</b>	<b>2.8896</b>	<b>0.0408</b>		<b>0.5164</b>	<b>0.5164</b>		<b>0.5164</b>	<b>0.5164</b>	<b>0.0000</b>	<b>7,397.4015</b>	<b>7,397.4015</b>	<b>0.1418</b>	<b>0.1356</b>	<b>7,442.4209</b>

### Mitigated

	Natural Gas 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					
Government (Civic Center)	3.72825e+006	0.0201	0.1828	0.1535	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.9536	198.9536	3.8100e-003	3.6500e-003	200.1644
Office Park	997709	5.3800e-003	0.0489	0.0411	2.9000e-004		3.7200e-003	3.7200e-003		3.7200e-003	3.7200e-003	0.0000	53.2415	53.2415	1.0200e-003	9.8000e-004	53.5656
Single Family Housing	4.64053e+007	0.2502	2.1383	0.9099	0.0137		0.1729	0.1729		0.1729	0.1729	0.0000	2,476.3623	2,476.3623	0.0475	0.0454	2,491.4330
Strip Mall	708767	3.8200e-003	0.0347	0.0292	2.1000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	37.8225	37.8225	7.2000e-004	6.9000e-004	38.0527
Apartments Low Rise	5.85517e+007	0.3157	2.6980	1.1481	0.0172		0.2181	0.2181		0.2181	0.2181	0.0000	3,124.5410	3,124.5410	0.0599	0.0573	3,143.5564
General Light Industry	1.09138e+006	5.8800e-003	0.0535	0.0449	3.2000e-004		4.0700e-003	4.0700e-003		4.0700e-003	4.0700e-003	0.0000	58.2402	58.2402	1.1200e-003	1.0700e-003	58.5946
<b>Total</b>		<b>0.6011</b>	<b>5.1562</b>	<b>2.3267</b>	<b>0.0328</b>		<b>0.4153</b>	<b>0.4153</b>		<b>0.4153</b>	<b>0.4153</b>	<b>0.0000</b>	<b>5,949.1611</b>	<b>5,949.1611</b>	<b>0.1140</b>	<b>0.1091</b>	<b>5,985.3667</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.44731e+007	5,987.3440	0.2442	0.0555	6,009.6789
General Light Industry	923040	225.8214	9.2100e-003	2.0900e-003	226.6637
Government (Civic Center)	3.33213e+006	815.2035	0.0333	7.5600e-003	818.2445
Office Park	654016	160.0047	6.5300e-003	1.4800e-003	160.6016
Single Family Housing	1.49396e+007	3,654.9655	0.1491	0.0339	3,668.5997
Strip Mall	5.00961e+006	1,225.5996	0.0500	0.0114	1,230.1715
<b>Total</b>		<b>12,068.9386</b>	<b>0.4923</b>	<b>0.1119</b>	<b>12,113.9599</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.41581e+007	5,910.2697	0.2411	0.0548	5,932.3171
General Light Industry	884637	216.4262	8.8300e-003	2.0100e-003	217.2335
Government (Civic Center)	3.01213e+006	736.9151	0.0301	6.8300e-003	739.6641
Office Park	586701	143.5363	5.8500e-003	1.3300e-003	144.0717
Single Family Housing	1.47138e+007	3,599.7214	0.1468	0.0334	3,613.1496





Hearth	0.6330	3.0000e-005	0.0345	0.0000		0.4373	0.4373		0.4327	0.4327	0.0000	6,264.4152	6,264.4152	0.1201	0.1149	6,302.5394
Landscaping	2.0053	0.7615	65.8405	3.4700e-003		0.3620	0.3620		0.3620	0.3620	0.0000	107.1950	107.1950	0.1046	0.0000	109.3905
<b>Total</b>	<b>56.8791</b>	<b>0.7615</b>	<b>65.8750</b>	<b>3.4700e-003</b>		<b>0.7994</b>	<b>0.7994</b>		<b>0.7948</b>	<b>0.7948</b>	<b>0.0000</b>	<b>6,371.6103</b>	<b>6,371.6103</b>	<b>0.2246</b>	<b>0.1149</b>	<b>6,411.9299</b>

**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	10.3686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	43.8721					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6330	3.0000e-005	0.0345	0.0000		0.4373	0.4373		0.4327	0.4327	0.0000	6,264.4152	6,264.4152	0.1201	0.1149	6,302.5394
Landscaping	2.0053	0.7615	65.8405	3.4700e-003		0.3620	0.3620		0.3620	0.3620	0.0000	107.1950	107.1950	0.1046	0.0000	109.3905
<b>Total</b>	<b>56.8791</b>	<b>0.7615</b>	<b>65.8750</b>	<b>3.4700e-003</b>		<b>0.7994</b>	<b>0.7994</b>		<b>0.7948</b>	<b>0.7948</b>	<b>0.0000</b>	<b>6,371.6103</b>	<b>6,371.6103</b>	<b>0.2246</b>	<b>0.1149</b>	<b>6,411.9299</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2,951.5855	17.7530	0.4423	3,461.5059

Unmitigated	3,485.4978	22.1830	0.5510	4,122.1373
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## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	439.138 / 276.848	2,290.7174	14.3971	0.3578	2,703.9796
General Light Industry	23.717 / 0	83.0768	0.7759	0.0190	105.2447
Government (Civic Center)	44.1601 / 27.0658	228.2520	1.4477	0.0360	269.8021
Office Park	6.60459 / 4.04797	34.1374	0.2165	5.3800e-003	40.3516
Single Family Housing	136.628 / 86.135	712.7054	4.4793	0.1113	841.2827
Strip Mall	26.4298 / 16.1989	136.6089	0.8665	0.0215	161.4767
<b>Total</b>		<b>3,485.4978</b>	<b>22.1830</b>	<b>0.5510</b>	<b>4,122.1373</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	351.311 / 276.848	1,944.2285	11.5222	0.2873	2,275.2548
General Light Industry	18.9736 / 0	64.3636	0.6206	0.0151	82.0901

Government (Civic Center)	35.328 / 27.0658	193.4088	1.1586	0.0289	226.6892
Office Park	5.28367 / 4.04797	28.9263	0.1733	4.3200e-003	33.9037
Single Family Housing	109.302 / 86.135	604.9032	3.5849	0.0894	707.8946
Strip Mall	21.1439 / 16.1989	115.7552	0.6934	0.0173	135.6736
<b>Total</b>		<b>2,951.5855</b>	<b>17.7530</b>	<b>0.4423</b>	<b>3,461.5059</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1,494.5413	88.3249	0.0000	3,349.3633
Unmitigated	1,494.5413	88.3249	0.0000	3,349.3633

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3100.4	629.3532	37.1937	0.0000	1,410.4210

General Light Industry	127.17	25.8144	1.5256	0.0000	57.8517
Government (Civic Center)	1267.05	257.1997	15.2001	0.0000	576.4011
Office Park	34.56	7.0154	0.4146	0.0000	15.7219
Single Family Housing	2458.77	499.1081	29.4964	0.0000	1,118.5334
Strip Mall	374.65	76.0506	4.4945	0.0000	170.4342
<b>Total</b>		<b>1,494.5413</b>	<b>88.3249</b>	<b>0.0000</b>	<b>3,349.3633</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3100.4	629.3532	37.1937	0.0000	1,410.4210
General Light Industry	127.17	25.8144	1.5256	0.0000	57.8517
Government (Civic Center)	1267.05	257.1997	15.2001	0.0000	576.4011
Office Park	34.56	7.0154	0.4146	0.0000	15.7219
Single Family Housing	2458.77	499.1081	29.4964	0.0000	1,118.5334
Strip Mall	374.65	76.0506	4.4945	0.0000	170.4342
<b>Total</b>		<b>1,494.5413</b>	<b>88.3249</b>	<b>0.0000</b>	<b>3,349.3633</b>

**9.0 Operational Offroad**

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



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## **ATTACHMENT 4**

### GHG Emissions Reduction Calculations

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# Summary Book

(Operational GHG Emissions Existing, BAU, Forecasted 2020, & Forecasted 2035)

## Raw CalEEMod Output

	Golden Hills			North Park			Uptown		
	2015	2020 BAU	2020 Buildout	2015	2020 BAU	2020 Buildout	2015	2020 BAU	2020 Buildout
Area	5258	6413	6412	18163	25740	25735	16381	23655	23650
Energy	22277	24514	17776	72996	95457	68984	89743	113093	80172
Mobile	84742	112113	81020	314233	462483	334267	377925	546966	395458
Waste	3329	3349	3349	10812	12603	12603	15419	17180	17180
Water	4348	5223	3462	15549	20775	13786	17575	23019	15272
<b>Total</b>	<b>119954</b>	<b>151613</b>	<b>112019</b>	<b>431753</b>	<b>617060</b>	<b>455375</b>	<b>517044</b>	<b>723913</b>	<b>531733</b>

## Corrected for Mobile Reductions

(0.6% for Tire Pressure Program, 2.4% for LEV III)

	Golden Hills			North Park			Uptown		
	2015	2020 BAU	2020 Buildout	2015	2020 BAU	2020 Buildout	2015	2020 BAU	2020 Buildout
Mobile	82212	108766	78601	304851	448676	324287	366642	530636	383651
Energy	22277	24514	17776	72996	95457	68984	89743	113093	80172
Area	5258	6413	6412	18163	25740	25735	16381	23655	23650
Waste	3329	3349	3349	10812	12603	12603	15419	17180	17180
Water	4348	5223	3462	15549	20775	13786	17575	23019	15272
<b>Total</b>	<b>117424</b>	<b>148265</b>	<b>109600</b>	<b>422371</b>	<b>603252</b>	<b>445395</b>	<b>505760</b>	<b>707583</b>	<b>519926</b>

## Corrected for Increased Destination Accessibility (Distance to downtown)

(Reduction equals 20% times (12 miles - [Distance to Downtown]) / 12 miles)

	Golden Hills			North Park			Uptown					
	Miles to Downtown	1.7	Percent of DUs	29%	Miles to Downtown	3	Percent of DUs	31%	Miles to Downtown	1.875	Percent of DUs	37%
	Reduction from Accessibility:	5.0%			Reduction from Accessibility:	4.7%			Reduction from Accessibility:	6.2%		
	2015	2020 BAU	2020 Buildout		2015	2020 BAU	2020 Buildout		2015	2020 BAU	2020 Buildout	
Mobile	82212	108766	74654		304851	448676	309039		366642	530636	359717	
Energy	22277	24514	17776		72996	95457	68984		89743	113093	80172	
Area	5258	6413	6412		18163	25740	25735		16381	23655	23650	
Waste	3329	3349	3349		10812	12603	12603		15419	17180	17180	
Water	4348	5223	3462		15549	20775	13786		17575	23019	15272	
<b>Total</b>	<b>117424</b>	<b>148265</b>	<b>105653</b>		<b>422371</b>	<b>603252</b>	<b>430147</b>		<b>505760</b>	<b>707583</b>	<b>495991</b>	

**Corrected for Increased Diversity**

(Emissions reduction is directly proportional to the VMT Reduction)  
 (VMT Reduction equals 30% times [VMT from new land uses])

CalEEMod Trip Summary Information	2020 CPU Buildout								
	Golden Hills			Uptown			North Park		
	VMT	LU Change	VMT-Post	VMT	LU Change	VMT-Post	VMT	LU Change	VMT-Post
Apartments Low Rise	124421123	38.35%	76701746	499973546	44.49%	277529253	560301176	36.63%	355061703
General Light Industry	1544734		1544734	0		0	0		0
Government(Civic Cent	8304984		8304984	88649887		88649887	32966255		32966255
Office Park	775791		775791	0		0	0		0
Hotel	0		0	3217898		3217898	2998495		2998495
Single Family Housing	55911939		55911939	146912153		146912153	136407001		136407001
Strip Mall	21853473	31.77%	14910692	293031668	12.55%	256266841	142599101	1.64%	140267500
Racquet Club	0		0	1572428		1572428	1387942		1387942
<b>Total</b>	<b>212812044</b>		<b>158149886</b>	<b>1033357580</b>		<b>774148460</b>	<b>876659971</b>		<b>669088898</b>

	Golden Hills			North Park			Uptown		
	VMT from New LU	26%	VMT Reduction 8%	VMT from New LU	25%	VMT Reduction 8%	VMT from New LU	24%	VMT Reduction 7%
	Reduction from Diversity:		7.7%	Reduction from Diversity:		7.5%	Reduction from Diversity:		7.1%
	Total Accessibility+Diversity		12.3%	Total Accessibility+Diversity		11.9%	Total Accessibility+Diversity		12.9%
	2015	2020 BAU	2020 Buildout	2015	2020 BAU	2020 Buildout	2015	2020 BAU	2020 Buildout
Mobile	82212	108766	68902	304851	448676	285783	366642	530636	334165
Energy	22277	24514	17776	72996	95457	68984	89743	113093	80172
Area	5258	6413	6412	18163	25740	25735	16381	23655	23650
Waste	3329	3349	3349	10812	12603	12603	15419	17180	17180
Water	4348	5223	3462	15549	20775	13786	17575	23019	15272
<b>Total</b>	<b>117424</b>	<b>148265</b>	<b>99900</b>	<b>422371</b>	<b>603252</b>	<b>406891</b>	<b>505760</b>	<b>707583</b>	<b>470439</b>

**Construction Added**

(2.1% of total Emissions) 1.02145046

	Golden Hills			North Park			Uptown		
	2015	2020 BAU	2020 Buildout	2015	2020 BAU	2020 Buildout	2015	2020 BAU	2020 Buildout
Mobile	82212	108766	68902	304851	448676	285783	366642	530636	334165
Energy	22277	24514	17776	72996	95457	68984	89743	113093	80172
Area	5258	6413	6412	18163	25740	25735	16381	23655	23650
Waste	3329	3349	3349	10812	12603	12603	15419	17180	17180
Water	4348	5223	3462	15549	20775	13786	17575	23019	15272
Construction	2519	3180	2143	9060	12940	8728	10849	15178	10091
<b>Total</b>	<b>119943</b>	<b>151446</b>	<b>102043</b>	<b>431431</b>	<b>616192</b>	<b>415619</b>	<b>516609</b>	<b>722761</b>	<b>480531</b>

**Post-Model Processed Emissions**

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**Uptown**

	2015	2020 BAU	2020 Buildout		Change	Change (%)
Mobile	366642	530636	334165		196471	37.0%
Energy	89743	113093	80172		32921	29.1%
Area	16381	23655	23650		5	0.0%
Waste	15419	17180	17180		0	0.0%
Water	17575	23019	15272		7747	33.7%
Construction	10849	15178	10091		5087	33.5%
<b>Total</b>	<b>516609</b>	<b>722761</b>	<b>480531</b>		<b>242230</b>	<b>33.5%</b>

**North Park**

	2015	2020 BAU	2020 Buildout		Change	Change (%)
Mobile	304851	448676	285783		162893	36.3%
Energy	72996	95457	68984		26473	27.7%
Area	18163	25740	25735		5	0.0%
Waste	10812	12603	12603		0	0.0%
Water	15549	20775	13786		6989	33.6%
Construction	9060	12940	8728		4212	32.6%
<b>Total</b>	<b>431431</b>	<b>616192</b>	<b>415619</b>		<b>200573</b>	<b>32.6%</b>

**Golden Hills**

	2015	2020 BAU	2020 Buildout		Change	Change (%)
Mobile	82212	108766	68902		39864	36.7%
Energy	22277	24514	17776		6738	27.5%
Area	5258	6413	6412		1	0.0%
Waste	3329	3349	3349		0	0.0%
Water	4348	5223	3462		1761	33.7%
Construction	2519	3180	2143		1037	32.6%
<b>Total</b>	<b>119943</b>	<b>151446</b>	<b>102043</b>		<b>49403</b>	<b>32.6%</b>

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*An Employee-Owned Company*

May 16, 2016

Ms. Rebecca Malone, AICP  
Associate Planner, Environmental and Policy Analysis  
City of San Diego Planning Department  
1010 Second Ave, Suite 1200, MS 413  
San Diego, CA 92101

Reference: Supplemental Analysis to the Greenhouse Gas Analysis for the Uptown, North Park, and Golden Hill Community Plan Updates, Project No. 30330/304032, SCH No. 2004651076 (RECON Number 6086.1)

Dear Ms. Malone:

This letter is a supplemental analysis to the Greenhouse Gas Technical Report (RECON 2015) prepared for the Uptown, North Park, and Golden Hill Community Plan Updates. This letter describes the results of the updated greenhouse gas (GHG) emission calculations associated with the existing land uses, buildout of the adopted land uses, and buildout of the proposed land uses for each of the community plan update (CPU) areas. This analysis discloses the GHG emissions from existing uses and compares GHG emissions associated with land uses as identified in the community plans adopted in 1986 and 1998 to the land uses identified in the proposed CPUs.

## **1.0 DEVELOPMENT SUMMARY**

The CPUs encompass a broad range of the land use designations defined in the General Plan and contain a more detailed description and distribution of land uses than the citywide General Plan. Existing land uses as well as planned land uses under the Adopted Community Plans and the proposed CPUs are summarized in Table 1.

## **2.0 METHODOLOGY AND ASSUMPTIONS**

Annual GHG emissions due to the operation of buildout of the community plan areas under the adopted and proposed plans were calculated using California Emissions Estimator Model (CalEEMod; CAPCOA 2013). The emissions sources include construction (off-road vehicles), mobile (on-road vehicles), area (fireplaces, consumer products [cleansers, aerosols, and solvents], landscape maintenance equipment, and architectural coatings), water and wastewater, and solid waste sources.

GHG emissions are estimated in terms of metric tons of carbon dioxide equivalent (MT CO<sub>2</sub>E). CO<sub>2</sub>E emissions are the preferred way to assess combined GHG emissions because they give weight to the global-warming potential (GWP) of different gases. The GWP is the potential of a gas to warm the global climate in the same amount as an equivalent amount of emissions of carbon dioxide (CO<sub>2</sub>). As example, CO<sub>2</sub> has a GWP of 1, methane (CH<sub>4</sub>) has a GWP of 21, and nitrous oxide (N<sub>2</sub>O) has a GWP of 310, which means CH<sub>4</sub> and N<sub>2</sub>O have 21 and 310 times greater global warming effect than CO<sub>2</sub>, respectively.



<b>Table 1</b>			
<b>Land Use Distribution by Community</b>			
<b>Land Use</b>	<b>Existing Land Use</b>	<b>Adopted Community Plan</b>	<b>Proposed Community Plan</b>
<b>UPTOWN</b>			
Residential (dwelling units)			
Single-Family	7,540	5,540	5,500
Multi-Family <sup>1</sup>	15,620	29,060	27,180
<b>SUBTOTAL<sup>2</sup></b>	<b>23,160</b>	<b>34,600</b>	<b>32,680</b>
Non-Residential (square feet)			
Commercial	4,184,170	4,783,000	4,785,200
Industrial	19,710	-	-
Institutional	2,627,550	2,314,900	2,485,700
Hotels	366,460	174,000	174,000
Recreation	31,110	31,100	31,100
<b>SUBTOTAL<sup>2</sup></b>	<b>7,229,000</b>	<b>7,303,000</b>	<b>7,476,000</b>
<b>NORTH PARK</b>			
Residential (dwelling units)			
Single-Family	5,797	5,116	5,117
Multi-Family <sup>1</sup>	19,228	29,179	31,453
<b>SUBTOTAL<sup>2</sup></b>	<b>25,025</b>	<b>34,295</b>	<b>36,570</b>
Non-Residential (square feet)			
Commercial	2,302,110	2,175,460	2,138,210
Industrial	42,850	-	-
Institutional	909,380	870,440	870,440
Hotels	163,866	158,870	158,900
Recreation	72,430	27,460	27,450
<b>SUBTOTAL<sup>2</sup></b>	<b>3,490,640</b>	<b>3,232,230</b>	<b>3,195,000</b>
<b>GOLDEN HILL</b>			
Residential (dwelling units)			
Single-Family	3,100	2,070	2,095
Multi-Family <sup>1</sup>	4,160	7,100	7,120
<b>SUBTOTAL<sup>2</sup></b>	<b>7,260</b>	<b>9,170</b>	<b>9,215</b>
Non-Residential (square feet)			
Commercial	268,810	431,160	393,960
Industrial	112,750	0	0
Institutional	264,130	213,040	213,040
Hotels	0	0	0
Recreation	2,250	0	0
<b>SUBTOTAL<sup>2</sup></b>	<b>647,940</b>	<b>644,200</b>	<b>607,000</b>
<sup>1</sup> All dwelling units that are not single-family were counted as multi-family. This includes dwelling units on other land uses such as commercial and institutional.			
<sup>2</sup> Total area may not match the sum of listed areas due to rounding.			

GHG emissions were calculated for the following scenarios:

- Existing (year 2016) land uses in the Uptown, North Park, and Golden Hill CPU areas
- Future (year 2020) land uses under the adopted Uptown, North Park, and Golden Hill community plans
- Future (year 2020) land uses under the proposed Uptown, North Park, and Golden Hill CPUs
- Future (year 2035) land uses under the adopted Uptown, North Park, and Golden Hill community plans
- Future (year 2035) land uses under the proposed Uptown, North Park, and Golden Hill CPUs

The analysis methodology and input data are described in the following sections. Where project-specific data were not available, model inputs were based on information provided in the CalEEMod User's Guide (CAPCOA 2013).

## **2.1 Construction Emissions**

At a program level, it would be speculative to estimate the schedule and construction requirements of individual projects that could occur in the CPU areas. Thus, this analysis relies on the methodology used in the San Diego County Updated Greenhouse Gas Inventory (San Diego County 2013), which forecasts that between 2015 and 2035 construction emissions would comprise roughly 2.1 percent of total GHG emissions within the county. Therefore, construction emissions are estimated at 2.1 percent of the total operational GHG emissions associated with each planning area. There are no construction emissions associated with the existing (year 2016) land uses.

## **2.2 Vehicle Emissions**

Vehicle emissions are calculated based on the vehicle type, the trip rate, and trip length for each land use. The vehicle emission factors and fleet mix used in CalEEMod are derived from California Air Resources Board's (CARB) Emission Factors 2011 model, which includes GHG reducing effects from the implementation of Pavley I (Clean Car Standards) and the Low Carbon Fuel Standard, and are thus considered in the calculation of emissions. Emission factors that include the effects of the Tire Pressure Program and the Low Emission Vehicles III regulations are not available. Therefore, to account for the effects of the Tire Pressure Program (0.6 percent) and the Low Emission Vehicles III (2.4 percent), a total 3 percent reduction was applied to the vehicle emissions calculated in CalEEMod (CARB 2011a).

All three CPUs encourage increased development diversity by increasing commercial and multi-family land uses and decreasing the planned number of single-family residences. Locating different land uses types near one another can decrease vehicle miles traveled (VMT), as trips between land use types are shorter and may be accommodated by alternative modes of transportation (CAPCOA 2010). This reduction was calculated using methodology from California Air Pollution Control Officers Association's (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* (CAPCOA 2010). By increasing density, especially within proximity of transit, people's travel distances are affected and greater options for the mode of travel are provided. This can result in a substantial reduction in VMT depending on the change in density compared to a typical urban residential density (CAPCOA 2010). By increasing the diversity of land use, a similar reduction in VMT can occur, because trips between land use types would be shorter and may be accommodated by non-auto modes of transport. By increasing transit accessibility (e.g., by locating a high-density project near transit), a shift in travel mode is facilitated along with reduced VMT. The effectiveness of these land-use strategies ranges from less than 1 percent up to a maximum 30 percent reduction in communitywide VMT and are not additive (CAPCOA 2010). For example, where high-density mixed use development is located within a 5- to 10-minute walk from a transit station with high-frequency transit or bus service and is combined with walkable neighborhood design, a total VMT reduction up to 24 percent can be achieved (CAPCOA 2010). The proposed CPUs' focus on community walkability, diversity of land uses, and development of higher densities near job centers (downtown San Diego) was included in the CPU emission calculations. Based on a review of mapping, the average distance from areas with increased residential

density to the nearest major job center, downtown San Diego, is approximately 1.9 miles for the Uptown planning area, 3.0 miles for the North Park planning area, and 1.7 miles for the Golden Hill planning area. All three of the CPUs propose an increase in multi-family residences. The VMT from residents of these new developments would be less due to the reduced trip lengths. Although this reduction was only counted for new development proposed under the CPUs, this would reduce overall mobile emissions by 5.2, 4.4, and 3.1 percent in the Uptown, North Park, and Golden Hill CPU areas, respectively (Attachment 1).

### 2.3 Energy Use Emissions

CalEEMod estimates GHG emissions from energy use by multiplying average rates of residential and non-residential energy consumption by the quantities of residential units and non-residential square footage entered in the land use module to obtain total projected energy use. This value is then multiplied by electricity and natural gas GHG emission factors applicable to the project location and utility provider.

Building energy use is typically divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as plug-in appliances. In California, Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or “plug-in energy use,” can be further subdivided by specific end-use (refrigeration, cooking, office equipment, etc.).

Energy consumption values are based on the California Energy Commission (CEC) sponsored *California Commercial End Use Survey and Residential Appliance Saturation Survey* studies, which identify energy use by building type and climate zone. Because these studies are based on older buildings, adjustments have been made in CalEEMod to account for changes to Title 24 Building Codes. CalEEMod is based on the 2008 Title 24 energy code (Part 6 of the Building Code).

As identified by the CEC, the Energy Code requires various improvements in the built environment that would achieve a 21.8 percent increase in electricity efficiency and a 16.8 percent increase in natural gas efficiency in non-residential buildings, a 36.4 percent increase in electricity efficiency and a 6.5 percent increase in natural gas efficiency in single-family uses, and a 23.3 percent increase in electricity efficiency and a 3.8 percent increase in natural gas efficiency in multi-family uses (CEC 2013).

The CPU areas would be served by San Diego Gas & Electric (SDG&E). Therefore, SDG&E’s specific energy intensity factors (i.e., the amount of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O per kilowatt-hour) are used in the calculations of GHG emissions. The state mandate for renewable energy is 33 percent by 2020 and 50 percent by 2030 (RECON 2015). However, the energy intensity factors included in CalEEMod by default only represent a 10.2 percent procurement of renewable energy (SDG&E 2011). SDG&E currently has procured 36.4 percent, and would achieve 50 percent by 2030. To account for the continuing effects of Renewables Portfolio Standard (RPS) through 2020, the energy intensity factors included in CalEEMod were reduced based on the percentage of renewables reported by SDG&E. SDG&E energy intensity factors that include this reduction are shown in Table 2.

GHG	2009 (lbs/MWh)	2016 (lbs/MWh)	2020 (lbs/MWh)	2035 (lbs/MWh)
Carbon dioxide (CO <sub>2</sub> )	720.49	531.72	531.72	433.73
Methane (CH <sub>4</sub> )	0.029	0.021	0.021	0.017
Nitrous oxide (N <sub>2</sub> O)	0.006	0.004	0.004	0.004
SOURCE: SDG&E 2011. lbs = pounds MWh = megawatt hour				

## **2.4 Area Source Emissions**

Area sources include GHG emissions that would occur from the use of landscaping equipment. The use of landscape equipment emits GHGs associated with the equipment's fuel combustion. The landscaping equipment emission values were derived from the 2011 In-Use Off-Road Equipment Inventory Model (CARB 2011b).

## **2.5 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 CH<sub>4</sub> and N<sub>2</sub>O.

The indoor and outdoor water use consumption data for each land use subtype comes from the Pacific Institute's *Waste Not, Want Not: The Potential for Urban Water Conservation in California* 2003 (as cited in CAPCOA 2013). Based on that report, a percentage of total water consumption was dedicated to landscape irrigation, which is used to determine outdoor water use. Wastewater generation was similarly based on a reported percentage of total indoor water use (CAPCOA 2013).

Development would be subject to California Green Building Standards Code (CalGreen), which requires a 20 percent increase in indoor water use efficiency. Thus, in order to demonstrate compliance with CalGreen, a 20 percent reduction in indoor water use was included in the water consumption calculations.

In addition to water reductions under CalGreen, the GHG emissions from the energy used to transport the water are affected by RPS. As discussed previously, to account for the effects of RPS through 2020 and 2030, the energy intensity factors included in CalEEMod were reduced by the values shown in Table 2.

## **2.6 Solid Waste Emissions**

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. To calculate the GHG emissions generated by disposing of solid waste for the project, the total volume of solid waste was calculated using waste disposal rates identified by California Department of Resources Recycling and Recovery. The methods for quantifying GHG emissions from solid waste are based on the Intergovernmental Panel on Climate Change method, using the degradable organic content of waste. GHG emissions associated with the project's waste disposal were calculated using these parameters. No solid waste reductions were modeled.

## **3.0 GHG EMISSION CALCULATIONS**

### **3.1 Existing GHG Emissions**

Based on the methodology summarized in Section 2.0, Methodology and Assumptions, the primary sources of direct and indirect GHG emissions have been calculated for the existing (on the ground) land uses in the CPU areas. Table 3 summarizes the results. The complete model outputs for the Uptown, North Park, and Golden Hill existing land uses are included in Attachments 2a, 2b, and 2c, respectively.

<b>Table 3</b>			
<b>Existing GHG Emissions</b>			
<b>(MT CO<sub>2</sub>E per Year)</b>			
<b>Emission Source</b>	<b>Uptown</b>	<b>North Park</b>	<b>Golden Hill</b>
Vehicles	382,422	307,279	83,063
Energy Use	80,430	63,047	19,365
Area Sources	16,805	18,158	5,268
Solid Waste Disposal	16,411	10,840	3,407
Water Use	14,339	12,136	3,430
<b>TOTAL</b>	<b>510,407</b>	<b>411,460</b>	<b>114,533</b>

### 3.2 Year 2020 GHG Emissions

Year 2020 GHG emissions were calculated for the land uses identified in the Uptown, North Park, and Golden Hill CPUs as well as the land uses identified in the adopted community plans using the methodology summarized in Section 2.0, Methodology and Assumptions.

Table 4 summarizes the year 2020 GHG emissions for of the land uses identified in the Uptown CPU and 1988 adopted community plan. The complete model outputs for the CPU and adopted community plan land uses are included in Attachments 3a and 3b, respectively. As shown, when comparing the land uses in the adopted plan to the land uses in the proposed plan, the proposed CPU would result in less emissions than the adopted community plan.

<b>Table 4</b>			
<b>Year 2020 Uptown GHG Emissions</b>			
<b>(MT CO<sub>2</sub>E per Year)</b>			
<b>Emission Source</b>	<b>Proposed Uptown CPU</b>	<b>Adopted Uptown Community Plan</b>	<b>Difference (Proposed – Adopted)</b>
Vehicles	372,922	380,530	-7,608
Energy Use	83,533	85,603	-2,070
Area Sources	23,712	25,105	-1,393
Solid Waste Disposal	17,488	17,459	29
Water Use	15,494	15,969	-475
Construction	10,776	11,018	-242
<b>TOTAL</b>	<b>523,925</b>	<b>535,684</b>	<b>-11,759</b>

Table 5 summarizes the year 2020 GHG emissions for the land uses identified in f the North Park CPU and 1986 adopted community plan. The complete model outputs for the CPU and adopted community plan are included in Attachments 4a and 4b, respectively. As shown, when comparing the land uses in the adopted plan to the land uses in the proposed plan, the proposed CPU would result in greater emissions than the adopted community plan.

<b>Table 5</b>			
<b>Year 2020 North Park GHG Emissions</b>			
<b>(MT CO<sub>2</sub>E per Year)</b>			
<b>Emission Source</b>	<b>Proposed North Park CPU</b>	<b>Adopted North Park Community Plan</b>	<b>Difference (Proposed – Adopted)</b>
Vehicles	318,902	305,841	13,061
Energy Use	72,661	69,529	3,132
Area Sources	26,534	24,884	1,651
Solid Waste Disposal	12,712	12,254	459
Water Use	14,144	13,386	758
Construction	9,344	8,944	400
<b>TOTAL</b>	<b>454,297</b>	<b>434,837</b>	<b>19,460</b>

Table 6 summarizes the year 2020 GHG emissions for the land uses identified in the Golden Hill CPU and 1988 adopted community plan. The complete model outputs for the CPU and adopted community plan are included in Attachments 5a and 5b, respectively. As shown, when comparing the land uses in the adopted plan to the land uses in the proposed plan, the proposed CPU would result in slightly less emissions than the adopted community plan.

<b>Table 6</b>			
<b>Year 2020 Golden Hill GHG Emissions</b>			
<b>(MT CO<sub>2</sub>E per Year)</b>			
<b>Emission Source</b>	<b>Proposed Golden Hill CPU</b>	<b>Adopted Golden Hill Community Plan</b>	<b>Difference (Proposed – Adopted)</b>
Vehicles	80,075	80,542	-467
Energy Use	18,884	18,901	-17
Area Sources	6,686	6,654	33
Solid Waste Disposal	3,348	3,348	0
Water Use	3,495	3,494	1
Construction	2,362	2,372	-9
<b>TOTAL</b>	<b>114,851</b>	<b>115,311</b>	<b>-460</b>

### 3.3 Year 2035 GHG Emissions

Year 2035 GHG emissions were calculated for the land uses identified in the Uptown, North Park, and Golden Hill CPUs as well as the adopted community plans using the methodology summarized in Section 2.0, Methodology and Assumptions. When compared to year 2020 emissions, year 2035 emissions would continue to decrease. This is due to increased vehicle efficiency regulations as well as SDG&E’s progress toward achieving RPS goals.

Table 7 summarizes the year 2035 GHG emissions for the land uses identified in the Uptown CPU and 1988 adopted community plan. The complete model outputs for the CPU and adopted community plan are included in Attachments 6a and 6b, respectively.

<b>Table 7</b>			
<b>Year 2035 Uptown GHG Emissions</b>			
<b>(MT CO<sub>2</sub>E per Year)</b>			
<b>Emission Source</b>	<b>Proposed Uptown CPU</b>	<b>Adopted Uptown Community Plan</b>	<b>Difference (Proposed – Adopted)</b>
Vehicles	340,913	347,868	-6,955
Energy Use	73,046	74,909	-1,863
Area Sources	23,712	25,105	-1,393
Solid Waste Disposal	17,488	17,459	29
Water Use	13,189	13,594	-405
Construction	9,835	10,058	-222
<b>TOTAL</b>	<b>478,184</b>	<b>488,993</b>	<b>-10,809</b>

Table 8 summarizes the year 2035 GHG emissions for the land uses identified in the North Park CPU and 1986 adopted community plan. The complete model outputs for the CPU and adopted community plan are included in Attachments 7a and 7b, respectively.

Table 8 Year 2035 North Park GHG Emissions (MT CO <sub>2</sub> E per Year)			
Emission Source	Proposed North Park CPU	Adopted North Park Community Plan	Difference (Proposed – Adopted)
Vehicles	291,530	279,590	11,940
Energy Use	64,163	61,372	2,791
Area Sources	26,534	24,883	1,651
Solid Waste Disposal	12,712	12,254	459
Water Use	12,039	11,394	645
Construction	8,547	8,179	367
<b>TOTAL</b>	<b>415,525</b>	<b>397,672</b>	<b>17,852</b>

Table 9 summarizes the year 2035 GHG emissions for the land uses identified in the Golden Hill CPU and 1988 adopted community plan. The complete model outputs for the CPU and adopted community plan are included in Attachments 8a and 8b, respectively.

Table 9 Year 2035 Golden Hill GHG Emissions (MT CO <sub>2</sub> E per Year)			
Emission Source	Proposed Golden Hill CPU	Adopted Golden Hill Community Plan	Difference (Proposed – Adopted)
Vehicles	73,202	73,629	-427
Energy Use	16,737	16,743	-6
Area Sources	6,686	6,653	33
Solid Waste Disposal	3,348	3,348	0
Water Use	2,975	2,974	1
Construction	2,162	2,170	-8
<b>TOTAL</b>	<b>105,110</b>	<b>105,518</b>	<b>-408</b>

If you have any questions about the results of this analysis, please contact me at [jfleming@reconenvironmental.com](mailto:jfleming@reconenvironmental.com) or (619) 308-9333.

Sincerely,



Jessica Fleming  
 Environmental Analyst

JLF:eab

Attachments



## REFERENCES CITED

### California Air Pollution Control Officers Association (CAPCOA)

- 2010 Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures. August.
- 2013 California Emissions Estimator model (CalEEMod). User's Guide Version 2013.2.2 September.

### California Air Resources Board (CARB)

- 2011a Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document. August 19. Accessed from the CARB website at [http://www.arb.ca.gov/cc/scopingplan/document/final\\_supplement\\_to\\_sp\\_fed.pdf](http://www.arb.ca.gov/cc/scopingplan/document/final_supplement_to_sp_fed.pdf) on May 9, 2012.
- 2011b In-Use Off-Road Equipment (Construction, Industrial, Ground Support, and Oil Drilling) 2011 Inventory Model.

### California Energy Commission (CEC)

- 2013 2013 Building Energy Efficiency Standards for Residential and Nonresidential Buildings.

### RECON

- 2015 Greenhouse Gas Analysis for the Uptown, North Park, and Golden Hill Community Plan Updates, City of San Diego. Project No. 30330/304032. SCH No. 2004651076. RECON No. 6086. September 18, 2015.

### San Diego, County of

- 2013 Climate Action Plan. Final. November.

### San Diego Gas and Electric (SDG&E)

- 2011 March 2011 Semi-Annual Compliance Report Pursuant to the California Renewables Portfolio Standard. Filed March.

## **ATTACHMENTS**

# **ATTACHMENT 1**

## **Summary of GHG Emissions**

# Summary GHG Emissions

(Operational GHG Emissions Existing, Forecasted 2020, & Forecasted 2035)

## Raw CalEEMod Output

	Uptown					North Park					Golden Hill				
	EXISTING	PROPOSED PLAN		ADOPTED PLAN		EXISTING	PROPOSED PLAN		ADOPTED PLAN		EXISTING	PROPOSED PLAN		ADOPTED PLAN	
	2016	2020	2035	2020	2035	2016	2020	2035	2020	2035	2016	2020	2035	2020	2035
Area	16,805	23,712	23,712	25,105	25,105	18,158	26,534	26,534	24,884	24,883	5,268	6,686	6,686	6,654	6,653
Energy	80,430	83,533	73,046	85,603	74,909	63,047	72,661	64,163	69,529	61,372	19,365	18,884	16,737	18,901	16,743
Mobile	382,422	405,487	370,683	416,774	381,002	307,279	343,947	314,425	328,593	300,389	83,063	85,183	77,871	85,685	78,330
Waste	16,411	17,488	17,488	17,459	17,459	10,840	12,712	12,712	12,254	12,254	3,407	3,348	3,348	3,348	3,348
Water	14,339	15,494	13,189	15,969	13,594	12,136	14,144	12,039	13,386	11,394	3,430	3,495	2,975	3,494	2,974
<b>Total</b>	<b>510,407</b>	<b>545,713</b>	<b>498,118</b>	<b>560,910</b>	<b>512,069</b>	<b>411,460</b>	<b>469,998</b>	<b>429,873</b>	<b>448,646</b>	<b>410,293</b>	<b>114,533</b>	<b>117,596</b>	<b>107,617</b>	<b>118,082</b>	<b>108,049</b>

## Corrected for Mobile Reductions

(0.6% for Tire Pressure Program, 2.4% for LEV III)

	Uptown					North Park					Golden Hill				
	EXISTING	PROPOSED PLAN		ADOPTED PLAN		EXISTING	PROPOSED PLAN		ADOPTED PLAN		EXISTING	PROPOSED PLAN		ADOPTED PLAN	
	2016	2020	2035	2020	2035	2016	2020	2035	2020	2035	2016	2020	2035	2020	2035
Mobile	382,422	393,322	359,562	404,271	369,571	307,279	333,628	304,992	318,735	291,377	83,063	82,627	75,535	83,114	75,980
Energy	80,430	83,533	73,046	85,603	74,909	63,047	72,661	64,163	69,529	61,372	19,365	18,884	16,737	18,901	16,743
Area	16,805	23,712	23,712	25,105	25,105	18,158	26,534	26,534	24,884	24,883	5,268	6,686	6,686	6,654	6,653
Waste	16,411	17,488	17,488	17,459	17,459	10,840	12,712	12,712	12,254	12,254	3,407	3,348	3,348	3,348	3,348
Water	14,339	15,494	13,189	15,969	13,594	12,136	14,144	12,039	13,386	11,394	3,430	3,495	2,975	3,494	2,974
<b>Total</b>	<b>510,407</b>	<b>533,549</b>	<b>486,998</b>	<b>548,407</b>	<b>500,639</b>	<b>411,460</b>	<b>459,680</b>	<b>420,440</b>	<b>438,788</b>	<b>401,281</b>	<b>114,533</b>	<b>115,041</b>	<b>105,281</b>	<b>115,511</b>	<b>105,699</b>

## Corrected for Increased Destination Accessibility (Distance to downtown)

(Reduction equals 20% times (12 miles - [Distance to Downtown]) / 12 miles) - CAPCOA LUT-4

	Uptown					North Park					Golden Hill				
	Miles to Downtown	1.875		Proposed	Adopted	Miles to Downtown	3		Proposed	Adopted	Miles to Downtown	1.7		Proposed	Adopted
	Percent of Dus (only new dus):	30.7%		34.8%		Percent of Dus (only new dus):	29.4%		27.0%		Percent of Dus (only new dus):	18.0%		18.0%	
	Reduction from Accessibility:	-5.2%		-5.9%		Reduction from Accessibility:	-4.4%		-4.0%		Reduction from Accessibility:	-3.1%		-3.1%	
	EXISTING	PROPOSED PLAN		ADOPTED PLAN		EXISTING	PROPOSED PLAN		ADOPTED PLAN		EXISTING	PROPOSED PLAN		ADOPTED PLAN	
	2016	2020	2035	2020	2035	2016	2020	2035	2020	2035	2016	2020	2035	2020	2035
Mobile	382,422	372,922	340,913	380,530	347,868	307,279	318,902	291,530	305,841	279,590	83,063	80,075	73,202	80,542	73,629
Energy	80,430	83,533	73,046	85,603	74,909	63,047	72,661	64,163	69,529	61,372	19,365	18,884	16,737	18,901	16,743
Area	16,805	23,712	23,712	25,105	25,105	18,158	26,534	26,534	24,884	24,883	5,268	6,686	6,686	6,654	6,653
Waste	16,411	17,488	17,488	17,459	17,459	10,840	12,712	12,712	12,254	12,254	3,407	3,348	3,348	3,348	3,348
Water	14,339	15,494	13,189	15,969	13,594	12,136	14,144	12,039	13,386	11,394	3,430	3,495	2,975	3,494	2,974
<b>Total</b>	<b>510,407</b>	<b>513,149</b>	<b>468,349</b>	<b>524,666</b>	<b>478,935</b>	<b>411,460</b>	<b>444,953</b>	<b>406,978</b>	<b>425,893</b>	<b>389,493</b>	<b>114,533</b>	<b>112,489</b>	<b>102,948</b>	<b>112,939</b>	<b>103,348</b>

## Construction Added

(2.1% of total Emissions)

	Uptown					North Park					Golden Hill				
	EXISTING	PROPOSED PLAN		ADOPTED PLAN		EXISTING	PROPOSED PLAN		ADOPTED PLAN		EXISTING	PROPOSED PLAN		ADOPTED PLAN	
	2016	2020	2035	2020	2035	2016	2020	2035	2020	2035	2016	2020	2035	2020	2035
Mobile	382,422	372,922	340,913	380,530	347,868	307,279	318,902	291,530	305,841	279,590	83,063	80,075	73,202	80,542	73,629
Energy	80,430	83,533	73,046	85,603	74,909	63,047	72,661	64,163	69,529	61,372	19,365	18,884	16,737	18,901	16,743
Area	16,805	23,712	23,712	25,105	25,105	18,158	26,534	26,534	24,884	24,883	5,268	6,686	6,686	6,654	6,653
Waste	16,411	17,488	17,488	17,459	17,459	10,840	12,712	12,712	12,254	12,254	3,407	3,348	3,348	3,348	3,348
Water	14,339	15,494	13,189	15,969	13,594	12,136	14,144	12,039	13,386	11,394	3,430	3,495	2,975	3,494	2,974
Construction	0	10,776	9,835	11,018	10,058	0	9,344	8,547	8,944	8,179	0	2,362	2,162	2,372	2,170
<b>Total</b>	<b>510,407</b>	<b>523,925</b>	<b>478,184</b>	<b>535,684</b>	<b>488,993</b>	<b>411,460</b>	<b>454,297</b>	<b>415,525</b>	<b>434,837</b>	<b>397,672</b>	<b>114,533</b>	<b>114,851</b>	<b>105,110</b>	<b>115,311</b>	<b>105,518</b>

## **ATTACHMENT 2a**

Existing GHG Emissions  
Uptown

**6086 Uptown - Existing Land Uses 2016**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	2,627.55	1000sqft	60.32	2,627,550.00	0
General Light Industry	19.71	1000sqft	0.45	19,710.00	0
Hotel	869.00	Room	28.97	366,460.00	0
Racquet Club	31.11	1000sqft	0.71	31,110.00	0
Apartments Low Rise	15,620.00	Dwelling Unit	976.25	15,620,000.00	44673
Single Family Housing	7,540.00	Dwelling Unit	2,448.05	13,572,000.00	21564
Strip Mall	4,184.17	1000sqft	96.06	4,184,170.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2016
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	531.72	<b>CH4 Intensity (lb/MWhr)</b>	0.021	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS status - SDG&E currently at 36.4%  
CalEEMod accounts for 10.2%  
Additional 26.2% reduction applied  
(531.72, 0.021, 0.004)

Land Use - Uptown existing land uses

Construction Phase - Existing land uses - no construction

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - Historical data

Area Mitigation -



Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblFireplaces	NumberGas	8,591.00	14,058.00
tblFireplaces	NumberGas	4,147.00	6,786.00
tblFireplaces	NumberWood	5,467.00	0.00
tblFireplaces	NumberWood	2,639.00	0.00
tblLandUse	LandUseSquareFeet	1,261,788.00	366,460.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	531.72
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2016
tblWoodstoves	NumberCatalytic	781.00	0.00
tblWoodstoves	NumberCatalytic	377.00	0.00
tblWoodstoves	NumberNoncatalytic	781.00	0.00
tblWoodstoves	NumberNoncatalytic	377.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	202.6037	2.0408	174.5252	9.0900e-003		2.0871	2.0871		2.0750	2.0750	0.0000	16,698.8137	16,698.8137	0.6013	0.3010	16,804.7491
Energy	2.6970	23.3266	11.8601	0.1471		1.8634	1.8634		1.8634	1.8634	0.0000	80,098.8587	80,098.8587	2.6209	0.8911	80,430.1399
Mobile	258.2107	542.1141	2,513.7484	4.8293	329.3491	6.6604	336.0095	88.0879	6.1228	94.2106	0.0000	382,065.2649	382,065.2649	17.0001	0.0000	382,422.2671
Waste						0.0000	0.0000		0.0000	0.0000	7,322.7792	0.0000	7,322.7792	432.7639	0.0000	16,410.8202
Water						0.0000	0.0000		0.0000	0.0000	751.6788	11,365.7104	12,117.3892	77.6535	1.9085	14,339.7385
<b>Total</b>	<b>463.5114</b>	<b>567.4815</b>	<b>2,700.1337</b>	<b>4.9855</b>	<b>329.3491</b>	<b>10.6108</b>	<b>339.9599</b>	<b>88.0879</b>	<b>10.0611</b>	<b>98.1490</b>	<b>8,074.4580</b>	<b>490,228.6477</b>	<b>498,303.1057</b>	<b>530.6397</b>	<b>3.1006</b>	<b>510,407.7148</b>

**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	202.6037	2.0408	174.5252	9.0900e-003		2.0871	2.0871		2.0750	2.0750	0.0000	16,698.8137	16,698.8137	0.6013	0.3010	16,804.7491
Energy	2.6970	23.3266	11.8601	0.1471		1.8634	1.8634		1.8634	1.8634	0.0000	80,098.8587	80,098.8587	2.6209	0.8911	80,430.1399
Mobile	258.2107	542.1141	2,513.7484	4.8293	329.3491	6.6604	336.0095	88.0879	6.1228	94.2106	0.0000	382,065.2649	382,065.2649	17.0001	0.0000	382,422.2671
Waste						0.0000	0.0000		0.0000	0.0000	7,322.7792	0.0000	7,322.7792	432.7639	0.0000	16,410.8202
Water						0.0000	0.0000		0.0000	0.0000	751.6788	11,365.7104	12,117.3892	77.6433	1.9065	14,338.9221
<b>Total</b>	<b>463.5114</b>	<b>567.4815</b>	<b>2,700.1337</b>	<b>4.9855</b>	<b>329.3491</b>	<b>10.6108</b>	<b>339.9599</b>	<b>88.0879</b>	<b>10.0611</b>	<b>98.1490</b>	<b>8,074.4580</b>	<b>490,228.6477</b>	<b>498,303.1057</b>	<b>530.6295</b>	<b>3.0986</b>	<b>510,406.8984</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	16,316.00	3,661.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

### 3.2 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0191	0.1599	0.2367	4.3000e-004	0.0119	2.2900e-003	0.0142	3.4100e-003	2.1000e-003	5.5100e-003	0.0000	38.8249	38.8249	2.9000e-004	0.0000	38.8311
Worker	0.0254	0.0336	0.3176	8.0000e-004	0.0654	4.9000e-004	0.0659	0.0174	4.5000e-004	0.0178	0.0000	58.6100	58.6100	2.9800e-003	0.0000	58.6726
<b>Total</b>	<b>0.0444</b>	<b>0.1935</b>	<b>0.5543</b>	<b>1.2300e-003</b>	<b>0.0773</b>	<b>2.7800e-003</b>	<b>0.0801</b>	<b>0.0208</b>	<b>2.5500e-003</b>	<b>0.0233</b>	<b>0.0000</b>	<b>97.4349</b>	<b>97.4349</b>	<b>3.2700e-003</b>	<b>0.0000</b>	<b>97.5037</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0191	0.1599	0.2367	4.3000e-004	0.0119	2.2900e-003	0.0142	3.4100e-003	2.1000e-003	5.5100e-003	0.0000	38.8249	38.8249	2.9000e-004	0.0000	38.8311
Worker	0.0254	0.0336	0.3176	8.0000e-004	0.0654	4.9000e-004	0.0659	0.0174	4.5000e-004	0.0178	0.0000	58.6100	58.6100	2.9800e-003	0.0000	58.6726
<b>Total</b>	<b>0.0444</b>	<b>0.1935</b>	<b>0.5543</b>	<b>1.2300e-003</b>	<b>0.0773</b>	<b>2.7800e-003</b>	<b>0.0801</b>	<b>0.0208</b>	<b>2.5500e-003</b>	<b>0.0233</b>	<b>0.0000</b>	<b>97.4349</b>	<b>97.4349</b>	<b>3.2700e-003</b>	<b>0.0000</b>	<b>97.5037</b>

### 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	258.2107	542.1141	2,513.7484	4.8293	329.3491	6.6604	336.0095	88.0879	6.1228	94.2106	0.0000	382,065.2649	382,065.2649	17.0001	0.0000	382,422.2671
Unmitigated	258.2107	542.1141	2,513.7484	4.8293	329.3491	6.6604	336.0095	88.0879	6.1228	94.2106	0.0000	382,065.2649	382,065.2649	17.0001	0.0000	382,422.2671

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	102,935.80	111,839.20	94813.40	294,231,506	294,231,506
General Light Industry	137.38	26.02	13.40	302,926	302,926
Government (Civic Center)	73,361.20	0.00	0.00	100,171,412	100,171,412
Hotel	7,099.73	7,117.11	5170.55	12,970,097	12,970,097
Racquet Club	1,024.45	649.27	831.57	1,604,519	1,604,519
Single Family Housing	72,157.80	76,003.20	66125.80	205,140,494	205,140,494
Strip Mall	185,442.41	175,902.51	85482.59	261,496,988	261,496,988
<b>Total</b>	<b>442,158.77</b>	<b>371,537.30</b>	<b>252,437.32</b>	<b>875,917,941</b>	<b>875,917,941</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510118	0.073510	0.192396	0.133166	0.036737	0.005265	0.012605	0.021642	0.001847	0.002083	0.006548	0.000610	0.003471

**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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	53,408.3421	53,408.3421	2.1093	0.4018	53,577.1892
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	53,408.3421	53,408.3421	2.1093	0.4018	53,577.1892
NaturalGas Mitigated	2.6970	23.3266	11.8601	0.1471		1.8634	1.8634		1.8634	1.8634	0.0000	26,690.5166	26,690.5166	0.5116	0.4893	26,852.9507
NaturalGas Unmitigated	2.6970	23.3266	11.8601	0.1471		1.8634	1.8634		1.8634	1.8634	0.0000	26,690.5166	26,690.5166	0.5116	0.4893	26,852.9507

### 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					
Government (Civic Center)	6.19051e+007	0.3338	3.0346	2.5490	0.0182		0.2306	0.2306		0.2306	0.2306	0.0000	3,303.4907	3,303.4907	0.0633	0.0606	3,323.5952
Hotel	2.25703e+007	0.1217	1.1064	0.9294	6.6400e-003		0.0841	0.0841		0.0841	0.0841	0.0000	1,204.4356	1,204.4356	0.0231	0.0221	1,211.7656
Racquet Club	382342	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.4032	20.4032	3.9000e-004	3.7000e-004	20.5274
Single Family Housing	2.268e+008	1.2229	10.4506	4.4471	0.0667		0.8449	0.8449		0.8449	0.8449	0.0000	12,102.9014	12,102.9014	0.2320	0.2219	12,176.5577
Strip Mall	1.00838e+007	0.0544	0.4943	0.4152	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1126	538.1126	0.0103	9.8700e-003	541.3875
Apartments Low Rise	1.78178e+008	0.9608	8.2102	3.4937	0.0524		0.6638	0.6638		0.6638	0.6638	0.0000	9,508.2464	9,508.2464	0.1822	0.1743	9,566.1120
General Light Industry	242236	1.3100e-003	0.0119	9.9700e-003	7.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	12.9266	12.9266	2.5000e-004	2.4000e-004	13.0053
<b>Total</b>		<b>2.6969</b>	<b>23.3266</b>	<b>11.8601</b>	<b>0.1471</b>		<b>1.8634</b>	<b>1.8634</b>		<b>1.8634</b>	<b>1.8634</b>	<b>0.0000</b>	<b>26,690.5166</b>	<b>26,690.5166</b>	<b>0.5116</b>	<b>0.4893</b>	<b>26,852.9507</b>

### 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					
Government (Civic Center)	6.19051e+007	0.3338	3.0346	2.5490	0.0182		0.2306	0.2306		0.2306	0.2306	0.0000	3,303.4907	3,303.4907	0.0633	0.0606	3,323.5952
Hotel	2.25703e+007	0.1217	1.1064	0.9294	6.6400e-003		0.0841	0.0841		0.0841	0.0841	0.0000	1,204.4356	1,204.4356	0.0231	0.0221	1,211.7656
Racquet Club	382342	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.4032	20.4032	3.9000e-004	3.7000e-004	20.5274
Single Family Housing	2.268e+008	1.2229	10.4506	4.4471	0.0667		0.8449	0.8449		0.8449	0.8449	0.0000	12,102.9014	12,102.9014	0.2320	0.2219	12,176.5577
Strip Mall	1.00838e+007	0.0544	0.4943	0.4152	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1126	538.1126	0.0103	9.8700e-003	541.3875
Apartments Low Rise	1.78178e+008	0.9608	8.2102	3.4937	0.0524		0.6638	0.6638		0.6638	0.6638	0.0000	9,508.2464	9,508.2464	0.1822	0.1743	9,566.1120
General Light Industry	242236	1.3100e-003	0.0119	9.9700e-003	7.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	12.9266	12.9266	2.5000e-004	2.4000e-004	13.0053
<b>Total</b>		<b>2.6969</b>	<b>23.3266</b>	<b>11.8601</b>	<b>0.1471</b>		<b>1.8634</b>	<b>1.8634</b>		<b>1.8634</b>	<b>1.8634</b>	<b>0.0000</b>	<b>26,690.5166</b>	<b>26,690.5166</b>	<b>0.5116</b>	<b>0.4893</b>	<b>26,852.9507</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	5.74247e+007	13,849.9370	0.5470	0.1042	13,893.7227
General Light Industry	184880	44.5901	1.7600e-003	3.4000e-004	44.7310
Government (Civic Center)	4.13576e+007	9,974.8059	0.3940	0.0750	10,006.3406
Hotel	5.63982e+006	1,360.2350	0.0537	0.0102	1,364.5353
Racquet Club	291812	70.3804	2.7800e-003	5.3000e-004	70.6029
Single Family Housing	5.46594e+007	13,182.9850	0.5207	0.0992	13,224.6622
Strip Mall	6.18839e+007	14,925.4087	0.5895	0.1123	14,972.5945
<b>Total</b>		<b>53,408.3420</b>	<b>2.1093</b>	<b>0.4018</b>	<b>53,577.1892</b>

## 5.3 Energy by Land Use - Electricity

### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	5.74247e+007	13,849.9370	0.5470	0.1042	13,893.7227
General Light Industry	184880	44.5901	1.7600e-003	3.4000e-004	44.7310
Government (Civic Center)	4.13576e+007	9,974.8059	0.3940	0.0750	10,006.3406
Hotel	5.63982e+006	1,360.2350	0.0537	0.0102	1,364.5353
Racquet Club	291812	70.3804	2.7800e-003	5.3000e-004	70.6029
Single Family Housing	5.46594e+007	13,182.9850	0.5207	0.0992	13,224.6622
Strip Mall	6.18839e+007	14,925.4087	0.5895	0.1123	14,972.5945
<b>Total</b>		<b>53,408.3420</b>	<b>2.1093</b>	<b>0.4018</b>	<b>53,577.1892</b>

## 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	202.6037	2.0408	174.5252	9.0900e-003		2.0871	2.0871		2.0750	2.0750	0.0000	16,698.8137	16,698.8137	0.6013	0.3010	16,804.7491
Unmitigated	202.6037	2.0408	174.5252	9.0900e-003		2.0871	2.0871		2.0750	2.0750	0.0000	16,698.8137	16,698.8137	0.6013	0.3010	16,804.7491

## 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	53.2044					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	142.2422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6589	8.0000e-005	0.0905	0.0000		1.1462	1.1462		1.1341	1.1341	0.0000	16,417.7726	16,417.7726	0.3147	0.3010	16,517.6885
Landscaping	5.4982	2.0408	174.4347	9.0900e-003		0.9409	0.9409		0.9409	0.9409	0.0000	281.0411	281.0411	0.2867	0.0000	287.0607
<b>Total</b>	<b>202.6037</b>	<b>2.0408</b>	<b>174.5252</b>	<b>9.0900e-003</b>		<b>2.0871</b>	<b>2.0871</b>		<b>2.0750</b>	<b>2.0750</b>	<b>0.0000</b>	<b>16,698.8137</b>	<b>16,698.8137</b>	<b>0.6013</b>	<b>0.3010</b>	<b>16,804.7491</b>



### 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	53.2044					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	142.2422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6589	8.0000e-005	0.0905	0.0000		1.1462	1.1462		1.1341	1.1341	0.0000	16,417.7726	16,417.7726	0.3147	0.3010	16,517.6885
Landscaping	5.4982	2.0408	174.4347	9.0900e-003		0.9409	0.9409		0.9409	0.9409	0.0000	281.0411	281.0411	0.2867	0.0000	287.0607
<b>Total</b>	<b>202.6037</b>	<b>2.0408</b>	<b>174.5252</b>	<b>9.0900e-003</b>		<b>2.0871</b>	<b>2.0871</b>		<b>2.0750</b>	<b>2.0750</b>	<b>0.0000</b>	<b>16,698.8137</b>	<b>16,698.8137</b>	<b>0.6013</b>	<b>0.3010</b>	<b>16,804.7491</b>

### 7.0 Water Detail

#### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12,117.3892	77.6433	1.9065	14,338.9221
Unmitigated	12,117.3892	77.6535	1.9085	14,339.7385

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1017.71 / 641.597	5,238.1298	33.3561	0.8200	6,192.8082
General Light Industry	4.55794 / 0	15.7600	0.1491	3.6100e-003	20.0114
Government (Civic Center)	521.988 / 319.928	2,662.1510	17.1076	0.4204	3,151.7345
Hotel	22.0437 / 2.4493	82.7839	0.7213	0.0175	103.3655
Racquet Club	1.83994 / 1.12771	9.3838	0.0603	1.4800e-003	11.1095
Single Family Housing	491.261 / 309.708	2,528.5210	16.1015	0.3958	2,989.3581
Strip Mall	309.932 / 189.958	1,580.6598	10.1577	0.2496	1,871.3514
<b>Total</b>		<b>12,117.3892</b>	<b>77.6535</b>	<b>1.9085</b>	<b>14,339.7385</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1017.71 / 641.597	5,238.1298	33.3517	0.8192	6,192.4575
General Light Industry	4.55794 / 0	15.7600	0.1491	3.6100e-003	20.0098
Government (Civic Center)	521.988 / 319.928	2,662.1510	17.1054	0.4200	3,151.5547
Hotel	22.0437 / 2.4493	82.7839	0.7212	0.0175	103.3579
Racquet Club	1.83994 / 1.12771	9.3838	0.0603	1.4800e-003	11.1088
Single Family Housing	491.261 / 309.708	2,528.5210	16.0994	0.3954	2,989.1888
Strip Mall	309.932 / 189.958	1,580.6598	10.1564	0.2494	1,871.2446
<b>Total</b>		<b>12,117.3892</b>	<b>77.6433</b>	<b>1.9065</b>	<b>14,338.9221</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	7,322.779 2	432.7639	0.0000	16,410.82 02
Mitigated	7,322.779 2	432.7639	0.0000	16,410.82 02

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	7185.2	1,458.5307	86.1967	0.0000	3,268.6612
General Light Industry	24.44	4.9611	0.2932	0.0000	11.1181
Government (Civic Center)	14977	3,040.2038	179.6709	0.0000	6,813.2926
Hotel	475.78	96.5790	5.7077	0.0000	216.4399
Racquet Club	177.33	35.9964	2.1273	0.0000	80.6702
Single Family Housing	8841.24	1,794.6918	106.0633	0.0000	4,022.0200
Strip Mall	4393.38	891.8164	52.7048	0.0000	1,998.6181
<b>Total</b>		<b>7,322.7792</b>	<b>432.7639</b>	<b>0.0000</b>	<b>16,410.8202</b>

### 8.2 Waste by Land Use

#### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	7185.2	1,458.5307	86.1967	0.0000	3,268.6612
General Light Industry	24.44	4.9611	0.2932	0.0000	11.1181
Government (Civic Center)	14977	3,040.2038	179.6709	0.0000	6,813.2926
Hotel	475.78	96.5790	5.7077	0.0000	216.4399
Racquet Club	177.33	35.9964	2.1273	0.0000	80.6702
Single Family Housing	8841.24	1,794.6918	106.0633	0.0000	4,022.0200
Strip Mall	4393.38	891.8164	52.7048	0.0000	1,998.6181
<b>Total</b>		<b>7,322.7792</b>	<b>432.7639</b>	<b>0.0000</b>	<b>16,410.8202</b>

### 9.0 Operational Offroad

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

## **ATTACHMENT 2b**

Existing GHG Emissions  
North Park

**6086 North Park - Existing Land Uses 2016**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	909.38	1000sqft	20.88	909,380.00	0
General Light Industry	42.85	1000sqft	0.98	42,850.00	0
Hotel	217.00	Room	7.23	163,866.00	0
Racquet Club	72.43	1000sqft	1.66	72,430.00	0
Apartments Low Rise	19,228.00	Dwelling Unit	1,201.75	19,228,000.00	54992
Single Family Housing	5,797.00	Dwelling Unit	1,882.14	10,434,600.00	16579
Strip Mall	2,302.11	1000sqft	52.85	2,302,110.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2016
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	531.72	<b>CH4 Intensity (lb/MWhr)</b>	0.021	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**



Project Characteristics - RPS status - SDG&E currently at 36.4%  
CalEEMod accounts for 10.2%  
Additional 26.2% reduction applied  
(531.72, 0.021, 0.004)

Land Use - North Park existing land uses

Construction Phase - Existing land uses - no construction

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - Historical data

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblFireplaces	NumberGas	10,575.40	17,305.20
tblFireplaces	NumberGas	3,188.35	5,217.30
tblFireplaces	NumberWood	6,729.80	0.00
tblFireplaces	NumberWood	2,028.95	0.00
tblLandUse	LandUseSquareFeet	315,084.00	163,866.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	531.72
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2016
tblWoodstoves	NumberCatalytic	961.40	0.00
tblWoodstoves	NumberCatalytic	289.85	0.00
tblWoodstoves	NumberNoncatalytic	961.40	0.00
tblWoodstoves	NumberNoncatalytic	289.85	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	187.2509	2.2047	188.5338	9.8100e-003		2.2550	2.2550		2.2420	2.2420	0.0000	18,043.4293	18,043.4293	0.6495	0.3252	18,157.8902
Energy	2.3304	20.0277	9.3043	0.1271		1.6101	1.6101		1.6101	1.6101	0.0000	62,780.9331	62,780.9331	2.0107	0.7216	63,046.8571
Mobile	195.2252	429.7663	1,963.3791	3.8798	265.4929	5.3271	270.8200	71.0089	4.8972	75.9061	0.0000	306,994.4926	306,994.4926	13.5413	0.0000	307,278.8604
Waste						0.0000	0.0000		0.0000	0.0000	4,836.8179	0.0000	4,836.8179	285.8478	0.0000	10,839.6207
Water						0.0000	0.0000		0.0000	0.0000	634.9383	9,624.9443	10,259.8826	65.5944	1.6123	12,137.1640
<b>Total</b>	<b>384.8065</b>	<b>451.9988</b>	<b>2,161.2172</b>	<b>4.0167</b>	<b>265.4929</b>	<b>9.1922</b>	<b>274.6851</b>	<b>71.0089</b>	<b>8.7493</b>	<b>79.7581</b>	<b>5,471.7562</b>	<b>397,443.7992</b>	<b>402,915.554</b>	<b>367.6436</b>	<b>2.6591</b>	<b>411,460.3923</b>

## 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	187.2509	2.2047	188.5338	9.8100e-003		2.2550	2.2550		2.2420	2.2420	0.0000	18,043.4293	18,043.4293	0.6495	0.3252	18,157.8902
Energy	2.3304	20.0277	9.3043	0.1271		1.6101	1.6101		1.6101	1.6101	0.0000	62,780.9331	62,780.9331	2.0107	0.7216	63,046.8571
Mobile	195.2252	429.7663	1,963.3791	3.8798	265.4929	5.3271	270.8200	71.0089	4.8972	75.9061	0.0000	306,994.4926	306,994.4926	13.5413	0.0000	307,278.8604
Waste						0.0000	0.0000		0.0000	0.0000	4,836.8179	0.0000	4,836.8179	285.8478	0.0000	10,839.6207
Water						0.0000	0.0000		0.0000	0.0000	634.9383	9,624.9443	10,259.8826	65.5858	1.6106	12,136.4743
<b>Total</b>	<b>384.8065</b>	<b>451.9988</b>	<b>2,161.2172</b>	<b>4.0167</b>	<b>265.4929</b>	<b>9.1922</b>	<b>274.6851</b>	<b>71.0089</b>	<b>8.7493</b>	<b>79.7581</b>	<b>5,471.7562</b>	<b>397,443.7992</b>	<b>402,915.554</b>	<b>367.6350</b>	<b>2.6575</b>	<b>411,459.7026</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	17,076.00	3,247.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

### 3.2 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0169	0.1418	0.2100	3.9000e-004	0.0106	2.0300e-003	0.0126	3.0200e-003	1.8700e-003	4.8900e-003	0.0000	34.4344	34.4344	2.6000e-004	0.0000	34.4399
Worker	0.0265	0.0352	0.3324	8.4000e-004	0.0685	5.1000e-004	0.0690	0.0182	4.7000e-004	0.0187	0.0000	61.3401	61.3401	3.1200e-003	0.0000	61.4056
<b>Total</b>	<b>0.0434</b>	<b>0.1770</b>	<b>0.5423</b>	<b>1.2300e-003</b>	<b>0.0790</b>	<b>2.5400e-003</b>	<b>0.0816</b>	<b>0.0212</b>	<b>2.3400e-003</b>	<b>0.0236</b>	<b>0.0000</b>	<b>95.7745</b>	<b>95.7745</b>	<b>3.3800e-003</b>	<b>0.0000</b>	<b>95.8455</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0169	0.1418	0.2100	3.9000e-004	0.0106	2.0300e-003	0.0126	3.0200e-003	1.8700e-003	4.8900e-003	0.0000	34.4344	34.4344	2.6000e-004	0.0000	34.4399
Worker	0.0265	0.0352	0.3324	8.4000e-004	0.0685	5.1000e-004	0.0690	0.0182	4.7000e-004	0.0187	0.0000	61.3401	61.3401	3.1200e-003	0.0000	61.4056
<b>Total</b>	<b>0.0434</b>	<b>0.1770</b>	<b>0.5423</b>	<b>1.2300e-003</b>	<b>0.0790</b>	<b>2.5400e-003</b>	<b>0.0816</b>	<b>0.0212</b>	<b>2.3400e-003</b>	<b>0.0236</b>	<b>0.0000</b>	<b>95.7745</b>	<b>95.7745</b>	<b>3.3800e-003</b>	<b>0.0000</b>	<b>95.8455</b>

### 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	195.2252	429.7663	1,963.379 1	3.8798	265.4929	5.3271	270.8200	71.0089	4.8972	75.9061	0.0000	306,994.4 926	306,994.4 926	13.5413	0.0000	307,278.8 604
Unmitigated	195.2252	429.7663	1,963.379 1	3.8798	265.4929	5.3271	270.8200	71.0089	4.8972	75.9061	0.0000	306,994.4 926	306,994.4 926	13.5413	0.0000	307,278.8 604

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	126,712.52	137,672.48	116,713.96	362,194,840	362,194,840
General Light Industry	298.66	56.56	29.14	658,568	658,568
Government (Civic Center)	25,389.89	0.00	0.00	34,668,752	34,668,752
Hotel	1,772.89	1,777.23	1,291.15	3,238,793	3,238,793
Racquet Club	2,385.12	1,511.61	1,936.05	3,735,625	3,735,625
Single Family Housing	55,477.29	58,433.76	50,839.69	157,718,759	157,718,759
Strip Mall	102,029.52	96,780.70	47,032.11	143,874,372	143,874,372
<b>Total</b>	<b>314,065.89</b>	<b>296,232.35</b>	<b>217,842.10</b>	<b>706,089,707</b>	<b>706,089,707</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510118	0.073510	0.192396	0.133166	0.036737	0.005265	0.012605	0.021642	0.001847	0.002083	0.006548	0.000610	0.003471

**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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	39,717.7409	39,717.7409	1.5686	0.2988	39,843.3061
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	39,717.7409	39,717.7409	1.5686	0.2988	39,843.3061
NaturalGas Mitigated	2.3304	20.0277	9.3043	0.1271		1.6101	1.6101		1.6101	1.6101	0.0000	23,063.1922	23,063.1922	0.4420	0.4228	23,203.5510
NaturalGas Unmitigated	2.3304	20.0277	9.3043	0.1271		1.6101	1.6101		1.6101	1.6101	0.0000	23,063.1922	23,063.1922	0.4420	0.4228	23,203.5510

### 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					
General Light Industry	526627	2.8400e-003	0.0258	0.0217	1.5000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	28.1028	28.1028	5.4000e-004	5.2000e-004	28.2738
Government (Civic Center)	2.1425e+007	0.1155	1.0502	0.8822	6.3000e-003		0.0798	0.0798		0.0798	0.0798	0.0000	1,143.3192	1,143.3192	0.0219	0.0210	1,150.2773
Hotel	1.00925e+007	0.0544	0.4947	0.4156	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.5746	538.5746	0.0103	9.8700e-003	541.8523
Racquet Club	890165	4.8000e-003	0.0436	0.0367	2.6000e-004		3.3200e-003	3.3200e-003		3.3200e-003	3.3200e-003	0.0000	47.5026	47.5026	9.1000e-004	8.7000e-004	47.7917
Single Family Housing	1.74371e+008	0.9402	8.0348	3.4190	0.0513		0.6496	0.6496		0.6496	0.6496	0.0000	9,305.1087	9,305.1087	0.1784	0.1706	9,361.7380
Strip Mall	5.54809e+006	0.0299	0.2720	0.2285	1.6300e-003		0.0207	0.0207		0.0207	0.0207	0.0000	296.0670	296.0670	5.6700e-003	5.4300e-003	297.8688
Apartments Low Rise	2.19334e+008	1.1827	10.1066	4.3007	0.0645		0.8171	0.8171		0.8171	0.8171	0.0000	11,704.5174	11,704.5174	0.2243	0.2146	11,775.7492
<b>Total</b>		<b>2.3304</b>	<b>20.0277</b>	<b>9.3043</b>	<b>0.1271</b>		<b>1.6101</b>	<b>1.6101</b>		<b>1.6101</b>	<b>1.6101</b>	<b>0.0000</b>	<b>23,063.1922</b>	<b>23,063.1922</b>	<b>0.4420</b>	<b>0.4228</b>	<b>23,203.5510</b>

### 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					
Government (Civic Center)	2.1425e+007	0.1155	1.0502	0.8822	6.3000e-003		0.0798	0.0798		0.0798	0.0798	0.0000	1,143.3192	1,143.3192	0.0219	0.0210	1,150.2773
Hotel	1.00925e+007	0.0544	0.4947	0.4156	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.5746	538.5746	0.0103	9.8700e-003	541.8523
Racquet Club	890165	4.8000e-003	0.0436	0.0367	2.6000e-004		3.3200e-003	3.3200e-003		3.3200e-003	3.3200e-003	0.0000	47.5026	47.5026	9.1000e-004	8.7000e-004	47.7917
Single Family Housing	1.74371e+008	0.9402	8.0348	3.4190	0.0513		0.6496	0.6496		0.6496	0.6496	0.0000	9,305.1087	9,305.1087	0.1784	0.1706	9,361.7380
Strip Mall	5.54809e+006	0.0299	0.2720	0.2285	1.6300e-003		0.0207	0.0207		0.0207	0.0207	0.0000	296.0670	296.0670	5.6700e-003	5.4300e-003	297.8688
Apartments Low Rise	2.19334e+008	1.1827	10.1066	4.3007	0.0645		0.8171	0.8171		0.8171	0.8171	0.0000	11,704.5174	11,704.5174	0.2243	0.2146	11,775.7492
General Light Industry	526627	2.8400e-003	0.0258	0.0217	1.5000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	28.1028	28.1028	5.4000e-004	5.2000e-004	28.2738
<b>Total</b>		<b>2.3304</b>	<b>20.0277</b>	<b>9.3043</b>	<b>0.1271</b>		<b>1.6101</b>	<b>1.6101</b>		<b>1.6101</b>	<b>1.6101</b>	<b>0.0000</b>	<b>23,063.1922</b>	<b>23,063.1922</b>	<b>0.4420</b>	<b>0.4228</b>	<b>23,203.5510</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	7.06891e+007	17,049.0774	0.6733	0.1283	17,102.9770
General Light Industry	401933	96.9399	3.8300e-003	7.3000e-004	97.2463
Government (Civic Center)	1.43136e+007	3,452.2232	0.1363	0.0260	3,463.1372
Hotel	2.5219e+006	608.2417	0.0240	4.5800e-003	610.1646
Racquet Club	679393	163.8589	6.4700e-003	1.2300e-003	164.3769
Single Family Housing	4.2024e+007	10,135.5125	0.4003	0.0763	10,167.5553
Strip Mall	3.40482e+007	8,211.8873	0.3243	0.0618	8,237.8487
<b>Total</b>		<b>39,717.7409</b>	<b>1.5686</b>	<b>0.2988</b>	<b>39,843.3061</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	7.06891e+007	17,049.0774	0.6733	0.1283	17,102.9770
General Light Industry	401933	96.9399	3.8300e-003	7.3000e-004	97.2463
Government (Civic Center)	1.43136e+007	3,452.2232	0.1363	0.0260	3,463.1372
Hotel	2.5219e+006	608.2417	0.0240	4.5800e-003	610.1646
Racquet Club	679393	163.8589	6.4700e-003	1.2300e-003	164.3769
Single Family Housing	4.2024e+007	10,135.5125	0.4003	0.0763	10,167.5553
Strip Mall	3.40482e+007	8,211.8873	0.3243	0.0618	8,237.8487
<b>Total</b>		<b>39,717.7409</b>	<b>1.5686</b>	<b>0.2988</b>	<b>39,843.3061</b>

### 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	187.2509	2.2047	188.5338	9.8100e-003		2.2550	2.2550		2.2420	2.2420	0.0000	18,043.4293	18,043.4293	0.6495	0.3252	18,157.8902
Unmitigated	187.2509	2.2047	188.5338	9.8100e-003		2.2550	2.2550		2.2420	2.2420	0.0000	18,043.4293	18,043.4293	0.6495	0.3252	18,157.8902

## 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	50.0419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	129.4800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7925	8.0000e-005	0.0978	0.0000		1.2385	1.2385		1.2254	1.2254	0.0000	17,739.8428	17,739.8428	0.3400	0.3252	17,847.8046
Landscaping	5.9365	2.2047	188.4361	9.8100e-003		1.0165	1.0165		1.0165	1.0165	0.0000	303.5864	303.5864	0.3095	0.0000	310.0857
<b>Total</b>	<b>187.2509</b>	<b>2.2047</b>	<b>188.5338</b>	<b>9.8100e-003</b>		<b>2.2550</b>	<b>2.2550</b>		<b>2.2420</b>	<b>2.2420</b>	<b>0.0000</b>	<b>18,043.4293</b>	<b>18,043.4293</b>	<b>0.6495</b>	<b>0.3252</b>	<b>18,157.8902</b>



## 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	50.0419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	129.4800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7925	8.0000e-005	0.0978	0.0000		1.2385	1.2385		1.2254	1.2254	0.0000	17,739.8428	17,739.8428	0.3400	0.3252	17,847.8046
Landscaping	5.9365	2.2047	188.4361	9.8100e-003		1.0165	1.0165		1.0165	1.0165	0.0000	303.5864	303.5864	0.3095	0.0000	310.0857
<b>Total</b>	<b>187.2509</b>	<b>2.2047</b>	<b>188.5338</b>	<b>9.8100e-003</b>		<b>2.2550</b>	<b>2.2550</b>		<b>2.2420</b>	<b>2.2420</b>	<b>0.0000</b>	<b>18,043.4293</b>	<b>18,043.4293</b>	<b>0.6495</b>	<b>0.3252</b>	<b>18,157.8902</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10,259.8826	65.5858	1.6106	12,136.4743
Unmitigated	10,259.8826	65.5944	1.6123	12,137.1640

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1252.78 / 789.797	6,448.0640	41.0609	1.0094	7,623.2597
General Light Industry	9.90906 / 0	34.2627	0.3241	7.8600e-003	43.5052
Government (Civic Center)	180.657 / 110.725	921.3552	5.9208	0.1455	1,090.7973
Hotel	5.50459 / 0.611621	20.6722	0.1801	4.3800e-003	25.8116
Racquet Club	4.28374 / 2.62552	21.8472	0.1404	3.4500e-003	25.8650
Single Family Housing	377.698 / 238.114	1,944.0101	12.3793	0.3043	2,298.3168
Strip Mall	170.523 / 104.514	869.6713	5.5887	0.1373	1,029.6085
<b>Total</b>		<b>10,259.8826</b>	<b>65.5944</b>	<b>1.6123</b>	<b>12,137.1640</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1252.78 / 789.797	6,448.064 0	41.0555	1.0084	7,622.828 0
General Light Industry	9.90906 / 0	34.2627	0.3241	7.8500e-003	43.5017
Government (Civic Center)	180.657 / 110.725	921.3552	5.9201	0.1454	1,090.735 0
Hotel	5.50459 / 0.611621	20.6722	0.1801	4.3700e-003	25.8097
Racquet Club	4.28374 / 2.62552	21.8472	0.1404	3.4500e-003	25.8635
Single Family Housing	377.698 / 238.114	1,944.010 1	12.3777	0.3040	2,298.186 7
Strip Mall	170.523 / 104.514	869.6713	5.5880	0.1372	1,029.549 7
<b>Total</b>		<b>10,259.88 26</b>	<b>65.5858</b>	<b>1.6106</b>	<b>12,136.47 43</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	4,836.8179	285.8478	0.0000	10,839.6207
Mitigated	4,836.8179	285.8478	0.0000	10,839.6207

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	8844.88	1,795.4307	106.1069	0.0000	4,023.6759
General Light Industry	53.13	10.7849	0.6374	0.0000	24.1697
Government (Civic Center)	5183.47	1,052.1976	62.1831	0.0000	2,358.0426
Hotel	118.81	24.1174	1.4253	0.0000	54.0486
Racquet Club	412.85	83.8048	4.9527	0.0000	187.8120
Single Family Housing	6797.39	1,379.8087	81.5444	0.0000	3,092.2403
Strip Mall	2417.22	490.6738	28.9980	0.0000	1,099.6316
<b>Total</b>		<b>4,836.8179</b>	<b>285.8477</b>	<b>0.0000</b>	<b>10,839.6207</b>

### 8.2 Waste by Land Use

#### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	8844.88	1,795.4307	106.1069	0.0000	4,023.6759
General Light Industry	53.13	10.7849	0.6374	0.0000	24.1697
Government (Civic Center)	5183.47	1,052.1976	62.1831	0.0000	2,358.0426
Hotel	118.81	24.1174	1.4253	0.0000	54.0486
Racquet Club	412.85	83.8048	4.9527	0.0000	187.8120
Single Family Housing	6797.39	1,379.8087	81.5444	0.0000	3,092.2403
Strip Mall	2417.22	490.6738	28.9980	0.0000	1,099.6316
<b>Total</b>		<b>4,836.8179</b>	<b>285.8477</b>	<b>0.0000</b>	<b>10,839.6207</b>

### 9.0 Operational Offroad

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

## **ATTACHMENT 2c**

Existing GHG Emissions  
Golden Hill

**6086 Golden Hill - Existing Land Uses 2016**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	264.13	1000sqft	6.06	264,130.00	0
General Light Industry	112.75	1000sqft	2.59	112,750.00	0
Racquet Club	2.25	1000sqft	0.05	2,250.00	0
Apartments Low Rise	4,160.00	Dwelling Unit	260.00	4,160,000.00	11898
Single Family Housing	3,100.00	Dwelling Unit	1,006.49	5,580,000.00	8866
Strip Mall	268.81	1000sqft	6.17	268,810.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2016
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MW hr)</b>	531.72	<b>CH4 Intensity (lb/MW hr)</b>	0.021	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**



Project Characteristics - RPS status - SDG&E currently at 36.4%  
 CalEEMod accounts for 10.2%  
 Additional 26.2% reduction applied  
 (531.72, 0.021, 0.004)

Land Use - Golden Hill existing land uses

Construction Phase - Existing land uses - no construction

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - Historical data

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblFireplaces	NumberGas	2,288.00	3,744.00
tblFireplaces	NumberGas	1,705.00	2,790.00
tblFireplaces	NumberWood	1,456.00	0.00
tblFireplaces	NumberWood	1,085.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	531.72
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2016
tblWoodstoves	NumberCatalytic	208.00	0.00
tblWoodstoves	NumberCatalytic	155.00	0.00
tblWoodstoves	NumberNoncatalytic	208.00	0.00
tblWoodstoves	NumberNoncatalytic	155.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0129	0.0606	0.1504	3.3000e-004	0.0202	1.5700e-003	0.0218	5.4300e-003	1.4600e-003	6.9000e-003	0.0000	26.1052	26.1052	1.1600e-003	0.0000	26.1294
<b>Total</b>	<b>0.0129</b>	<b>0.0606</b>	<b>0.1504</b>	<b>3.3000e-004</b>	<b>0.0202</b>	<b>1.5700e-003</b>	<b>0.0218</b>	<b>5.4300e-003</b>	<b>1.4600e-003</b>	<b>6.9000e-003</b>	<b>0.0000</b>	<b>26.1052</b>	<b>26.1052</b>	<b>1.1600e-003</b>	<b>0.0000</b>	<b>26.1294</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0129	0.0606	0.1504	3.3000e-004	0.0202	1.5700e-003	0.0218	5.4300e-003	1.4600e-003	6.9000e-003	0.0000	26.1052	26.1052	1.1600e-003	0.0000	26.1294
<b>Total</b>	<b>0.0129</b>	<b>0.0606</b>	<b>0.1504</b>	<b>3.3000e-004</b>	<b>0.0202</b>	<b>1.5700e-003</b>	<b>0.0218</b>	<b>5.4300e-003</b>	<b>1.4600e-003</b>	<b>6.9000e-003</b>	<b>0.0000</b>	<b>26.1052</b>	<b>26.1052</b>	<b>1.1600e-003</b>	<b>0.0000</b>	<b>26.1294</b>

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

**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	58.7242	0.6396	54.6920	2.8500e-003		0.6542	0.6542		0.6504	0.6504	0.0000	5,234.5705	5,234.5705	0.1884	0.0944	5,267.7764
Energy	0.8033	6.8893	3.0999	0.0438		0.5550	0.5550		0.5550	0.5550	0.0000	19,280.7393	19,280.7393	0.5999	0.2310	19,364.9442
Mobile	49.8140	114.7665	517.1052	1.0486	71.9752	1.4341	73.4093	19.2505	1.3184	20.5689	0.0000	82,987.0077	82,987.0077	3.6319	0.0000	83,063.2772
Waste						0.0000	0.0000		0.0000	0.0000	1,520.2176	0.0000	1,520.2176	89.8423	0.0000	3,406.9056
Water						0.0000	0.0000		0.0000	0.0000	181.3449	2,713.2689	2,894.6137	18.7330	0.4602	3,430.6717
<b>Total</b>	<b>109.3415</b>	<b>122.2954</b>	<b>574.8971</b>	<b>1.0953</b>	<b>71.9752</b>	<b>2.6433</b>	<b>74.6185</b>	<b>19.2505</b>	<b>2.5238</b>	<b>21.7743</b>	<b>1,701.5625</b>	<b>110,215.5864</b>	<b>111,917.1489</b>	<b>112.9955</b>	<b>0.7856</b>	<b>114,533.5750</b>

## 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	58.7242	0.6396	54.6920	2.8500e-003		0.6542	0.6542		0.6504	0.6504	0.0000	5,234.5705	5,234.5705	0.1884	0.0944	5,267.7764
Energy	0.8033	6.8893	3.0999	0.0438		0.5550	0.5550		0.5550	0.5550	0.0000	19,280.7393	19,280.7393	0.5999	0.2310	19,364.9442
Mobile	49.8140	114.7665	517.1052	1.0486	71.9752	1.4341	73.4093	19.2505	1.3184	20.5689	0.0000	82,987.0077	82,987.0077	3.6319	0.0000	83,063.2772
Waste						0.0000	0.0000		0.0000	0.0000	1,520.2176	0.0000	1,520.2176	89.8423	0.0000	3,406.9056
Water						0.0000	0.0000		0.0000	0.0000	181.3449	2,713.2689	2,894.6137	18.7306	0.4597	3,430.4747
<b>Total</b>	<b>109.3415</b>	<b>122.2954</b>	<b>574.8971</b>	<b>1.0953</b>	<b>71.9752</b>	<b>2.6433</b>	<b>74.6185</b>	<b>19.2505</b>	<b>2.5238</b>	<b>21.7743</b>	<b>1,701.5625</b>	<b>110,215.5864</b>	<b>111,917.1489</b>	<b>112.9930</b>	<b>0.7851</b>	<b>114,533.3780</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	4,330.00	882.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

### 3.2 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5900e-003	0.0385	0.0570	1.0000e-004	2.8700e-003	5.5000e-004	3.4200e-003	8.2000e-004	5.1000e-004	1.3300e-003	0.0000	9.3536	9.3536	7.0000e-005	0.0000	9.3551
Worker	6.7300e-003	8.9100e-003	0.0843	2.1000e-004	0.0174	1.3000e-004	0.0175	4.6100e-003	1.2000e-004	4.7300e-003	0.0000	15.5542	15.5542	7.9000e-004	0.0000	15.5708
<b>Total</b>	<b>0.0113</b>	<b>0.0474</b>	<b>0.1413</b>	<b>3.1000e-004</b>	<b>0.0202</b>	<b>6.8000e-004</b>	<b>0.0209</b>	<b>5.4300e-003</b>	<b>6.3000e-004</b>	<b>6.0600e-003</b>	<b>0.0000</b>	<b>24.9078</b>	<b>24.9078</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>24.9258</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5900e-003	0.0385	0.0570	1.0000e-004	2.8700e-003	5.5000e-004	3.4200e-003	8.2000e-004	5.1000e-004	1.3300e-003	0.0000	9.3536	9.3536	7.0000e-005	0.0000	9.3551
Worker	6.7300e-003	8.9100e-003	0.0843	2.1000e-004	0.0174	1.3000e-004	0.0175	4.6100e-003	1.2000e-004	4.7300e-003	0.0000	15.5542	15.5542	7.9000e-004	0.0000	15.5708
<b>Total</b>	<b>0.0113</b>	<b>0.0474</b>	<b>0.1413</b>	<b>3.1000e-004</b>	<b>0.0202</b>	<b>6.8000e-004</b>	<b>0.0209</b>	<b>5.4300e-003</b>	<b>6.3000e-004</b>	<b>6.0600e-003</b>	<b>0.0000</b>	<b>24.9078</b>	<b>24.9078</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>24.9258</b>

### 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	49.8140	114.7665	517.1052	1.0486	71.9752	1.4341	73.4093	19.2505	1.3184	20.5689	0.0000	82,987.00 77	82,987.00 77	3.6319	0.0000	83,063.27 72
Unmitigated	49.8140	114.7665	517.1052	1.0486	71.9752	1.4341	73.4093	19.2505	1.3184	20.5689	0.0000	82,987.00 77	82,987.00 77	3.6319	0.0000	83,063.27 72

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	27,414.40	29,785.60	25,251.20	78,361,272	78,361,272
General Light Industry	785.87	148.83	76.67	1,732,871	1,732,871
Government (Civic Center)	7,374.51	0.00	0.00	10,069,561	10,069,561
Racquet Club	74.09	46.96	60.14	116,045	116,045
Single Family Housing	29,667.00	31,248.00	27,187.00	84,341,582	84,341,582
Strip Mall	11,913.66	11,300.77	5,491.79	16,799,749	16,799,749
<b>Total</b>	<b>77,229.53</b>	<b>72,530.16</b>	<b>58,066.80</b>	<b>191,421,080</b>	<b>191,421,080</b>

### 4.3 Trip Type Information



Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510118	0.073510	0.192396	0.133166	0.036737	0.005265	0.012605	0.021642	0.001847	0.002083	0.006548	0.000610	0.003471

### 5.0 Energy Detail

#### 4.4 Fleet Mix

Historical Energy Use: Y

### 5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11,330.3892	11,330.3892	0.4475	0.0852	11,366.2096
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11,330.3892	11,330.3892	0.4475	0.0852	11,366.2096
NaturalGas Mitigated	0.8033	6.8893	3.0999	0.0438		0.5550	0.5550		0.5550	0.5550	0.0000	7,950.3501	7,950.3501	0.1524	0.1458	7,998.7346
NaturalGas Unmitigated	0.8033	6.8893	3.0999	0.0438		0.5550	0.5550		0.5550	0.5550	0.0000	7,950.3501	7,950.3501	0.1524	0.1458	7,998.7346

### 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					
Government (Civic Center)	6.2229e+006	0.0336	0.3050	0.2562	1.8300e-003		0.0232	0.0232		0.0232	0.0232	0.0000	332.0778	332.0778	6.3600e-003	6.0900e-003	334.0988
Racquet Club	27652.5	1.5000e-004	1.3600e-003	1.1400e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4756	1.4756	3.0000e-005	3.0000e-005	1.4846
Single Family Housing	9.32466e+007	0.5028	4.2967	1.8284	0.0274		0.3474	0.3474		0.3474	0.3474	0.0000	4,975.9940	4,975.9940	0.0954	0.0912	5,006.2770
Strip Mall	647832	3.4900e-003	0.0318	0.0267	1.9000e-004		2.4100e-003	2.4100e-003		2.4100e-003	2.4100e-003	0.0000	34.5708	34.5708	6.6000e-004	6.3000e-004	34.7812
Apartments Low Rise	4.74532e+007	0.2559	2.1866	0.9305	0.0140		0.1768	0.1768		0.1768	0.1768	0.0000	2,532.2859	2,532.2859	0.0485	0.0464	2,547.6969
General Light Industry	1.3857e+006	7.4700e-003	0.0679	0.0571	4.1000e-004		5.1600e-003	5.1600e-003		5.1600e-003	5.1600e-003	0.0000	73.9461	73.9461	1.4200e-003	1.3600e-003	74.3961
<b>Total</b>		<b>0.8033</b>	<b>6.8893</b>	<b>3.0999</b>	<b>0.0438</b>		<b>0.5550</b>	<b>0.5550</b>		<b>0.5550</b>	<b>0.5550</b>	<b>0.0000</b>	<b>7,950.3501</b>	<b>7,950.3501</b>	<b>0.1524</b>	<b>0.1458</b>	<b>7,998.7346</b>

### 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					
Government (Civic Center)	6.2229e+006	0.0336	0.3050	0.2562	1.8300e-003		0.0232	0.0232		0.0232	0.0232	0.0000	332.0778	332.0778	6.3600e-003	6.0900e-003	334.0988
Racquet Club	27652.5	1.5000e-004	1.3600e-003	1.1400e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4756	1.4756	3.0000e-005	3.0000e-005	1.4846
Single Family Housing	9.32466e+007	0.5028	4.2967	1.8284	0.0274		0.3474	0.3474		0.3474	0.3474	0.0000	4,975.9940	4,975.9940	0.0954	0.0912	5,006.2770
Strip Mall	647832	3.4900e-003	0.0318	0.0267	1.9000e-004		2.4100e-003	2.4100e-003		2.4100e-003	2.4100e-003	0.0000	34.5708	34.5708	6.6000e-004	6.3000e-004	34.7812
Apartments Low Rise	4.74532e+007	0.2559	2.1866	0.9305	0.0140		0.1768	0.1768		0.1768	0.1768	0.0000	2,532.2859	2,532.2859	0.0485	0.0464	2,547.6969
General Light Industry	1.3857e+006	7.4700e-003	0.0679	0.0571	4.1000e-004		5.1600e-003	5.1600e-003		5.1600e-003	5.1600e-003	0.0000	73.9461	73.9461	1.4200e-003	1.3600e-003	74.3961
<b>Total</b>		<b>0.8033</b>	<b>6.8893</b>	<b>3.0999</b>	<b>0.0438</b>		<b>0.5550</b>	<b>0.5550</b>		<b>0.5550</b>	<b>0.5550</b>	<b>0.0000</b>	<b>7,950.3501</b>	<b>7,950.3501</b>	<b>0.1524</b>	<b>0.1458</b>	<b>7,998.7346</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.52937e+007	3,688.5876	0.1457	0.0278	3,700.2488
General Light Industry	1.0576e+006	255.0751	0.0101	1.9200e-003	255.8815
Government (Civic Center)	4.15741e+006	1,002.7004	0.0396	7.5400e-003	1,005.8704
Racquet Club	21105	5.0902	2.0000e-004	4.0000e-005	5.1063
Single Family Housing	2.24727e+007	5,420.0602	0.2141	0.0408	5,437.1953
Strip Mall	3.9757e+006	958.8757	0.0379	7.2100e-003	961.9072
<b>Total</b>		<b>11,330.3892</b>	<b>0.4475</b>	<b>0.0852</b>	<b>11,366.2095</b>

## 5.3 Energy by Land Use - Electricity

### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.52937e+007	3,688.5876	0.1457	0.0278	3,700.2488
General Light Industry	1.0576e+006	255.0751	0.0101	1.9200e-003	255.8815
Government (Civic Center)	4.15741e+006	1,002.7004	0.0396	7.5400e-003	1,005.8704
Racquet Club	21105	5.0902	2.0000e-004	4.0000e-005	5.1063
Single Family Housing	2.24727e+007	5,420.0602	0.2141	0.0408	5,437.1953
Strip Mall	3.9757e+006	958.8757	0.0379	7.2100e-003	961.9072
<b>Total</b>		<b>11,330.3892</b>	<b>0.4475</b>	<b>0.0852</b>	<b>11,366.2095</b>

## 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	58.7242	0.6396	54.6920	2.8500e-003		0.6542	0.6542		0.6504	0.6504	0.0000	5,234.5705	5,234.5705	0.1884	0.0944	5,267.7764
Unmitigated	58.7242	0.6396	54.6920	2.8500e-003		0.6542	0.6542		0.6504	0.6504	0.0000	5,234.5705	5,234.5705	0.1884	0.0944	5,267.7764

## 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	15.9121					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	40.5701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.5200	2.0000e-005	0.0284	0.0000		0.3593	0.3593		0.3555	0.3555	0.0000	5,146.5039	5,146.5039	0.0986	0.0944	5,177.8246
Landscaping	1.7219	0.6396	54.6636	2.8500e-003		0.2949	0.2949		0.2949	0.2949	0.0000	88.0666	88.0666	0.0898	0.0000	89.9517
<b>Total</b>	<b>58.7242</b>	<b>0.6396</b>	<b>54.6920</b>	<b>2.8500e-003</b>		<b>0.6542</b>	<b>0.6542</b>		<b>0.6504</b>	<b>0.6504</b>	<b>0.0000</b>	<b>5,234.5705</b>	<b>5,234.5705</b>	<b>0.1884</b>	<b>0.0944</b>	<b>5,267.7764</b>

### 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	15.9121					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	40.5701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.5200	2.0000e-005	0.0284	0.0000		0.3593	0.3593		0.3555	0.3555	0.0000	5,146.5039	5,146.5039	0.0986	0.0944	5,177.8246
Landscaping	1.7219	0.6396	54.6636	2.8500e-003		0.2949	0.2949		0.2949	0.2949	0.0000	88.0666	88.0666	0.0898	0.0000	89.9517
<b>Total</b>	<b>58.7242</b>	<b>0.6396</b>	<b>54.6920</b>	<b>2.8500e-003</b>		<b>0.6542</b>	<b>0.6542</b>		<b>0.6504</b>	<b>0.6504</b>	<b>0.0000</b>	<b>5,234.5705</b>	<b>5,234.5705</b>	<b>0.1884</b>	<b>0.0944</b>	<b>5,267.7764</b>

### 7.0 Water Detail

#### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2,894.6137	18.7306	0.4597	3,430.4747
Unmitigated	2,894.6137	18.7330	0.4602	3,430.6717

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	271.041 / 170.874	1,395.046 1	8.8836	0.2184	1,649.301 0
General Light Industry	26.0734 / 0	90.1545	0.8528	0.0207	114.4739
Government (Civic Center)	52.472 / 32.1602	267.6082	1.7197	0.0423	316.8228
Racquet Club	0.133072 / 0.0815603	0.6787	4.3600e-003	1.1000e-004	0.8035
Single Family Housing	201.977 / 127.334	1,039.577 6	6.6200	0.1627	1,229.046 4
Strip Mall	19.9114 / 12.2038	101.5487	0.6526	0.0160	120.2241
<b>Total</b>		<b>2,894.613 8</b>	<b>18.7330</b>	<b>0.4602</b>	<b>3,430.671 7</b>



## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	271.041 / 170.874	1,395.046 1	8.8824	0.2182	1,649.207 6
General Light Industry	26.0734 / 0	90.1545	0.8527	0.0207	114.4649
Government (Civic Center)	52.472 / 32.1602	267.6082	1.7195	0.0422	316.8047
Racquet Club	0.133072 / 0.0815603	0.6787	4.3600e-003	1.1000e-004	0.8034
Single Family Housing	201.977 / 127.334	1,039.577 6	6.6191	0.1626	1,228.976 8
Strip Mall	19.9114 / 12.2038	101.5487	0.6525	0.0160	120.2172
<b>Total</b>		<b>2,894.613 8</b>	<b>18.7306</b>	<b>0.4597</b>	<b>3,430.474 7</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	1,520.2176	89.8423	0.0000	3,406.9056
Mitigated	1,520.2176	89.8423	0.0000	3,406.9056

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1913.6	388.4435	22.9564	0.0000	870.5269
General Light Industry	139.81	28.3802	1.6772	0.0000	63.6018
Government (Civic Center)	1505.54	305.6110	18.0611	0.0000	684.8940
Racquet Club	12.83	2.6044	0.1539	0.0000	5.8366
Single Family Housing	3635.06	737.8843	43.6077	0.0000	1,653.6463
Strip Mall	282.25	57.2942	3.3860	0.0000	128.4000
<b>Total</b>		<b>1,520.2176</b>	<b>89.8423</b>	<b>0.0000</b>	<b>3,406.9056</b>

## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1913.6	388.4435	22.9564	0.0000	870.5269
General Light Industry	139.81	28.3802	1.6772	0.0000	63.6018
Government (Civic Center)	1505.54	305.6110	18.0611	0.0000	684.8940
Racquet Club	12.83	2.6044	0.1539	0.0000	5.8366
Single Family Housing	3635.06	737.8843	43.6077	0.0000	1,653.6463
Strip Mall	282.25	57.2942	3.3860	0.0000	128.4000
<b>Total</b>		<b>1,520.2176</b>	<b>89.8423</b>	<b>0.0000</b>	<b>3,406.9056</b>

## 9.0 Operational Offroad

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

## **ATTACHMENT 3a**

Year 2020 GHG Emissions of the CPU  
Uptown

**6086 Uptown - Proposed Plan 2020**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	2,485.70	1000sqft	57.06	2,485,700.00	0
Hotel	220.00	Room	7.33	174,000.00	0
Racquet Club	31.10	1000sqft	0.71	31,100.00	0
Apartments Low Rise	27,180.00	Dwelling Unit	1,698.75	27,180,000.00	77735
Single Family Housing	5,500.00	Dwelling Unit	1,785.71	9,900,000.00	15730
Strip Mall	4,785.20	1000sqft	109.85	4,785,200.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2020
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MW hr)</b>	531.72	<b>CH4 Intensity (lb/MW hr)</b>	0.021	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS status - SDG&E currently at 36.4%  
 CalEEMod accounts for 10.2%  
 Additional 26.2% reduction applied  
 (531.72, 0.021, 0.004)

Land Use - Uptown proposed land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	5.84	4.57
tblEnergyUse	T24E	1.48	1.16
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	49.75	41.39
tblEnergyUse	T24NG	4.54	3.78
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	14,949.00	24,462.00
tblFireplaces	NumberGas	3,025.00	4,950.00
tblFireplaces	NumberWood	9,513.00	0.00

tblFireplaces	NumberWood	1,925.00	0.00
tblLandUse	LandUseSquareFeet	319,440.00	174,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	531.72
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2020
tblWater	IndoorWaterUseRate	1,770,886,416.39	1,416,709,133.11
tblWater	IndoorWaterUseRate	493,808,381.15	395,046,704.92
tblWater	IndoorWaterUseRate	5,580,689.40	4,464,551.52
tblWater	IndoorWaterUseRate	1,839,351.78	1,471,481.42
tblWater	IndoorWaterUseRate	358,347,140.92	286,677,712.74
tblWater	IndoorWaterUseRate	354,451,829.81	283,561,463.85
tblWoodstoves	NumberCatalytic	1,359.00	0.00
tblWoodstoves	NumberCatalytic	275.00	0.00
tblWoodstoves	NumberNoncatalytic	1,359.00	0.00
tblWoodstoves	NumberNoncatalytic	275.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	249.5757	2.8166	243.6566	0.0128		2.9563	2.9563		2.9392	2.9392	0.0000	23,562.8597	23,562.8597	0.8309	0.4247	23,711.9703
Energy	2.6613	22.9319	11.0731	0.1452		1.8387	1.8387		1.8387	1.8387	0.0000	83,192.8618	83,192.8618	2.7503	0.9106	83,532.8913
Mobile	240.8244	469.3678	2,283.5571	5.8381	398.7095	6.7942	405.5037	106.6351	6.2696	112.9047	0.0000	405,151.8101	405,151.8101	15.9424	0.0000	405,486.6013
Waste						0.0000	0.0000		0.0000	0.0000	7,803.5349	0.0000	7,803.5349	461.1757	0.0000	17,488.2246
Water						0.0000	0.0000		0.0000	0.0000	757.5804	12,493.8684	13,251.4488	78.3042	1.9313	15,494.5305
<b>Total</b>	<b>493.0613</b>	<b>495.1163</b>	<b>2,538.2869</b>	<b>5.9961</b>	<b>398.7095</b>	<b>11.5892</b>	<b>410.2987</b>	<b>106.6351</b>	<b>11.0475</b>	<b>117.6827</b>	<b>8,561.1153</b>	<b>524,401.4000</b>	<b>532,962.5152</b>	<b>559.0035</b>	<b>3.2666</b>	<b>545,714.2181</b>

## 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	249.5757	2.8166	243.6566	0.0128		2.9563	2.9563		2.9392	2.9392	0.0000	23,562.8597	23,562.8597	0.8309	0.4247	23,711.9703
Energy	2.6613	22.9319	11.0731	0.1452		1.8387	1.8387		1.8387	1.8387	0.0000	83,192.8618	83,192.8618	2.7503	0.9106	83,532.8913
Mobile	240.8244	469.3678	2,283.5571	5.8381	398.7095	6.7942	405.5037	106.6351	6.2696	112.9047	0.0000	405,151.8101	405,151.8101	15.9424	0.0000	405,486.6013
Waste						0.0000	0.0000		0.0000	0.0000	7,803.5349	0.0000	7,803.5349	461.1757	0.0000	17,488.2246
Water						0.0000	0.0000		0.0000	0.0000	757.5804	12,493.8684	13,251.4488	78.2939	1.9293	15,493.7077
<b>Total</b>	<b>493.0613</b>	<b>495.1163</b>	<b>2,538.2869</b>	<b>5.9961</b>	<b>398.7095</b>	<b>11.5892</b>	<b>410.2987</b>	<b>106.6351</b>	<b>11.0475</b>	<b>117.6827</b>	<b>8,561.1153</b>	<b>524,401.4000</b>	<b>532,962.5152</b>	<b>558.9932</b>	<b>3.2646</b>	<b>545,713.3952</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	23,962.00	4,719.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Building Construction - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0246	0.2061	0.3051	5.6000e-004	0.0154	2.9500e-003	0.0183	4.3900e-003	2.7100e-003	7.1000e-003	0.0000	50.0450	50.0450	3.8000e-004	0.0000	50.0529
Worker	0.0372	0.0493	0.4664	1.1800e-003	0.0961	7.2000e-004	0.0968	0.0255	6.6000e-004	0.0262	0.0000	86.0759	86.0759	4.3800e-003	0.0000	86.1678
<b>Total</b>	<b>0.0618</b>	<b>0.2554</b>	<b>0.7716</b>	<b>1.7400e-003</b>	<b>0.1114</b>	<b>3.6700e-003</b>	<b>0.1151</b>	<b>0.0299</b>	<b>3.3700e-003</b>	<b>0.0333</b>	<b>0.0000</b>	<b>136.1208</b>	<b>136.1208</b>	<b>4.7600e-003</b>	<b>0.0000</b>	<b>136.2207</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0246	0.2061	0.3051	5.6000e-004	0.0154	2.9500e-003	0.0183	4.3900e-003	2.7100e-003	7.1000e-003	0.0000	50.0450	50.0450	3.8000e-004	0.0000	50.0529
Worker	0.0372	0.0493	0.4664	1.1800e-003	0.0961	7.2000e-004	0.0968	0.0255	6.6000e-004	0.0262	0.0000	86.0759	86.0759	4.3800e-003	0.0000	86.1678
<b>Total</b>	<b>0.0618</b>	<b>0.2554</b>	<b>0.7716</b>	<b>1.7400e-003</b>	<b>0.1114</b>	<b>3.6700e-003</b>	<b>0.1151</b>	<b>0.0299</b>	<b>3.3700e-003</b>	<b>0.0333</b>	<b>0.0000</b>	<b>136.1208</b>	<b>136.1208</b>	<b>4.7600e-003</b>	<b>0.0000</b>	<b>136.2207</b>

### 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	240.8244	469.3678	2,283.5571	5.8381	398.7095	6.7942	405.5037	106.6351	6.2696	112.9047	0.0000	405,151.8101	405,151.8101	15.9424	0.0000	405,486.6013
Unmitigated	240.8244	469.3678	2,283.5571	5.8381	398.7095	6.7942	405.5037	106.6351	6.2696	112.9047	0.0000	405,151.8101	405,151.8101	15.9424	0.0000	405,486.6013

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	179,116.20	194,608.80	164,982.60	511,985,424	511,985,424
Government (Civic Center)	69,400.74	0.00	0.00	94,763,593	94,763,593
Hotel	1,797.40	1,801.80	1,309.00	3,283,569	3,283,569
Racquet Club	1,024.12	649.06	831.30	1,604,003	1,604,003
Single Family Housing	52,635.00	55,440.00	48,235.00	149,638,291	149,638,291
Strip Mall	212,080.06	201,169.81	97,761.64	299,059,404	299,059,404
<b>Total</b>	<b>516,053.53</b>	<b>453,669.47</b>	<b>313,119.54</b>	<b>1,060,334,284</b>	<b>1,060,334,284</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

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

#### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	56,855.6524	56,855.6524	2.2455	0.4277	57,035.3980
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	56,855.6524	56,855.6524	2.2455	0.4277	57,035.3980
NaturalGas Mitigated	2.6613	22.9319	11.0731	0.1452		1.8387	1.8387		1.8387	1.8387	0.0000	26,337.2094	26,337.2094	0.5048	0.4829	26,497.4933
NaturalGas Unmitigated	2.6613	22.9319	11.0731	0.1452		1.8387	1.8387		1.8387	1.8387	0.0000	26,337.2094	26,337.2094	0.5048	0.4829	26,497.4933

### 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					
Government (Civic Center)	4.52397e+007	0.2439	2.2176	1.8628	0.0133		0.1685	0.1685		0.1685	0.1685	0.0000	2,414.1648	2,414.1648	0.0463	0.0443	2,428.8570
Hotel	9.13326e+006	0.0493	0.4477	0.3761	2.6900e-003		0.0340	0.0340		0.0340	0.0340	0.0000	487.3855	487.3855	9.3400e-003	8.9400e-003	490.3517
Racquet Club	343033	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3056	18.3056	3.5000e-004	3.4000e-004	18.4170
Single Family Housing	1.44288e+008	0.7780	6.6486	2.8292	0.0424		0.5375	0.5375		0.5375	0.5375	0.0000	7,699.7772	7,699.7772	0.1476	0.1412	7,746.6367
Strip Mall	1.00011e+007	0.0539	0.4903	0.4118	2.9400e-003		0.0373	0.0373		0.0373	0.0373	0.0000	533.6951	533.6951	0.0102	9.7800e-003	536.9431
Apartments Low Rise	2.84535e+008	1.5343	13.1109	5.5791	0.0837		1.0600	1.0600		1.0600	1.0600	0.0000	15,183.8813	15,183.8813	0.2910	0.2784	15,276.2878
<b>Total</b>		<b>2.6613</b>	<b>22.9319</b>	<b>11.0731</b>	<b>0.1452</b>		<b>1.8387</b>	<b>1.8387</b>		<b>1.8387</b>	<b>1.8387</b>	<b>0.0000</b>	<b>26,337.2094</b>	<b>26,337.2094</b>	<b>0.5048</b>	<b>0.4829</b>	<b>26,497.4933</b>



### 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					
Hotel	9.13326e+006	0.0493	0.4477	0.3761	2.6900e-003		0.0340	0.0340		0.0340	0.0340	0.0000	487.3855	487.3855	9.3400e-003	8.9400e-003	490.3517
Racquet Club	343033	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3056	18.3056	3.5000e-004	3.4000e-004	18.4170
Single Family Housing	1.44288e+008	0.7780	6.6486	2.8292	0.0424		0.5375	0.5375		0.5375	0.5375	0.0000	7,699.7772	7,699.7772	0.1476	0.1412	7,746.6367
Strip Mall	1.00011e+007	0.0539	0.4903	0.4118	2.9400e-003		0.0373	0.0373		0.0373	0.0373	0.0000	533.6951	533.6951	0.0102	9.7800e-003	536.9431
Apartments Low Rise	2.84535e+008	1.5343	13.1109	5.5791	0.0837		1.0600	1.0600		1.0600	1.0600	0.0000	15,183.8813	15,183.8813	0.2910	0.2784	15,276.2878
Government (Civic Center)	4.52397e+007	0.2439	2.2176	1.8628	0.0133		0.1685	0.1685		0.1685	0.1685	0.0000	2,414.1648	2,414.1648	0.0463	0.0443	2,428.8570
<b>Total</b>		<b>2.6613</b>	<b>22.9319</b>	<b>11.0731</b>	<b>0.1452</b>		<b>1.8387</b>	<b>1.8387</b>		<b>1.8387</b>	<b>1.8387</b>	<b>0.0000</b>	<b>26,337.2094</b>	<b>26,337.2094</b>	<b>0.5048</b>	<b>0.4829</b>	<b>26,497.4933</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9.75213e+007	23,520.5895	0.9289	0.1769	23,594.9484
Government (Civic Center)	3.41784e+007	8,243.2818	0.3256	0.0620	8,269.3424
Hotel	2.31768e+006	558.9877	0.0221	4.2100e-003	560.7549
Racquet Club	269948	65.1072	2.5700e-003	4.9000e-004	65.3130
Single Family Housing	3.83314e+007	9,244.9183	0.3651	0.0696	9,274.1456
Strip Mall	6.31168e+007	15,222.7679	0.6012	0.1145	15,270.8938
<b>Total</b>		<b>56,855.6524</b>	<b>2.2455</b>	<b>0.4277</b>	<b>57,035.3980</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9.75213e+007	23,520.5895	0.9289	0.1769	23,594.9484
Government (Civic Center)	3.41784e+007	8,243.2818	0.3256	0.0620	8,269.3424
Hotel	2.31768e+006	558.9877	0.0221	4.2100e-003	560.7549
Racquet Club	269948	65.1072	2.5700e-003	4.9000e-004	65.3130
Single Family Housing	3.83314e+007	9,244.9183	0.3651	0.0696	9,274.1456
Strip Mall	6.31168e+007	15,222.7679	0.6012	0.1145	15,270.8938
<b>Total</b>		<b>56,855.6524</b>	<b>2.2455</b>	<b>0.4277</b>	<b>57,035.3980</b>

### 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	249.5757	2.8166	243.6566	0.0128		2.9563	2.9563		2.9392	2.9392	0.0000	23,562.8597	23,562.8597	0.8309	0.4247	23,711.9703
Unmitigated	249.5757	2.8166	243.6566	0.0128		2.9563	2.9563		2.9392	2.9392	0.0000	23,562.8597	23,562.8597	0.8309	0.4247	23,711.9703

## 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	65.8012					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	174.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.3409	1.1000e-004	0.1277	0.0000		1.6173	1.6173		1.6003	1.6003	0.0000	23,166.3562	23,166.3562	0.4440	0.4247	23,307.3428
Landscaping	7.4201	2.8165	243.5289	0.0128		1.3390	1.3390		1.3390	1.3390	0.0000	396.5035	396.5035	0.3869	0.0000	404.6275
<b>Total</b>	<b>249.5757</b>	<b>2.8166</b>	<b>243.6566</b>	<b>0.0128</b>		<b>2.9563</b>	<b>2.9563</b>		<b>2.9392</b>	<b>2.9392</b>	<b>0.0000</b>	<b>23,562.8597</b>	<b>23,562.8597</b>	<b>0.8309</b>	<b>0.4247</b>	<b>23,711.9703</b>

## 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	65.8012					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	174.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.3409	1.1000e-004	0.1277	0.0000		1.6173	1.6173		1.6003	1.6003	0.0000	23,166.3562	23,166.3562	0.4440	0.4247	23,307.3428
Landscaping	7.4201	2.8165	243.5289	0.0128		1.3390	1.3390		1.3390	1.3390	0.0000	396.5035	396.5035	0.3869	0.0000	404.6275
<b>Total</b>	<b>249.5757</b>	<b>2.8166</b>	<b>243.6566</b>	<b>0.0128</b>		<b>2.9563</b>	<b>2.9563</b>		<b>2.9392</b>	<b>2.9392</b>	<b>0.0000</b>	<b>23,562.8597</b>	<b>23,562.8597</b>	<b>0.8309</b>	<b>0.4247</b>	<b>23,711.9703</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13,251.4488	78.2939	1.9293	15,493.7077
Unmitigated	13,251.4488	78.3042	1.9313	15,494.5305

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1416.71 / 1116.43	7,890.1050	46.4574	1.1460	9,220.9676
Government (Civic Center)	395.047 / 302.657	2,176.9436	12.9536	0.3194	2,547.9788
Hotel	4.46455 / 0.620077	17.0987	0.1461	3.5500e-003	21.2681
Racquet Club	1.47148 / 1.12734	8.1087	0.0483	1.1900e-003	9.4908
Single Family Housing	286.678 / 225.915	1,596.5996	9.4009	0.2319	1,865.9059
Strip Mall	283.561 / 217.245	1,562.5932	9.2980	0.2293	1,828.9194
<b>Total</b>		<b>13,251.4488</b>	<b>78.3042</b>	<b>1.9313</b>	<b>15,494.5305</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1416.71 / 1116.43	7,890.1050	46.4513	1.1448	9,220.4794
Government (Civic Center)	395.047 / 302.657	2,176.9436	12.9519	0.3191	2,547.8426
Hotel	4.46455 / 0.620077	17.0987	0.1461	3.5500e-003	21.2666
Racquet Club	1.47148 / 1.12734	8.1087	0.0482	1.1900e-003	9.4903
Single Family Housing	286.678 / 225.915	1,596.5996	9.3996	0.2317	1,865.8071
Strip Mall	283.561 / 217.245	1,562.5932	9.2968	0.2290	1,828.8217
<b>Total</b>		<b>13,251.4488</b>	<b>78.2939</b>	<b>1.9293</b>	<b>15,493.7076</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	7,803.534 9	461.1757	0.0000	17,488.22 46
Mitigated	7,803.534 9	461.1757	0.0000	17,488.22 46

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	12502.8	2,537.955 4	149.9889	0.0000	5,687.721 6
Government (Civic Center)	14168.5	2,876.075 4	169.9712	0.0000	6,445.470 4
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.27	35.9842	2.1266	0.0000	80.6429
Single Family Housing	6449.3	1,309.149 6	77.3685	0.0000	2,933.888 7
Strip Mall	5024.46	1,019.920 0	60.2755	0.0000	2,285.706 4
<b>Total</b>		<b>7,803.534 9</b>	<b>461.1757</b>	<b>0.0000</b>	<b>17,488.22 46</b>



## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	12502.8	2,537.955 4	149.9889	0.0000	5,687.721 6
Government (Civic Center)	14168.5	2,876.075 4	169.9712	0.0000	6,445.470 4
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.27	35.9842	2.1266	0.0000	80.6429
Single Family Housing	6449.3	1,309.149 6	77.3685	0.0000	2,933.888 7
Strip Mall	5024.46	1,019.920 0	60.2755	0.0000	2,285.706 4
<b>Total</b>		<b>7,803.534 9</b>	<b>461.1757</b>	<b>0.0000</b>	<b>17,488.22 46</b>

## 9.0 Operational Offroad

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

## **ATTACHMENT 3b**

Year 2020 GHG Emissions of the Adopted Plan  
Uptown

**6086 Uptown - Adopted Plan 2020**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	2,314.90	1000sqft	53.14	2,314,900.00	0
Hotel	220.00	Room	7.33	174,000.00	0
Racquet Club	31.10	1000sqft	0.71	31,100.00	0
Apartments Low Rise	29,060.00	Dwelling Unit	1,816.25	29,060,000.00	83112
Single Family Housing	5,540.00	Dwelling Unit	1,798.70	9,972,000.00	15844
Strip Mall	4,783.00	1000sqft	109.80	4,783,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2020
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	531.72	<b>CH4 Intensity (lb/MWhr)</b>	0.021	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS status - SDG&E currently at 36.4%  
 CalEEMod accounts for 10.2%  
 Additional 26.2% reduction applied  
 (531.72, 0.021, 0.004)

Land Use - Uptown adopted land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblAreaCoating	Area_Nonresidential_Interior	10954500	10954515
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	5.84	4.57
tblEnergyUse	T24E	1.48	1.16
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	49.75	41.39
tblEnergyUse	T24NG	4.54	3.78
tblEnergyUse	T24NG	21,834.49	20,415.25

tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	15,983.00	26,154.00
tblFireplaces	NumberGas	3,047.00	4,986.00
tblFireplaces	NumberWood	10,171.00	0.00
tblFireplaces	NumberWood	1,939.00	0.00
tblLandUse	LandUseSquareFeet	319,440.00	174,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	531.72
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2020
tblWater	IndoorWaterUseRate	1,893,375,984.56	1,514,700,787.65
tblWater	IndoorWaterUseRate	459,877,306.81	367,901,845.45
tblWater	IndoorWaterUseRate	5,580,689.40	4,464,551.52
tblWater	IndoorWaterUseRate	1,839,351.78	1,471,481.42
tblWater	IndoorWaterUseRate	360,953,301.94	288,762,641.55
tblWater	IndoorWaterUseRate	354,288,870.26	283,431,096.21
tblWoodstoves	NumberCatalytic	1,453.00	0.00
tblWoodstoves	NumberCatalytic	277.00	0.00
tblWoodstoves	NumberNoncatalytic	1,453.00	0.00
tblWoodstoves	NumberNoncatalytic	277.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	222.5795	2.9820	257.9661	0.0136		3.1299	3.1299		3.1119	3.1119	0.0000	24,947.2028	24,947.2028	0.8797	0.4497	25,105.0733
Energy	2.7562	23.7345	11.3514	0.1503		1.9043	1.9043		1.9043	1.9043	0.0000	85,253.6768	85,253.6768	2.8126	0.9362	85,602.9707
Mobile	246.1046	481.7490	2,340.5401	6.0006	409.9347	6.9793	416.9140	109.6373	6.4404	116.0777	0.0000	416,430.1669	416,430.1669	16.3744	0.0000	416,774.0295
Waste						0.0000	0.0000		0.0000	0.0000	7,790.4765	0.0000	7,790.4765	460.4040	0.0000	17,458.9599
Water						0.0000	0.0000		0.0000	0.0000	780.6769	12,877.8275	13,658.5044	80.6916	1.9902	15,969.9811
<b>Total</b>	<b>471.4403</b>	<b>508.4655</b>	<b>2,609.8576</b>	<b>6.1645</b>	<b>409.9347</b>	<b>12.0135</b>	<b>421.9483</b>	<b>109.6373</b>	<b>11.4566</b>	<b>121.0939</b>	<b>8,571.1534</b>	<b>539,508.8740</b>	<b>548,080.0273</b>	<b>561.1622</b>	<b>3.3761</b>	<b>560,911.0143</b>

## 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	222.5795	2.9820	257.9661	0.0136		3.1299	3.1299		3.1119	3.1119	0.0000	24,947.2028	24,947.2028	0.8797	0.4497	25,105.0733
Energy	2.7562	23.7345	11.3514	0.1503		1.9043	1.9043		1.9043	1.9043	0.0000	85,253.6768	85,253.6768	2.8126	0.9362	85,602.9707
Mobile	246.1046	481.7490	2,340.5401	6.0006	409.9347	6.9793	416.9140	109.6373	6.4404	116.0777	0.0000	416,430.1669	416,430.1669	16.3744	0.0000	416,774.0295
Waste						0.0000	0.0000		0.0000	0.0000	7,790.4765	0.0000	7,790.4765	460.4040	0.0000	17,458.9599
Water						0.0000	0.0000		0.0000	0.0000	780.6769	12,877.8275	13,658.5044	80.6810	1.9882	15,969.1331
<b>Total</b>	<b>471.4403</b>	<b>508.4655</b>	<b>2,609.8576</b>	<b>6.1645</b>	<b>409.9347</b>	<b>12.0135</b>	<b>421.9483</b>	<b>109.6373</b>	<b>11.4566</b>	<b>121.0939</b>	<b>8,571.1534</b>	<b>539,508.8740</b>	<b>548,080.0273</b>	<b>561.1516</b>	<b>3.3741</b>	<b>560,910.1664</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0



**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	25,275.00	4,896.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Building Construction - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0255	0.2138	0.3166	5.8000e-004	0.0159	3.0600e-003	0.0190	4.5600e-003	2.8100e-003	7.3700e-003	0.0000	51.9221	51.9221	3.9000e-004	0.0000	51.9303
Worker	0.0393	0.0520	0.4920	1.2500e-003	0.1013	7.5000e-004	0.1021	0.0269	7.0000e-004	0.0276	0.0000	90.7924	90.7924	4.6200e-003	0.0000	90.8893
<b>Total</b>	<b>0.0648</b>	<b>0.2658</b>	<b>0.8086</b>	<b>1.8300e-003</b>	<b>0.1173</b>	<b>3.8100e-003</b>	<b>0.1211</b>	<b>0.0315</b>	<b>3.5100e-003</b>	<b>0.0350</b>	<b>0.0000</b>	<b>142.7145</b>	<b>142.7145</b>	<b>5.0100e-003</b>	<b>0.0000</b>	<b>142.8196</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0255	0.2138	0.3166	5.8000e-004	0.0159	3.0600e-003	0.0190	4.5600e-003	2.8100e-003	7.3700e-003	0.0000	51.9221	51.9221	3.9000e-004	0.0000	51.9303
Worker	0.0393	0.0520	0.4920	1.2500e-003	0.1013	7.5000e-004	0.1021	0.0269	7.0000e-004	0.0276	0.0000	90.7924	90.7924	4.6200e-003	0.0000	90.8893
<b>Total</b>	<b>0.0648</b>	<b>0.2658</b>	<b>0.8086</b>	<b>1.8300e-003</b>	<b>0.1173</b>	<b>3.8100e-003</b>	<b>0.1211</b>	<b>0.0315</b>	<b>3.5100e-003</b>	<b>0.0350</b>	<b>0.0000</b>	<b>142.7145</b>	<b>142.7145</b>	<b>5.0100e-003</b>	<b>0.0000</b>	<b>142.8196</b>

### 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	246.1046	481.7490	2,340.5401	6.0006	409.9347	6.9793	416.9140	109.6373	6.4404	116.0777	0.0000	416,430.1669	416,430.1669	16.3744	0.0000	416,774.0295
Unmitigated	246.1046	481.7490	2,340.5401	6.0006	409.9347	6.9793	416.9140	109.6373	6.4404	116.0777	0.0000	416,430.1669	416,430.1669	16.3744	0.0000	416,774.0295

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	191,505.40	208,069.60	176,394.20	547,398,691	547,398,691
Government (Civic Center)	64,632.01	0.00	0.00	88,252,098	88,252,098
Hotel	1,797.40	1,801.80	1,309.00	3,283,569	3,283,569
Racquet Club	1,024.12	649.06	831.30	1,604,003	1,604,003
Single Family Housing	53,017.80	55,843.20	48,585.80	150,726,570	150,726,570
Strip Mall	211,982.56	201,077.32	97,716.69	298,921,911	298,921,911
<b>Total</b>	<b>523,959.29</b>	<b>467,440.98</b>	<b>324,836.99</b>	<b>1,090,186,843</b>	<b>1,090,186,843</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

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**

**4.4 Fleet Mix**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	57,976.3526	57,976.3526	2.2898	0.4361	58,159.6412
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	57,976.3526	57,976.3526	2.2898	0.4361	58,159.6412
NaturalGas Mitigated	2.7562	23.7345	11.3514	0.1503		1.9043	1.9043		1.9043	1.9043	0.0000	27,277.3242	27,277.3242	0.5228	0.5001	27,443.3295
NaturalGas Unmitigated	2.7562	23.7345	11.3514	0.1503		1.9043	1.9043		1.9043	1.9043	0.0000	27,277.3242	27,277.3242	0.5228	0.5001	27,443.3295

### 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					
Government (Civic Center)	4.21312e+007	0.2272	2.0653	1.7348	0.0124		0.1570	0.1570		0.1570	0.1570	0.0000	2,248.2802	2,248.2802	0.0431	0.0412	2,261.9629
Hotel	9.13326e+006	0.0493	0.4477	0.3761	2.6900e-003		0.0340	0.0340		0.0340	0.0340	0.0000	487.3855	487.3855	9.3400e-003	8.9400e-003	490.3517
Racquet Club	343033	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3056	18.3056	3.5000e-004	3.4000e-004	18.4170
Single Family Housing	1.45338e+008	0.7837	6.6969	2.8498	0.0428		0.5415	0.5415		0.5415	0.5415	0.0000	7,755.7756	7,755.7756	0.1487	0.1422	7,802.9759
Strip Mall	9.99647e+006	0.0539	0.4900	0.4116	2.9400e-003		0.0372	0.0372		0.0372	0.0372	0.0000	533.4497	533.4497	0.0102	9.7800e-003	536.6962
Apartments Low Rise	3.04216e+008	1.6404	14.0178	5.9650	0.0895		1.1334	1.1334		1.1334	1.1334	0.0000	16,234.1277	16,234.1277	0.3112	0.2976	16,332.9258
<b>Total</b>		<b>2.7562</b>	<b>23.7345</b>	<b>11.3514</b>	<b>0.1504</b>		<b>1.9043</b>	<b>1.9043</b>		<b>1.9043</b>	<b>1.9043</b>	<b>0.0000</b>	<b>27,277.3242</b>	<b>27,277.3242</b>	<b>0.5228</b>	<b>0.5001</b>	<b>27,443.3294</b>

### 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					
Hotel	9.13326e+006	0.0493	0.4477	0.3761	2.6900e-003		0.0340	0.0340		0.0340	0.0340	0.0000	487.3855	487.3855	9.3400e-003	8.9400e-003	490.3517
Racquet Club	343033	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3056	18.3056	3.5000e-004	3.4000e-004	18.4170
Single Family Housing	1.45338e+008	0.7837	6.6969	2.8498	0.0428		0.5415	0.5415		0.5415	0.5415	0.0000	7,755.7756	7,755.7756	0.1487	0.1422	7,802.9759
Strip Mall	9.99647e+006	0.0539	0.4900	0.4116	2.9400e-003		0.0372	0.0372		0.0372	0.0372	0.0000	533.4497	533.4497	0.0102	9.7800e-003	536.6962
Apartments Low Rise	3.04216e+008	1.6404	14.0178	5.9650	0.0895		1.1334	1.1334		1.1334	1.1334	0.0000	16,234.1277	16,234.1277	0.3112	0.2976	16,332.9258
Government (Civic Center)	4.21312e+007	0.2272	2.0653	1.7348	0.0124		0.1570	0.1570		0.1570	0.1570	0.0000	2,248.2802	2,248.2802	0.0431	0.0412	2,261.9629
<b>Total</b>		<b>2.7562</b>	<b>23.7345</b>	<b>11.3514</b>	<b>0.1504</b>		<b>1.9043</b>	<b>1.9043</b>		<b>1.9043</b>	<b>1.9043</b>	<b>0.0000</b>	<b>27,277.3242</b>	<b>27,277.3242</b>	<b>0.5228</b>	<b>0.5001</b>	<b>27,443.3294</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.04267e+008	25,147.4736	0.9932	0.1892	25,226.9757
Government (Civic Center)	3.18299e+007	7,676.8609	0.3032	0.0578	7,701.1308
Hotel	2.31768e+006	558.9877	0.0221	4.2100e-003	560.7549
Racquet Club	269948	65.1072	2.5700e-003	4.9000e-004	65.3130
Single Family Housing	3.86101e+007	9,312.1541	0.3678	0.0701	9,341.5939
Strip Mall	6.30878e+007	15,215.7692	0.6009	0.1145	15,263.8730
<b>Total</b>		<b>57,976.3526</b>	<b>2.2898</b>	<b>0.4361</b>	<b>58,159.6412</b>



### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.04267e+008	25,147.4736	0.9932	0.1892	25,226.9757
Government (Civic Center)	3.18299e+007	7,676.8609	0.3032	0.0578	7,701.1308
Hotel	2.31768e+006	558.9877	0.0221	4.2100e-003	560.7549
Racquet Club	269948	65.1072	2.5700e-003	4.9000e-004	65.3130
Single Family Housing	3.86101e+007	9,312.1541	0.3678	0.0701	9,341.5939
Strip Mall	6.30878e+007	15,215.7692	0.6009	0.1145	15,263.8730
<b>Total</b>		<b>57,976.3526</b>	<b>2.2898</b>	<b>0.4361</b>	<b>58,159.6412</b>

### 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	222.5795	2.9820	257.9661	0.0136		3.1299	3.1299		3.1119	3.1119	0.0000	24,947.20 28	24,947.20 28	0.8797	0.4497	25,105.07 33
Unmitigated	222.5795	2.9820	257.9661	0.0136		3.1299	3.1299		3.1119	3.1119	0.0000	24,947.20 28	24,947.20 28	0.8797	0.4497	25,105.07 33

## 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	31.2843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	180.9613					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4784	1.1000e-004	0.1352	0.0000		1.7123	1.7123		1.6943	1.6943	0.0000	24,527.41 51	24,527.41 51	0.4701	0.4497	24,676.68 48
Landscaping	7.8555	2.9819	257.8309	0.0136		1.4176	1.4176		1.4176	1.4176	0.0000	419.7877	419.7877	0.4096	0.0000	428.3884
<b>Total</b>	<b>222.5795</b>	<b>2.9820</b>	<b>257.9661</b>	<b>0.0136</b>		<b>3.1299</b>	<b>3.1299</b>		<b>3.1119</b>	<b>3.1119</b>	<b>0.0000</b>	<b>24,947.20 28</b>	<b>24,947.20 28</b>	<b>0.8797</b>	<b>0.4497</b>	<b>25,105.07 33</b>

## 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	31.2843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	180.9613					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4784	1.1000e-004	0.1352	0.0000		1.7123	1.7123		1.6943	1.6943	0.0000	24,527.4151	24,527.4151	0.4701	0.4497	24,676.6848
Landscaping	7.8555	2.9819	257.8309	0.0136		1.4176	1.4176		1.4176	1.4176	0.0000	419.7877	419.7877	0.4096	0.0000	428.3884
<b>Total</b>	<b>222.5795</b>	<b>2.9820</b>	<b>257.9661</b>	<b>0.0136</b>		<b>3.1299</b>	<b>3.1299</b>		<b>3.1119</b>	<b>3.1119</b>	<b>0.0000</b>	<b>24,947.2028</b>	<b>24,947.2028</b>	<b>0.8797</b>	<b>0.4497</b>	<b>25,105.0733</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13,658.5044	80.6810	1.9882	15,969.1331
Unmitigated	13,658.5044	80.6916	1.9902	15,969.9811

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1514.7 / 1193.65	8,435.8517	49.6707	1.2253	9,858.7681
Government (Civic Center)	367.902 / 281.86	2,027.3592	12.0636	0.2974	2,372.8994
Hotel	4.46455 / 0.620077	17.0987	0.1461	3.5500e-003	21.2681
Racquet Club	1.47148 / 1.12734	8.1087	0.0483	1.1900e-003	9.4908
Single Family Housing	288.763 / 227.558	1,608.2112	9.4692	0.2336	1,879.4761
Strip Mall	283.431 / 217.145	1,561.8748	9.2937	0.2292	1,828.0786
<b>Total</b>		<b>13,658.5044</b>	<b>80.6916</b>	<b>1.9902</b>	<b>15,969.9811</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1514.7 / 1193.65	8,435.8517	49.6642	1.2240	9,858.2461
Government (Civic Center)	367.902 / 281.86	2,027.3592	12.0620	0.2971	2,372.7726
Hotel	4.46455 / 0.620077	17.0987	0.1461	3.5500e-003	21.2666
Racquet Club	1.47148 / 1.12734	8.1087	0.0482	1.1900e-003	9.4903
Single Family Housing	288.763 / 227.558	1,608.2112	9.4680	0.2334	1,879.3766
Strip Mall	283.431 / 217.145	1,561.8748	9.2925	0.2289	1,827.9809
<b>Total</b>		<b>13,658.5044</b>	<b>80.6810</b>	<b>1.9882</b>	<b>15,969.1331</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	7,790.4765	460.4040	0.0000	17,458.9599
Mitigated	7,790.4765	460.4040	0.0000	17,458.9599

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13367.6	2,713.5020	160.3634	0.0000	6,081.1328
Government (Civic Center)	13194.9	2,678.4516	158.2920	0.0000	6,002.5825
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.27	35.9842	2.1266	0.0000	80.6429
Single Family Housing	6496.04	1,318.6374	77.9292	0.0000	2,955.1514
Strip Mall	5022.15	1,019.4511	60.2478	0.0000	2,284.6555
<b>Total</b>		<b>7,790.4765</b>	<b>460.4040</b>	<b>0.0000</b>	<b>17,458.9599</b>

## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13367.6	2,713.5020	160.3634	0.0000	6,081.1328
Government (Civic Center)	13194.9	2,678.4516	158.2920	0.0000	6,002.5825
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.27	35.9842	2.1266	0.0000	80.6429
Single Family Housing	6496.04	1,318.6374	77.9292	0.0000	2,955.1514
Strip Mall	5022.15	1,019.4511	60.2478	0.0000	2,284.6555
<b>Total</b>		<b>7,790.4765</b>	<b>460.4040</b>	<b>0.0000</b>	<b>17,458.9599</b>

## 9.0 Operational Offroad

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

## **ATTACHMENT 4a**

Year 2020 GHG Emissions of the CPU  
North Park



**6086 North Park - Proposed Plan 2020**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	870.44	1000sqft	19.98	870,440.00	0
Hotel	205.00	Room	6.83	158,900.00	0
Racquet Club	27.45	1000sqft	0.63	27,450.00	0
Apartments Low Rise	31,453.00	Dwelling Unit	1,965.81	31,453,000.00	89956
Single Family Housing	5,117.00	Dwelling Unit	1,661.36	9,210,600.00	14635
Strip Mall	2,138.21	1000sqft	49.09	2,138,210.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2020
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	531.72	<b>CH4 Intensity (lb/MWhr)</b>	0.021	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS status - SDG&E currently at 36.4%  
 CalEEMod accounts for 10.2%  
 Additional 26.2% reduction applied  
 (531.72, 0.021, 0.004)

Land Use - North Park proposed land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	5.84	4.57
tblEnergyUse	T24E	1.48	1.16
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	49.75	41.39
tblEnergyUse	T24NG	4.54	3.78
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	17,299.15	28,307.70
tblFireplaces	NumberGas	2,814.35	4,605.30
tblFireplaces	NumberWood	11,008.55	0.00

tblFireplaces	NumberWood	1,790.95	0.00
tblLandUse	LandUseSquareFeet	297,660.00	158,900.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	531.72
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2020
tblWater	IndoorWaterUseRate	2,049,289,567.87	1,639,431,654.30
tblWater	IndoorWaterUseRate	172,921,336.96	138,337,069.57
tblWater	IndoorWaterUseRate	5,200,187.85	4,160,150.28
tblWater	IndoorWaterUseRate	1,623,479.30	1,298,783.44
tblWater	IndoorWaterUseRate	333,393,149.10	266,714,519.28
tblWater	IndoorWaterUseRate	158,382,606.16	126,706,084.93
tblWoodstoves	NumberCatalytic	1,572.65	0.00
tblWoodstoves	NumberCatalytic	255.85	0.00
tblWoodstoves	NumberNoncatalytic	1,572.65	0.00
tblWoodstoves	NumberNoncatalytic	255.85	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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## 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	249.1507	3.1514	272.6119	0.0143		3.3080	3.3080		3.2889	3.2889	0.0000	26,367.5262	26,367.5262	0.9295	0.4753	26,534.3807
Energy	2.6554	22.7771	10.2806	0.1448		1.8347	1.8347		1.8347	1.8347	0.0000	72,355.7687	72,355.7687	2.3234	0.8284	72,661.3691
Mobile	189.1419	390.8566	1,867.0018	4.9516	339.5423	5.7197	345.2620	90.8108	5.2779	96.0887	0.0000	343,665.3125	343,665.3125	13.3973	0.0000	343,946.6549
Waste						0.0000	0.0000		0.0000	0.0000	5,672.3937	0.0000	5,672.3937	335.2289	0.0000	12,712.1998
Water						0.0000	0.0000		0.0000	0.0000	690.5501	11,409.0220	12,099.5721	71.3767	1.7606	14,144.2524
<b>Total</b>	<b>440.9479</b>	<b>416.7851</b>	<b>2,149.8944</b>	<b>5.1107</b>	<b>339.5423</b>	<b>10.8624</b>	<b>350.4047</b>	<b>90.8108</b>	<b>10.4015</b>	<b>101.2123</b>	<b>6,362.9437</b>	<b>453,797.6294</b>	<b>460,160.5731</b>	<b>423.2558</b>	<b>3.0642</b>	<b>469,998.8569</b>

## 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	249.1507	3.1514	272.6119	0.0143		3.3080	3.3080		3.2889	3.2889	0.0000	26,367.5262	26,367.5262	0.9295	0.4753	26,534.3807
Energy	2.6554	22.7771	10.2806	0.1448		1.8347	1.8347		1.8347	1.8347	0.0000	72,355.7687	72,355.7687	2.3234	0.8284	72,661.3691
Mobile	189.1419	390.8566	1,867.0018	4.9516	339.5423	5.7197	345.2620	90.8108	5.2779	96.0887	0.0000	343,665.3125	343,665.3125	13.3973	0.0000	343,946.6549
Waste						0.0000	0.0000		0.0000	0.0000	5,672.3937	0.0000	5,672.3937	335.2289	0.0000	12,712.1998
Water						0.0000	0.0000		0.0000	0.0000	690.5501	11,409.0220	12,099.5721	71.3673	1.7588	14,143.5024
<b>Total</b>	<b>440.9479</b>	<b>416.7851</b>	<b>2,149.8944</b>	<b>5.1107</b>	<b>339.5423</b>	<b>10.8624</b>	<b>350.4047</b>	<b>90.8108</b>	<b>10.4015</b>	<b>101.2123</b>	<b>6,362.9437</b>	<b>453,797.6294</b>	<b>460,160.5731</b>	<b>423.2464</b>	<b>3.0624</b>	<b>469,998.1069</b>

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

## 3.0 Construction Detail

### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	25,529.00	4,433.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Building Construction - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0231	0.1936	0.2866	5.3000e-004	0.0144	2.7700e-003	0.0172	4.1300e-003	2.5500e-003	6.6700e-003	0.0000	47.0120	47.0120	3.5000e-004	0.0000	47.0194
Worker	0.0397	0.0526	0.4969	1.2600e-003	0.1024	7.6000e-004	0.1031	0.0272	7.0000e-004	0.0279	0.0000	91.7048	91.7048	4.6600e-003	0.0000	91.8027
<b>Total</b>	<b>0.0628</b>	<b>0.2461</b>	<b>0.7836</b>	<b>1.7900e-003</b>	<b>0.1168</b>	<b>3.5300e-003</b>	<b>0.1203</b>	<b>0.0313</b>	<b>3.2500e-003</b>	<b>0.0346</b>	<b>0.0000</b>	<b>138.7168</b>	<b>138.7168</b>	<b>5.0100e-003</b>	<b>0.0000</b>	<b>138.8221</b>



### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0231	0.1936	0.2866	5.3000e-004	0.0144	2.7700e-003	0.0172	4.1300e-003	2.5500e-003	6.6700e-003	0.0000	47.0120	47.0120	3.5000e-004	0.0000	47.0194
Worker	0.0397	0.0526	0.4969	1.2600e-003	0.1024	7.6000e-004	0.1031	0.0272	7.0000e-004	0.0279	0.0000	91.7048	91.7048	4.6600e-003	0.0000	91.8027
<b>Total</b>	<b>0.0628</b>	<b>0.2461</b>	<b>0.7836</b>	<b>1.7900e-003</b>	<b>0.1168</b>	<b>3.5300e-003</b>	<b>0.1203</b>	<b>0.0313</b>	<b>3.2500e-003</b>	<b>0.0346</b>	<b>0.0000</b>	<b>138.7168</b>	<b>138.7168</b>	<b>5.0100e-003</b>	<b>0.0000</b>	<b>138.8221</b>

### 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	189.1419	390.8566	1,867.0018	4.9516	339.5423	5.7197	345.2620	90.8108	5.2779	96.0887	0.0000	343,665.3125	343,665.3125	13.3973	0.0000	343,946.6549
Unmitigated	189.1419	390.8566	1,867.0018	4.9516	339.5423	5.7197	345.2620	90.8108	5.2779	96.0887	0.0000	343,665.3125	343,665.3125	13.3973	0.0000	343,946.6549

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	207,275.27	225,203.48	190919.71	592,475,260	592,475,260
Government (Civic Center)	24,302.68	0.00	0.00	33,184,222	33,184,222
Hotel	1,674.85	1,678.95	1219.75	3,059,689	3,059,689
Racquet Club	903.93	572.88	733.74	1,415,752	1,415,752
Single Family Housing	48,969.69	51,579.36	44876.09	139,218,025	139,218,025
Strip Mall	94,765.47	89,890.35	43683.63	133,631,156	133,631,156
<b>Total</b>	<b>377,891.89</b>	<b>368,925.02</b>	<b>281,432.92</b>	<b>902,984,104</b>	<b>902,984,104</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

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**

**4.4 Fleet Mix**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46,076.1070	46,076.1070	1.8198	0.3466	46,221.7737
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46,076.1070	46,076.1070	1.8198	0.3466	46,221.7737
NaturalGas Mitigated	2.6554	22.7771	10.2806	0.1448		1.8347	1.8347		1.8347	1.8347	0.0000	26,279.6617	26,279.6617	0.5037	0.4818	26,439.5953
NaturalGas Unmitigated	2.6554	22.7771	10.2806	0.1448		1.8347	1.8347		1.8347	1.8347	0.0000	26,279.6617	26,279.6617	0.5037	0.4818	26,439.5953

### 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					
Hotel	8.34066e+006	0.0450	0.4089	0.3434	2.4500e-003		0.0311	0.0311		0.0311	0.0311	0.0000	445.0894	445.0894	8.5300e-003	8.1600e-003	447.7982
Racquet Club	302774	1.6300e-003	0.0148	0.0125	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1572	16.1572	3.1000e-004	3.0000e-004	16.2555
Single Family Housing	1.34241e+008	0.7239	6.1856	2.6322	0.0395		0.5001	0.5001		0.5001	0.5001	0.0000	7,163.5927	7,163.5927	0.1373	0.1313	7,207.1891
Strip Mall	4.46886e+006	0.0241	0.2191	0.1840	1.3100e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.4753	238.4753	4.5700e-003	4.3700e-003	239.9267
Apartments Low Rise	3.29267e+008	1.7755	15.1721	6.4562	0.0968		1.2267	1.2267		1.2267	1.2267	0.0000	17,570.9572	17,570.9572	0.3368	0.3221	17,677.8911
Government (Civic Center)	1.5842e+007	0.0854	0.7766	0.6523	4.6600e-003		0.0590	0.0590		0.0590	0.0590	0.0000	845.3899	845.3899	0.0162	0.0155	850.5348
<b>Total</b>		<b>2.6554</b>	<b>22.7771</b>	<b>10.2806</b>	<b>0.1448</b>		<b>1.8347</b>	<b>1.8347</b>		<b>1.8347</b>	<b>1.8347</b>	<b>0.0000</b>	<b>26,279.6617</b>	<b>26,279.6617</b>	<b>0.5037</b>	<b>0.4818</b>	<b>26,439.5953</b>

### 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					
Hotel	8.34066e+006	0.0450	0.4089	0.3434	2.4500e-003		0.0311	0.0311		0.0311	0.0311	0.0000	445.0894	445.0894	8.5300e-003	8.1600e-003	447.7982
Racquet Club	302774	1.6300e-003	0.0148	0.0125	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1572	16.1572	3.1000e-004	3.0000e-004	16.2555
Single Family Housing	1.34241e+008	0.7239	6.1856	2.6322	0.0395		0.5001	0.5001		0.5001	0.5001	0.0000	7,163.5927	7,163.5927	0.1373	0.1313	7,207.1891
Strip Mall	4.46886e+006	0.0241	0.2191	0.1840	1.3100e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.4753	238.4753	4.5700e-003	4.3700e-003	239.9267
Apartments Low Rise	3.29267e+008	1.7755	15.1721	6.4562	0.0968		1.2267	1.2267		1.2267	1.2267	0.0000	17,570.9572	17,570.9572	0.3368	0.3221	17,677.8911
Government (Civic Center)	1.5842e+007	0.0854	0.7766	0.6523	4.6600e-003		0.0590	0.0590		0.0590	0.0590	0.0000	845.3899	845.3899	0.0162	0.0155	850.5348
<b>Total</b>		<b>2.6554</b>	<b>22.7771</b>	<b>10.2806</b>	<b>0.1448</b>		<b>1.8347</b>	<b>1.8347</b>		<b>1.8347</b>	<b>1.8347</b>	<b>0.0000</b>	<b>26,279.6617</b>	<b>26,279.6617</b>	<b>0.5037</b>	<b>0.4818</b>	<b>26,439.5953</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.12853e+008	27,218.2893	1.0750	0.2048	27,304.3382
Government (Civic Center)	1.19686e+007	2,886.6244	0.1140	0.0217	2,895.7503
Hotel	2.11655e+006	510.4778	0.0202	3.8400e-003	512.0916
Racquet Club	238266	57.4660	2.2700e-003	4.3000e-004	57.6477
Single Family Housing	3.56621e+007	8,601.1358	0.3397	0.0647	8,628.3278
Strip Mall	2.8203e+007	6,802.1137	0.2687	0.0512	6,823.6182
<b>Total</b>		<b>46,076.1070</b>	<b>1.8198</b>	<b>0.3466</b>	<b>46,221.7737</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.12853e+008	27,218.2893	1.0750	0.2048	27,304.3382
Government (Civic Center)	1.19686e+007	2,886.6244	0.1140	0.0217	2,895.7503
Hotel	2.11655e+006	510.4778	0.0202	3.8400e-003	512.0916
Racquet Club	238266	57.4660	2.2700e-003	4.3000e-004	57.6477
Single Family Housing	3.56621e+007	8,601.1358	0.3397	0.0647	8,628.3278
Strip Mall	2.8203e+007	6,802.1137	0.2687	0.0512	6,823.6182
<b>Total</b>		<b>46,076.1070</b>	<b>1.8198</b>	<b>0.3466</b>	<b>46,221.7737</b>

### 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	249.1507	3.1514	272.6119	0.0143		3.3080	3.3080		3.2889	3.2889	0.0000	26,367.5262	26,367.5262	0.9295	0.4753	26,534.3807
Unmitigated	249.1507	3.1514	272.6119	0.0143		3.3080	3.3080		3.2889	3.2889	0.0000	26,367.5262	26,367.5262	0.9295	0.4753	26,534.3807

## 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	66.9426					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	171.2898					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.6195	1.2000e-004	0.1429	0.0000		1.8098	1.8098		1.7908	1.7908	0.0000	25,923.9182	25,923.9182	0.4969	0.4753	26,081.6868
Landscaping	8.2988	3.1513	272.4690	0.0143		1.4982	1.4982		1.4982	1.4982	0.0000	443.6080	443.6080	0.4327	0.0000	452.6939
<b>Total</b>	<b>249.1506</b>	<b>3.1514</b>	<b>272.6119</b>	<b>0.0143</b>		<b>3.3080</b>	<b>3.3080</b>		<b>3.2889</b>	<b>3.2889</b>	<b>0.0000</b>	<b>26,367.5262</b>	<b>26,367.5262</b>	<b>0.9295</b>	<b>0.4753</b>	<b>26,534.3807</b>



## 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	66.9426					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	171.2898					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.6195	1.2000e-004	0.1429	0.0000		1.8098	1.8098		1.7908	1.7908	0.0000	25,923.9182	25,923.9182	0.4969	0.4753	26,081.6868
Landscaping	8.2988	3.1513	272.4690	0.0143		1.4982	1.4982		1.4982	1.4982	0.0000	443.6080	443.6080	0.4327	0.0000	452.6939
<b>Total</b>	<b>249.1506</b>	<b>3.1514</b>	<b>272.6119</b>	<b>0.0143</b>		<b>3.3080</b>	<b>3.3080</b>		<b>3.2889</b>	<b>3.2889</b>	<b>0.0000</b>	<b>26,367.5262</b>	<b>26,367.5262</b>	<b>0.9295</b>	<b>0.4753</b>	<b>26,534.3807</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12,099.5721	71.3673	1.7588	14,143.5024
Unmitigated	12,099.5721	71.3767	1.7606	14,144.2524

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1639.43 / 1291.94	9,130.5177	53.7610	1.3262	10,670.6068
Government (Civic Center)	138.337 / 105.984	762.3200	4.5361	0.1118	892.2487
Hotel	4.16015 / 0.577799	15.9329	0.1361	3.3100e-003	19.8180
Racquet Club	1.29878 / 0.995036	7.1571	0.0426	1.0500e-003	8.3769
Single Family Housing	266.715 / 210.183	1,485.4182	8.7462	0.2158	1,735.9710
Strip Mall	126.706 / 97.0732	698.2263	4.1547	0.1024	817.2310
<b>Total</b>		<b>12,099.5721</b>	<b>71.3767</b>	<b>1.7606</b>	<b>14,144.2524</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1639.43 / 1291.94	9,130.5177	53.7539	1.3248	10,670.0418
Government (Civic Center)	138.337 / 105.984	762.3200	4.5355	0.1117	892.2011
Hotel	4.16015 / 0.577799	15.9329	0.1361	3.3100e-003	19.8166
Racquet Club	1.29878 / 0.995036	7.1571	0.0426	1.0500e-003	8.3765
Single Family Housing	266.715 / 210.183	1,485.4182	8.7451	0.2155	1,735.8791
Strip Mall	126.706 / 97.0732	698.2263	4.1542	0.1023	817.1873
<b>Total</b>		<b>12,099.5721</b>	<b>71.3673</b>	<b>1.7588</b>	<b>14,143.5024</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	5,672.393 7	335.2289	0.0000	12,712.19 98
Mitigated	5,672.393 7	335.2289	0.0000	12,712.19 98

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	14468.4	2,936.950 4	173.5688	0.0000	6,581.895 1
Government (Civic Center)	4961.51	1,007.141 7	59.5204	0.0000	2,257.069 4
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.47	31.7620	1.8771	0.0000	71.1807
Single Family Housing	6000.35	1,218.016 8	71.9827	0.0000	2,729.654 2
Strip Mall	2245.12	455.7391	26.9334	0.0000	1,021.340 6
<b>Total</b>		<b>5,672.393 7</b>	<b>335.2289</b>	<b>0.0000</b>	<b>12,712.19 98</b>

### 8.2 Waste by Land Use

#### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	14468.4	2,936.9504	173.5688	0.0000	6,581.8951
Government (Civic Center)	4961.51	1,007.1417	59.5204	0.0000	2,257.0694
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.47	31.7620	1.8771	0.0000	71.1807
Single Family Housing	6000.35	1,218.0168	71.9827	0.0000	2,729.6542
Strip Mall	2245.12	455.7391	26.9334	0.0000	1,021.3406
<b>Total</b>		<b>5,672.3937</b>	<b>335.2289</b>	<b>0.0000</b>	<b>12,712.1998</b>

### 9.0 Operational Offroad

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

## **ATTACHMENT 4b**

Year 2020 GHG Emissions of the Adopted Plan  
North Park

**6086 North Park - Adopted Plan 2020**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	870.44	1000sqft	19.98	870,440.00	0
Hotel	205.00	Room	6.83	158,870.00	0
Racquet Club	27.46	1000sqft	0.63	27,460.00	0
Apartments Low Rise	29,179.00	Dwelling Unit	1,823.69	29,179,000.00	83452
Single Family Housing	5,116.00	Dwelling Unit	1,661.04	9,208,800.00	14632
Strip Mall	2,175.46	1000sqft	49.94	2,175,460.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2020
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	531.72	<b>CH4 Intensity (lb/MWhr)</b>	0.021	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS status - SDG&E currently at 36.4%  
 CalEEMod accounts for 10.2%  
 Additional 26.2% reduction applied  
 (531.72, 0.021, 0.004)

Land Use - North Park adopted land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	5.84	4.57
tblEnergyUse	T24E	1.48	1.16
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	49.75	41.39
tblEnergyUse	T24NG	4.54	3.78
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	16,048.45	26,261.10
tblFireplaces	NumberGas	2,813.80	4,604.40
tblFireplaces	NumberWood	10,212.65	0.00



tblFireplaces	NumberWood	1,790.60	0.00
tblLandUse	LandUseSquareFeet	297,660.00	158,870.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	531.72
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2020
tblWater	IndoorWaterUseRate	1,901,129,313.61	1,520,903,450.89
tblWater	IndoorWaterUseRate	172,921,336.96	138,337,069.57
tblWater	IndoorWaterUseRate	5,200,187.85	4,160,150.28
tblWater	IndoorWaterUseRate	1,624,070.74	1,299,256.59
tblWater	IndoorWaterUseRate	333,327,995.08	266,662,396.06
tblWater	IndoorWaterUseRate	161,141,807.59	128,913,446.07
tblWoodstoves	NumberCatalytic	1,458.95	0.00
tblWoodstoves	NumberCatalytic	255.80	0.00
tblWoodstoves	NumberNoncatalytic	1,458.95	0.00
tblWoodstoves	NumberNoncatalytic	255.80	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	236.2077	2.9554	255.6551	0.0135		3.1022	3.1022		3.0843	3.0843	0.0000	24,727.2209	24,727.2209	0.8717	0.4457	24,883.6957
Energy	2.5273	21.6827	9.8165	0.1379		1.7462	1.7462		1.7462	1.7462	0.0000	69,237.0005	69,237.0005	2.2260	0.7913	69,529.0339
Mobile	181.6534	373.8682	1,788.0758	4.7306	324.3007	5.4672	329.7679	86.7344	5.0448	91.7793	0.0000	328,324.3242	328,324.3242	12.8072	0.0000	328,593.2743
Waste						0.0000	0.0000		0.0000	0.0000	5,467.7565	0.0000	5,467.7565	323.1352	0.0000	12,253.5946
Water						0.0000	0.0000		0.0000	0.0000	653.6305	10,797.6965	11,451.3269	67.5606	1.6664	13,386.6860
<b>Total</b>	<b>420.3884</b>	<b>398.5063</b>	<b>2,053.5474</b>	<b>4.8819</b>	<b>324.3007</b>	<b>10.3155</b>	<b>334.6163</b>	<b>86.7344</b>	<b>9.8753</b>	<b>96.6098</b>	<b>6,121.3869</b>	<b>433,086.2421</b>	<b>439,207.6290</b>	<b>406.6006</b>	<b>2.9034</b>	<b>448,646.2845</b>

**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	236.2077	2.9554	255.6551	0.0135		3.1022	3.1022		3.0843	3.0843	0.0000	24,727.2209	24,727.2209	0.8717	0.4457	24,883.6957
Energy	2.5273	21.6827	9.8165	0.1379		1.7462	1.7462		1.7462	1.7462	0.0000	69,237.0005	69,237.0005	2.2260	0.7913	69,529.0339
Mobile	181.6534	373.8682	1,788.0758	4.7306	324.3007	5.4672	329.7679	86.7344	5.0448	91.7793	0.0000	328,324.3242	328,324.3242	12.8072	0.0000	328,593.2743
Waste						0.0000	0.0000		0.0000	0.0000	5,467.7565	0.0000	5,467.7565	323.1352	0.0000	12,253.5946
Water						0.0000	0.0000		0.0000	0.0000	653.6305	10,797.6965	11,451.3269	67.5517	1.6647	13,385.9761
<b>Total</b>	<b>420.3884</b>	<b>398.5063</b>	<b>2,053.5474</b>	<b>4.8819</b>	<b>324.3007</b>	<b>10.3155</b>	<b>334.6163</b>	<b>86.7344</b>	<b>9.8753</b>	<b>96.6098</b>	<b>6,121.3869</b>	<b>433,086.2421</b>	<b>439,207.6290</b>	<b>406.5918</b>	<b>2.9017</b>	<b>448,645.5746</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	23,904.00	4,196.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Building Construction - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0218	0.1832	0.2713	5.0000e-004	0.0137	2.6200e-003	0.0163	3.9100e-003	2.4100e-003	6.3200e-003	0.0000	44.4986	44.4986	3.4000e-004	0.0000	44.5056
Worker	0.0372	0.0492	0.4653	1.1800e-003	0.0959	7.1000e-004	0.0966	0.0255	6.6000e-004	0.0261	0.0000	85.8675	85.8675	4.3700e-003	0.0000	85.9592
<b>Total</b>	<b>0.0590</b>	<b>0.2324</b>	<b>0.7366</b>	<b>1.6800e-003</b>	<b>0.1095</b>	<b>3.3300e-003</b>	<b>0.1128</b>	<b>0.0294</b>	<b>3.0700e-003</b>	<b>0.0325</b>	<b>0.0000</b>	<b>130.3661</b>	<b>130.3661</b>	<b>4.7100e-003</b>	<b>0.0000</b>	<b>130.4648</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0218	0.1832	0.2713	5.0000e-004	0.0137	2.6200e-003	0.0163	3.9100e-003	2.4100e-003	6.3200e-003	0.0000	44.4986	44.4986	3.4000e-004	0.0000	44.5056
Worker	0.0372	0.0492	0.4653	1.1800e-003	0.0959	7.1000e-004	0.0966	0.0255	6.6000e-004	0.0261	0.0000	85.8675	85.8675	4.3700e-003	0.0000	85.9592
<b>Total</b>	<b>0.0590</b>	<b>0.2324</b>	<b>0.7366</b>	<b>1.6800e-003</b>	<b>0.1095</b>	<b>3.3300e-003</b>	<b>0.1128</b>	<b>0.0294</b>	<b>3.0700e-003</b>	<b>0.0325</b>	<b>0.0000</b>	<b>130.3661</b>	<b>130.3661</b>	<b>4.7100e-003</b>	<b>0.0000</b>	<b>130.4648</b>

### 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	181.6534	373.8682	1,788.0758	4.7306	324.3007	5.4672	329.7679	86.7344	5.0448	91.7793	0.0000	328,324.3242	328,324.3242	12.8072	0.0000	328,593.2743
Unmitigated	181.6534	373.8682	1,788.0758	4.7306	324.3007	5.4672	329.7679	86.7344	5.0448	91.7793	0.0000	328,324.3242	328,324.3242	12.8072	0.0000	328,593.2743

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	192,289.61	208,921.64	177,116.53	549,640,276	549,640,276
Government (Civic Center)	24,302.68	0.00	0.00	33,184,222	33,184,222
Hotel	1,674.85	1,678.95	1,219.75	3,059,689	3,059,689
Racquet Club	904.26	573.09	734.01	1,416,267	1,416,267
Single Family Housing	48,960.12	51,569.28	44,867.32	139,190,818	139,190,818
Strip Mall	96,416.39	91,456.34	44,444.65	135,959,160	135,959,160
<b>Total</b>	<b>364,547.91</b>	<b>354,199.30</b>	<b>268,382.25</b>	<b>862,450,432</b>	<b>862,450,432</b>

### 4.3 Trip Type Information



Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

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

#### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	44,225.0136	44,225.0136	1.7466	0.3327	44,364.8283
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	44,225.0136	44,225.0136	1.7466	0.3327	44,364.8283
NaturalGas Mitigated	2.5273	21.6827	9.8165	0.1379		1.7462	1.7462		1.7462	1.7462	0.0000	25,011.9869	25,011.9869	0.4794	0.4586	25,164.2057
NaturalGas Unmitigated	2.5273	21.6827	9.8165	0.1379		1.7462	1.7462		1.7462	1.7462	0.0000	25,011.9869	25,011.9869	0.4794	0.4586	25,164.2057

### 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					
Hotel	8.33909e+006	0.0450	0.4088	0.3434	2.4500e-003		0.0311	0.0311		0.0311	0.0311	0.0000	445.0054	445.0054	8.5300e-003	8.1600e-003	447.7136
Racquet Club	302884	1.6300e-003	0.0149	0.0125	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1630	16.1630	3.1000e-004	3.0000e-004	16.2614
Single Family Housing	1.34214e+008	0.7237	6.1844	2.6317	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	7,162.1927	7,162.1927	0.1373	0.1313	7,205.7806
Strip Mall	4.54671e+006	0.0245	0.2229	0.1872	1.3400e-003		0.0169	0.0169		0.0169	0.0169	0.0000	242.6298	242.6298	4.6500e-003	4.4500e-003	244.1064
Apartments Low Rise	3.05462e+008	1.6471	14.0752	5.9895	0.0898		1.1380	1.1380		1.1380	1.1380	0.0000	16,300.6060	16,300.6060	0.3124	0.2988	16,399.8088
Government (Civic Center)	1.5842e+007	0.0854	0.7766	0.6523	4.6600e-003		0.0590	0.0590		0.0590	0.0590	0.0000	845.3899	845.3899	0.0162	0.0155	850.5348
<b>Total</b>		<b>2.5274</b>	<b>21.6827</b>	<b>9.8165</b>	<b>0.1379</b>		<b>1.7462</b>	<b>1.7462</b>		<b>1.7462</b>	<b>1.7462</b>	<b>0.0000</b>	<b>25,011.9869</b>	<b>25,011.9869</b>	<b>0.4794</b>	<b>0.4586</b>	<b>25,164.2057</b>

### 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					
Hotel	8.33909e+006	0.0450	0.4088	0.3434	2.4500e-003		0.0311	0.0311		0.0311	0.0311	0.0000	445.0054	445.0054	8.5300e-003	8.1600e-003	447.7136
Racquet Club	302884	1.6300e-003	0.0149	0.0125	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1630	16.1630	3.1000e-004	3.0000e-004	16.2614
Single Family Housing	1.34214e+008	0.7237	6.1844	2.6317	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	7,162.1927	7,162.1927	0.1373	0.1313	7,205.7806
Strip Mall	4.54671e+006	0.0245	0.2229	0.1872	1.3400e-003		0.0169	0.0169		0.0169	0.0169	0.0000	242.6298	242.6298	4.6500e-003	4.4500e-003	244.1064
Apartments Low Rise	3.05462e+008	1.6471	14.0752	5.9895	0.0898		1.1380	1.1380		1.1380	1.1380	0.0000	16,300.6060	16,300.6060	0.3124	0.2988	16,399.8088
Government (Civic Center)	1.5842e+007	0.0854	0.7766	0.6523	4.6600e-003		0.0590	0.0590		0.0590	0.0590	0.0000	845.3899	845.3899	0.0162	0.0155	850.5348
<b>Total</b>		<b>2.5274</b>	<b>21.6827</b>	<b>9.8165</b>	<b>0.1379</b>		<b>1.7462</b>	<b>1.7462</b>		<b>1.7462</b>	<b>1.7462</b>	<b>0.0000</b>	<b>25,011.9869</b>	<b>25,011.9869</b>	<b>0.4794</b>	<b>0.4586</b>	<b>25,164.2057</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.04694e+008	25,250.4519	0.9973	0.1900	25,330.2796
Government (Civic Center)	1.19686e+007	2,886.6244	0.1140	0.0217	2,895.7503
Hotel	2.11615e+006	510.3814	0.0202	3.8400e-003	511.9950
Racquet Club	238353	57.4869	2.2700e-003	4.3000e-004	57.6687
Single Family Housing	3.56551e+007	8,599.4549	0.3396	0.0647	8,626.6416
Strip Mall	2.86943e+007	6,920.6141	0.2733	0.0521	6,942.4932
<b>Total</b>		<b>44,225.0136</b>	<b>1.7467</b>	<b>0.3327</b>	<b>44,364.8283</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.04694e+008	25,250.4519	0.9973	0.1900	25,330.2796
Government (Civic Center)	1.19686e+007	2,886.6244	0.1140	0.0217	2,895.7503
Hotel	2.11615e+006	510.3814	0.0202	3.8400e-003	511.9950
Racquet Club	238353	57.4869	2.2700e-003	4.3000e-004	57.6687
Single Family Housing	3.56551e+007	8,599.4549	0.3396	0.0647	8,626.6416
Strip Mall	2.86943e+007	6,920.6141	0.2733	0.0521	6,942.4932
<b>Total</b>		<b>44,225.0136</b>	<b>1.7467</b>	<b>0.3327</b>	<b>44,364.8283</b>

### 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	236.2077	2.9554	255.6551	0.0135		3.1022	3.1022		3.0843	3.0843	0.0000	24,727.2209	24,727.2209	0.8717	0.4457	24,883.6957
Unmitigated	236.2077	2.9554	255.6551	0.0135		3.1022	3.1022		3.0843	3.0843	0.0000	24,727.2209	24,727.2209	0.8717	0.4457	24,883.6957

## 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	63.4213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	162.5470					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4565	1.1000e-004	0.1340	0.0000		1.6972	1.6972		1.6794	1.6794	0.0000	24,311.2052	24,311.2052	0.4660	0.4457	24,459.1591
Landscaping	7.7828	2.9553	255.5211	0.0135		1.4050	1.4050		1.4050	1.4050	0.0000	416.0157	416.0157	0.4058	0.0000	424.5366
<b>Total</b>	<b>236.2077</b>	<b>2.9554</b>	<b>255.6551</b>	<b>0.0135</b>		<b>3.1022</b>	<b>3.1022</b>		<b>3.0843</b>	<b>3.0843</b>	<b>0.0000</b>	<b>24,727.2209</b>	<b>24,727.2209</b>	<b>0.8717</b>	<b>0.4457</b>	<b>24,883.6957</b>

## 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	63.4213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	162.5470					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4565	1.1000e-004	0.1340	0.0000		1.6972	1.6972		1.6794	1.6794	0.0000	24,311.2052	24,311.2052	0.4660	0.4457	24,459.1591
Landscaping	7.7828	2.9553	255.5211	0.0135		1.4050	1.4050		1.4050	1.4050	0.0000	416.0157	416.0157	0.4058	0.0000	424.5366
<b>Total</b>	<b>236.2077</b>	<b>2.9554</b>	<b>255.6551</b>	<b>0.0135</b>		<b>3.1022</b>	<b>3.1022</b>		<b>3.0843</b>	<b>3.0843</b>	<b>0.0000</b>	<b>24,727.2209</b>	<b>24,727.2209</b>	<b>0.8717</b>	<b>0.4457</b>	<b>24,883.6957</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11,451.3269	67.5517	1.6647	13,385.9761
Unmitigated	11,451.3269	67.5606	1.6664	13,386.6860

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1520.9 / 1198.54	8,470.3964	49.8741	1.2303	9,899.1395
Government (Civic Center)	138.337 / 105.984	762.3200	4.5361	0.1118	892.2487
Hotel	4.16015 / 0.577799	15.9329	0.1361	3.3100e-003	19.8180
Racquet Club	1.29926 / 0.995398	7.1597	0.0426	1.0500e-003	8.3800
Single Family Housing	266.662 / 210.142	1,485.1279	8.7445	0.2157	1,735.6317
Strip Mall	128.913 / 98.7643	710.3902	4.2271	0.1042	831.4681
<b>Total</b>		<b>11,451.3270</b>	<b>67.5606</b>	<b>1.6664</b>	<b>13,386.6860</b>



## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1520.9 / 1198.54	8,470.3964	49.8676	1.2290	9,898.6154
Government (Civic Center)	138.337 / 105.984	762.3200	4.5355	0.1117	892.2011
Hotel	4.16015 / 0.577799	15.9329	0.1361	3.3100e-003	19.8166
Racquet Club	1.29926 / 0.995398	7.1597	0.0426	1.0500e-003	8.3795
Single Family Housing	266.662 / 210.142	1,485.1279	8.7434	0.2155	1,735.5398
Strip Mall	128.913 / 98.7643	710.3902	4.2265	0.1041	831.4237
<b>Total</b>		<b>11,451.3270</b>	<b>67.5517</b>	<b>1.6647</b>	<b>13,385.9761</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	5,467.7565	323.1352	0.0000	12,253.5946
Mitigated	5,467.7565	323.1352	0.0000	12,253.5946

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13422.3	2,724.6137	161.0201	0.0000	6,106.0349
Government (Civic Center)	4961.51	1,007.1417	59.5204	0.0000	2,257.0694
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.52	31.7722	1.8777	0.0000	71.2034
Single Family Housing	5999.12	1,217.7671	71.9680	0.0000	2,729.0947
Strip Mall	2284.23	463.6781	27.4026	0.0000	1,039.1324
<b>Total</b>		<b>5,467.7565</b>	<b>323.1352</b>	<b>0.0000</b>	<b>12,253.5946</b>

### 8.2 Waste by Land Use

#### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13422.3	2,724.6137	161.0201	0.0000	6,106.0349
Government (Civic Center)	4961.51	1,007.1417	59.5204	0.0000	2,257.0694
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.52	31.7722	1.8777	0.0000	71.2034
Single Family Housing	5999.12	1,217.7671	71.9680	0.0000	2,729.0947
Strip Mall	2284.23	463.6781	27.4026	0.0000	1,039.1324
<b>Total</b>		<b>5,467.7565</b>	<b>323.1352</b>	<b>0.0000</b>	<b>12,253.5946</b>

### 9.0 Operational Offroad

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

## **ATTACHMENT 5a**

Year 2020 GHG Emissions of the CPU  
Golden Hill

**6086 Golden Hill - Proposed Plan 2020**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	213.04	1000sqft	4.89	213,040.00	0
Apartments Low Rise	7,120.00	Dwelling Unit	445.00	7,120,000.00	20363
Single Family Housing	2,095.00	Dwelling Unit	680.19	3,771,000.00	5992
Strip Mall	393.96	1000sqft	9.04	393,960.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2020
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	531.72	<b>CH4 Intensity (lb/MWhr)</b>	0.021	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS status - SDG&E currently at 36.4%  
 CalEEMod accounts for 10.2%  
 Additional 26.2% reduction applied  
 (531.72, 0.021, 0.004)

Land Use - Golden Hill proposed land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	3,916.00	6,408.00
tblFireplaces	NumberGas	1,152.25	1,885.50
tblFireplaces	NumberWood	2,492.00	0.00
tblFireplaces	NumberWood	733.25	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	531.72
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

tblProjectCharacteristics	OperationalYear	2014	2020
tblWater	IndoorWaterUseRate	463,896,662.42	371,117,329.94
tblWater	IndoorWaterUseRate	42,322,459.48	33,857,967.58
tblWater	IndoorWaterUseRate	136,497,683.68	109,198,146.94
tblWater	IndoorWaterUseRate	29,181,610.56	23,345,288.45
tblWoodstoves	NumberCatalytic	356.00	0.00
tblWoodstoves	NumberCatalytic	104.75	0.00
tblWoodstoves	NumberNoncatalytic	356.00	0.00
tblWoodstoves	NumberNoncatalytic	104.75	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	65.3264	0.7941	68.6915	3.6100e-003		0.8336	0.8336		0.8288	0.8288	0.0000	6,644.1514	6,644.1514	0.2342	0.1198	6,686.1956
Energy	0.7236	6.1974	2.7327	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	18,803.9292	18,803.9292	0.5971	0.2189	18,884.3191
Mobile	45.8913	96.3427	457.9833	1.2263	84.1764	1.4138	85.5902	22.5130	1.3046	23.8176	0.0000	85,113.0920	85,113.0920	3.3101	0.0000	85,182.6039
Waste						0.0000	0.0000		0.0000	0.0000	1,493.9952	0.0000	1,493.9952	88.2926	0.0000	3,348.1396
Water						0.0000	0.0000		0.0000	0.0000	170.5299	2,819.7243	2,990.2542	17.6264	0.4348	3,495.1910
<b>Total</b>	<b>111.9413</b>	<b>103.3342</b>	<b>529.4075</b>	<b>1.2694</b>	<b>84.1764</b>	<b>2.7473</b>	<b>86.9237</b>	<b>22.5130</b>	<b>2.6333</b>	<b>25.1463</b>	<b>1,664.5251</b>	<b>113,380.8969</b>	<b>115,045.4220</b>	<b>110.0604</b>	<b>0.7734</b>	<b>117,596.4491</b>

## 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	65.3264	0.7941	68.6915	3.6100e-003		0.8336	0.8336		0.8288	0.8288	0.0000	6,644.1514	6,644.1514	0.2342	0.1198	6,686.1956
Energy	0.7236	6.1974	2.7327	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	18,803.9292	18,803.9292	0.5971	0.2189	18,884.3191
Mobile	45.8913	96.3427	457.9833	1.2263	84.1764	1.4138	85.5902	22.5130	1.3046	23.8176	0.0000	85,113.0920	85,113.0920	3.3101	0.0000	85,182.6039
Waste						0.0000	0.0000		0.0000	0.0000	1,493.9952	0.0000	1,493.9952	88.2926	0.0000	3,348.1396
Water						0.0000	0.0000		0.0000	0.0000	170.5299	2,819.7243	2,990.2542	17.6241	0.4343	3,495.0058
<b>Total</b>	<b>111.9413</b>	<b>103.3342</b>	<b>529.4075</b>	<b>1.2694</b>	<b>84.1764</b>	<b>2.7473</b>	<b>86.9237</b>	<b>22.5130</b>	<b>2.6333</b>	<b>25.1463</b>	<b>1,664.5251</b>	<b>113,380.8969</b>	<b>115,045.4220</b>	<b>110.0581</b>	<b>0.7730</b>	<b>117,596.2639</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	6,075.00	1,085.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

### 3.2 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6500e-003	0.0474	0.0702	1.3000e-004	3.5300e-003	6.8000e-004	4.2100e-003	1.0100e-003	6.2000e-004	1.6300e-003	0.0000	11.5064	11.5064	9.0000e-005	0.0000	11.5082
Worker	9.4400e-003	0.0125	0.1183	3.0000e-004	0.0244	1.8000e-004	0.0245	6.4700e-003	1.7000e-004	6.6400e-003	0.0000	21.8225	21.8225	1.1100e-003	0.0000	21.8458
<b>Total</b>	<b>0.0151</b>	<b>0.0599</b>	<b>0.1884</b>	<b>4.3000e-004</b>	<b>0.0279</b>	<b>8.6000e-004</b>	<b>0.0288</b>	<b>7.4800e-003</b>	<b>7.9000e-004</b>	<b>8.2700e-003</b>	<b>0.0000</b>	<b>33.3289</b>	<b>33.3289</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>33.3540</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6500e-003	0.0474	0.0702	1.3000e-004	3.5300e-003	6.8000e-004	4.2100e-003	1.0100e-003	6.2000e-004	1.6300e-003	0.0000	11.5064	11.5064	9.0000e-005	0.0000	11.5082
Worker	9.4400e-003	0.0125	0.1183	3.0000e-004	0.0244	1.8000e-004	0.0245	6.4700e-003	1.7000e-004	6.6400e-003	0.0000	21.8225	21.8225	1.1100e-003	0.0000	21.8458
<b>Total</b>	<b>0.0151</b>	<b>0.0599</b>	<b>0.1884</b>	<b>4.3000e-004</b>	<b>0.0279</b>	<b>8.6000e-004</b>	<b>0.0288</b>	<b>7.4800e-003</b>	<b>7.9000e-004</b>	<b>8.2700e-003</b>	<b>0.0000</b>	<b>33.3289</b>	<b>33.3289</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>33.3540</b>

### 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	45.8913	96.3427	457.9833	1.2263	84.1764	1.4138	85.5902	22.5130	1.3046	23.8176	0.0000	85,113.09 20	85,113.09 20	3.3101	0.0000	85,182.60 39
Unmitigated	45.8913	96.3427	457.9833	1.2263	84.1764	1.4138	85.5902	22.5130	1.3046	23.8176	0.0000	85,113.09 20	85,113.09 20	3.3101	0.0000	85,182.60 39

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	46,920.80	50,979.20	43218.40	134,118,330	134,118,330
Government (Civic Center)	5,948.08	0.00	0.00	8,121,831	8,121,831
Single Family Housing	20,049.15	21,117.60	18373.15	56,998,585	56,998,585
Strip Mall	17,460.31	16,562.08	8048.60	24,621,216	24,621,216
<b>Total</b>	<b>90,378.33</b>	<b>88,658.88</b>	<b>69,640.15</b>	<b>223,859,963</b>	<b>223,859,963</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
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

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**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11,642.6377	11,642.6377	0.4598	0.0876	11,679.4452
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11,642.6377	11,642.6377	0.4598	0.0876	11,679.4452
NaturalGas Mitigated	0.7236	6.1974	2.7327	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	7,161.2915	7,161.2915	0.1373	0.1313	7,204.8739
NaturalGas Unmitigated	0.7236	6.1974	2.7327	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	7,161.2915	7,161.2915	0.1373	0.1313	7,204.8739

### 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					
Government (Civic Center)	3.87733e+006	0.0209	0.1901	0.1597	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.9090	206.9090	3.9700e-003	3.7900e-003	208.1682
Single Family Housing	5.49608e+007	0.2964	2.5325	1.0777	0.0162		0.2048	0.2048		0.2048	0.2048	0.0000	2,932.9151	2,932.9151	0.0562	0.0538	2,950.7644
Strip Mall	823376	4.4400e-003	0.0404	0.0339	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	43.9385	43.9385	8.4000e-004	8.1000e-004	44.2059
Apartments Low Rise	7.45361e+007	0.4019	3.4345	1.4615	0.0219		0.2777	0.2777		0.2777	0.2777	0.0000	3,977.5289	3,977.5289	0.0762	0.0729	4,001.7354
<b>Total</b>		<b>0.7236</b>	<b>6.1975</b>	<b>2.7327</b>	<b>0.0395</b>		<b>0.5000</b>	<b>0.5000</b>		<b>0.5000</b>	<b>0.5000</b>	<b>0.0000</b>	<b>7,161.2915</b>	<b>7,161.2915</b>	<b>0.1373</b>	<b>0.1313</b>	<b>7,204.8739</b>



**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					
Single Family Housing	5.49608e+007	0.2964	2.5325	1.0777	0.0162		0.2048	0.2048		0.2048	0.2048	0.0000	2,932.9151	2,932.9151	0.0562	0.0538	2,950.7644
Strip Mall	823376	4.4400e-003	0.0404	0.0339	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	43.9385	43.9385	8.4000e-004	8.1000e-004	44.2059
Apartments Low Rise	7.45361e+007	0.4019	3.4345	1.4615	0.0219		0.2777	0.2777		0.2777	0.2777	0.0000	3,977.5289	3,977.5289	0.0762	0.0729	4,001.7354
Government (Civic Center)	3.87733e+006	0.0209	0.1901	0.1597	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.9090	206.9090	3.9700e-003	3.7900e-003	208.1682
<b>Total</b>		<b>0.7236</b>	<b>6.1975</b>	<b>2.7327</b>	<b>0.0395</b>		<b>0.5000</b>	<b>0.5000</b>		<b>0.5000</b>	<b>0.5000</b>	<b>0.0000</b>	<b>7,161.2915</b>	<b>7,161.2915</b>	<b>0.1373</b>	<b>0.1313</b>	<b>7,204.8739</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.55464e+007	6,161.3906	0.2433	0.0464	6,180.8695
Government (Civic Center)	2.9293e+006	706.5007	0.0279	5.3100e-003	708.7342
Single Family Housing	1.46008e+007	3,521.4734	0.1391	0.0265	3,532.6064
Strip Mall	5.19633e+006	1,253.2729	0.0495	9.4300e-003	1,257.2351
<b>Total</b>		<b>11,642.6377</b>	<b>0.4598</b>	<b>0.0876</b>	<b>11,679.4452</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.55464e+007	6,161.3906	0.2433	0.0464	6,180.8695
Government (Civic Center)	2.9293e+006	706.5007	0.0279	5.3100e-003	708.7342
Single Family Housing	1.46008e+007	3,521.4734	0.1391	0.0265	3,532.6064
Strip Mall	5.19633e+006	1,253.2729	0.0495	9.4300e-003	1,257.2351
<b>Total</b>		<b>11,642.6377</b>	<b>0.4598</b>	<b>0.0876</b>	<b>11,679.4452</b>

### 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	65.3264	0.7941	68.6915	3.6100e-003		0.8336	0.8336		0.8288	0.8288	0.0000	6,644.1514	6,644.1514	0.2342	0.1198	6,686.1956
Unmitigated	65.3264	0.7941	68.6915	3.6100e-003		0.8336	0.8336		0.8288	0.8288	0.0000	6,644.1514	6,644.1514	0.2342	0.1198	6,686.1956

### 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	17.6700					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	44.9054					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6601	3.0000e-005	0.0360	0.0000		0.4560	0.4560		0.4512	0.4512	0.0000	6,532.3737	6,532.3737	0.1252	0.1198	6,572.1286
Landscaping	2.0910	0.7941	68.6555	3.6100e-003		0.3775	0.3775		0.3775	0.3775	0.0000	111.7777	111.7777	0.1090	0.0000	114.0670
<b>Total</b>	<b>65.3264</b>	<b>0.7941</b>	<b>68.6915</b>	<b>3.6100e-003</b>		<b>0.8335</b>	<b>0.8335</b>		<b>0.8287</b>	<b>0.8287</b>	<b>0.0000</b>	<b>6,644.1514</b>	<b>6,644.1514</b>	<b>0.2342</b>	<b>0.1198</b>	<b>6,686.1956</b>

### 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	17.6700					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	44.9054					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6601	3.0000e-005	0.0360	0.0000		0.4560	0.4560		0.4512	0.4512	0.0000	6,532.3737	6,532.3737	0.1252	0.1198	6,572.1286
Landscaping	2.0910	0.7941	68.6555	3.6100e-003		0.3775	0.3775		0.3775	0.3775	0.0000	111.7777	111.7777	0.1090	0.0000	114.0670
<b>Total</b>	<b>65.3264</b>	<b>0.7941</b>	<b>68.6915</b>	<b>3.6100e-003</b>		<b>0.8335</b>	<b>0.8335</b>		<b>0.8287</b>	<b>0.8287</b>	<b>0.0000</b>	<b>6,644.1514</b>	<b>6,644.1514</b>	<b>0.2342</b>	<b>0.1198</b>	<b>6,686.1956</b>

### 7.0 Water Detail

#### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2,990.2542	17.6241	0.4343	3,495.0058
Unmitigated	2,990.2542	17.6264	0.4348	3,495.1910

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	371.117 / 292.457	2,066.870 8	12.1698	0.3002	2,415.500 0
Government (Civic Center)	33.858 / 25.9396	186.5777	1.1102	0.0274	218.3777
Single Family Housing	109.198 / 86.0529	608.1593	3.5809	0.0883	710.7405
Strip Mall	23.3453 / 17.8855	128.6465	0.7655	0.0189	150.5728
<b>Total</b>		<b>2,990.254 2</b>	<b>17.6264</b>	<b>0.4348</b>	<b>3,495.191 0</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	371.117 / 292.457	2,066.870 8	12.1683	0.2999	2,415.372 1
Government (Civic Center)	33.858 / 25.9396	186.5777	1.1101	0.0274	218.3660
Single Family Housing	109.198 / 86.0529	608.1593	3.5804	0.0882	710.7029
Strip Mall	23.3453 / 17.8855	128.6465	0.7654	0.0189	150.5648
<b>Total</b>		<b>2,990.254 2</b>	<b>17.6241</b>	<b>0.4343</b>	<b>3,495.005 7</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	1,493.995 2	88.2926	0.0000	3,348.139 6
Mitigated	1,493.995 2	88.2926	0.0000	3,348.139 6

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3275.2	664.8360	39.2907	0.0000	1,489.940 3
Government (Civic Center)	1214.33	246.4980	14.5676	0.0000	552.4179
Single Family Housing	2456.72	498.6920	29.4719	0.0000	1,117.6008
Strip Mall	413.66	83.9692	4.9624	0.0000	188.1805
<b>Total</b>		<b>1,493.995 2</b>	<b>88.2926</b>	<b>0.0000</b>	<b>3,348.139 6</b>



## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3275.2	664.8360	39.2907	0.0000	1,489.9403
Government (Civic Center)	1214.33	246.4980	14.5676	0.0000	552.4179
Single Family Housing	2456.72	498.6920	29.4719	0.0000	1,117.6008
Strip Mall	413.66	83.9692	4.9624	0.0000	188.1805
<b>Total</b>		<b>1,493.9952</b>	<b>88.2926</b>	<b>0.0000</b>	<b>3,348.1396</b>

## 9.0 Operational Offroad

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

## **ATTACHMENT 5b**

Year 2020 GHG Emissions of the Adopted Plan  
Golden Hill

**6086 Golden Hill - Adopted Plan 2020**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	213.04	1000sqft	4.89	213,040.00	0
Apartments Low Rise	7,100.00	Dwelling Unit	443.75	7,100,000.00	20306
Single Family Housing	2,070.00	Dwelling Unit	672.08	3,726,000.00	5920
Strip Mall	431.16	1000sqft	9.90	431,160.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2020
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MW hr)</b>	531.72	<b>CH4 Intensity (lb/MW hr)</b>	0.021	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS status - SDG&E currently at 36.4%  
 CalEEMod accounts for 10.2%  
 Additional 26.2% reduction applied  
 (531.72, 0.021, 0.004)

Land Use - Golden Hill adopted land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	3,905.00	6,390.00
tblFireplaces	NumberGas	1,138.50	1,863.00
tblFireplaces	NumberWood	2,485.00	0.00
tblFireplaces	NumberWood	724.50	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	531.72
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

tblProjectCharacteristics	OperationalYear	2014	2020
tblWater	IndoorWaterUseRate	462,593,581.91	370,074,865.53
tblWater	IndoorWaterUseRate	42,322,459.48	33,857,967.58
tblWater	IndoorWaterUseRate	134,868,833.04	107,895,066.43
tblWater	IndoorWaterUseRate	31,937,108.36	25,549,686.69
tblWoodstoves	NumberCatalytic	355.00	0.00
tblWoodstoves	NumberCatalytic	103.50	0.00
tblWoodstoves	NumberNoncatalytic	355.00	0.00
tblWoodstoves	NumberNoncatalytic	103.50	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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					
Energy	0.7194	6.1614	2.7190	0.0392		0.4970	0.4970		0.4970	0.4970	0.0000	18,820.9180	18,820.9180	0.5986	0.2186	18,901.2387
Mobile	46.3833	97.0173	461.7081	1.2335	84.6532	1.4228	86.0760	22.6405	1.3129	23.9534	0.0000	85,615.0250	85,615.0250	3.3315	0.0000	85,684.9855
Waste						0.0000	0.0000		0.0000	0.0000	1,494.0642	0.0000	1,494.0642	88.2967	0.0000	3,348.2942
Water						0.0000	0.0000		0.0000	0.0000	170.4851	2,818.8536	2,989.3387	17.6218	0.4347	3,494.1424
Area	65.1416	0.7902	68.3564	3.6000e-003		0.8295	0.8295		0.8247	0.8247	0.0000	6,611.7065	6,611.7065	0.2331	0.1192	6,653.5454
<b>Total</b>	<b>112.2443</b>	<b>103.9689</b>	<b>532.7834</b>	<b>1.2764</b>	<b>84.6532</b>	<b>2.7493</b>	<b>87.4025</b>	<b>22.6405</b>	<b>2.6346</b>	<b>25.2752</b>	<b>1,664.5494</b>	<b>113,866.5030</b>	<b>115,531.0524</b>	<b>110.0816</b>	<b>0.7724</b>	<b>118,082.2063</b>

## 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					
Energy	0.7194	6.1614	2.7190	0.0392		0.4970	0.4970		0.4970	0.4970	0.0000	18,820.9180	18,820.9180	0.5986	0.2186	18,901.2387
Mobile	46.3833	97.0173	461.7081	1.2335	84.6532	1.4228	86.0760	22.6405	1.3129	23.9534	0.0000	85,615.0250	85,615.0250	3.3315	0.0000	85,684.9855
Waste						0.0000	0.0000		0.0000	0.0000	1,494.0642	0.0000	1,494.0642	88.2967	0.0000	3,348.2942
Water						0.0000	0.0000		0.0000	0.0000	170.4851	2,818.8536	2,989.3387	17.6195	0.4342	3,493.9573
Area	65.1416	0.7902	68.3564	3.6000e-003		0.8295	0.8295		0.8247	0.8247	0.0000	6,611.7065	6,611.7065	0.2331	0.1192	6,653.5454
<b>Total</b>	<b>112.2443</b>	<b>103.9689</b>	<b>532.7834</b>	<b>1.2764</b>	<b>84.6532</b>	<b>2.7493</b>	<b>87.4025</b>	<b>22.6405</b>	<b>2.6346</b>	<b>25.2752</b>	<b>1,664.5494</b>	<b>113,866.5030</b>	<b>115,531.0524</b>	<b>110.0793</b>	<b>0.7720</b>	<b>118,082.0211</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0



**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	6,063.00	1,086.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Building Construction - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6500e-003	0.0474	0.0702	1.3000e-004	3.5300e-003	6.8000e-004	4.2100e-003	1.0100e-003	6.2000e-004	1.6300e-003	0.0000	11.5170	11.5170	9.0000e-005	0.0000	11.5189
Worker	9.4200e-003	0.0125	0.1180	3.0000e-004	0.0243	1.8000e-004	0.0245	6.4600e-003	1.7000e-004	6.6300e-003	0.0000	21.7794	21.7794	1.1100e-003	0.0000	21.8027
<b>Total</b>	<b>0.0151</b>	<b>0.0599</b>	<b>0.1882</b>	<b>4.3000e-004</b>	<b>0.0278</b>	<b>8.6000e-004</b>	<b>0.0287</b>	<b>7.4700e-003</b>	<b>7.9000e-004</b>	<b>8.2600e-003</b>	<b>0.0000</b>	<b>33.2964</b>	<b>33.2964</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>33.3215</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6500e-003	0.0474	0.0702	1.3000e-004	3.5300e-003	6.8000e-004	4.2100e-003	1.0100e-003	6.2000e-004	1.6300e-003	0.0000	11.5170	11.5170	9.0000e-005	0.0000	11.5189
Worker	9.4200e-003	0.0125	0.1180	3.0000e-004	0.0243	1.8000e-004	0.0245	6.4600e-003	1.7000e-004	6.6300e-003	0.0000	21.7794	21.7794	1.1100e-003	0.0000	21.8027
<b>Total</b>	<b>0.0151</b>	<b>0.0599</b>	<b>0.1882</b>	<b>4.3000e-004</b>	<b>0.0278</b>	<b>8.6000e-004</b>	<b>0.0287</b>	<b>7.4700e-003</b>	<b>7.9000e-004</b>	<b>8.2600e-003</b>	<b>0.0000</b>	<b>33.2964</b>	<b>33.2964</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>33.3215</b>

### 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	46.3833	97.0173	461.7081	1.2335	84.6532	1.4228	86.0760	22.6405	1.3129	23.9534	0.0000	85,615.0250	85,615.0250	3.3315	0.0000	85,684.9855
Unmitigated	46.3833	97.0173	461.7081	1.2335	84.6532	1.4228	86.0760	22.6405	1.3129	23.9534	0.0000	85,615.0250	85,615.0250	3.3315	0.0000	85,684.9855

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	46,789.00	50,836.00	43,097.00	133,741,594	133,741,594
Government (Civic Center)	5,948.08	0.00	0.00	8,121,831	8,121,831
Single Family Housing	19,809.90	20,865.60	18,153.90	56,318,411	56,318,411
Strip Mall	19,109.01	18,125.97	8,808.60	26,946,095	26,946,095
<b>Total</b>	<b>91,655.99</b>	<b>89,827.57</b>	<b>70,059.50</b>	<b>225,127,931</b>	<b>225,127,931</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
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

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**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11,701.6494	11,701.6494	0.4622	0.0880	11,738.6434
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11,701.6494	11,701.6494	0.4622	0.0880	11,738.6434
NaturalGas Mitigated	0.7194	6.1614	2.7190	0.0392		0.4970	0.4970		0.4970	0.4970	0.0000	7,119.2686	7,119.2686	0.1365	0.1305	7,162.5953
NaturalGas Unmitigated	0.7194	6.1614	2.7190	0.0392		0.4970	0.4970		0.4970	0.4970	0.0000	7,119.2686	7,119.2686	0.1365	0.1305	7,162.5953

### 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					
Government (Civic Center)	3.87733e+006	0.0209	0.1901	0.1597	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.9090	206.9090	3.9700e-003	3.7900e-003	208.1682
Single Family Housing	5.43049e+007	0.2928	2.5023	1.0648	0.0160		0.2023	0.2023		0.2023	0.2023	0.0000	2,897.9161	2,897.9161	0.0555	0.0531	2,915.5524
Strip Mall	901124	4.8600e-003	0.0442	0.0371	2.7000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	48.0874	48.0874	9.2000e-004	8.8000e-004	48.3801
Apartments Low Rise	7.43267e+007	0.4008	3.4249	1.4574	0.0219		0.2769	0.2769		0.2769	0.2769	0.0000	3,966.3560	3,966.3560	0.0760	0.0727	3,990.4946
<b>Total</b>		<b>0.7194</b>	<b>6.1614</b>	<b>2.7190</b>	<b>0.0392</b>		<b>0.4970</b>	<b>0.4970</b>		<b>0.4970</b>	<b>0.4970</b>	<b>0.0000</b>	<b>7,119.2686</b>	<b>7,119.2686</b>	<b>0.1365</b>	<b>0.1305</b>	<b>7,162.5953</b>

### 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					
Single Family Housing	5.43049e+007	0.2928	2.5023	1.0648	0.0160		0.2023	0.2023		0.2023	0.2023	0.0000	2,897.9161	2,897.9161	0.0555	0.0531	2,915.5524
Strip Mall	901124	4.8600e-003	0.0442	0.0371	2.7000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	48.0874	48.0874	9.2000e-004	8.8000e-004	48.3801
Apartments Low Rise	7.43267e+007	0.4008	3.4249	1.4574	0.0219		0.2769	0.2769		0.2769	0.2769	0.0000	3,966.3560	3,966.3560	0.0760	0.0727	3,990.4946
Government (Civic Center)	3.87733e+006	0.0209	0.1901	0.1597	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.9090	206.9090	3.9700e-003	3.7900e-003	208.1682
<b>Total</b>		<b>0.7194</b>	<b>6.1614</b>	<b>2.7190</b>	<b>0.0392</b>		<b>0.4970</b>	<b>0.4970</b>		<b>0.4970</b>	<b>0.4970</b>	<b>0.0000</b>	<b>7,119.2686</b>	<b>7,119.2686</b>	<b>0.1365</b>	<b>0.1305</b>	<b>7,162.5953</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.54747e+007	6,144.0834	0.2427	0.0462	6,163.5075
Government (Civic Center)	2.9293e+006	706.5007	0.0279	5.3100e-003	708.7342
Single Family Housing	1.44265e+007	3,479.4511	0.1374	0.0262	3,490.4512
Strip Mall	5.687e+006	1,371.6143	0.0542	0.0103	1,375.9506
<b>Total</b>		<b>11,701.6494</b>	<b>0.4622</b>	<b>0.0880</b>	<b>11,738.6434</b>



### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.54747e+007	6,144.0834	0.2427	0.0462	6,163.5075
Government (Civic Center)	2.9293e+006	706.5007	0.0279	5.3100e-003	708.7342
Single Family Housing	1.44265e+007	3,479.4511	0.1374	0.0262	3,490.4512
Strip Mall	5.687e+006	1,371.6143	0.0542	0.0103	1,375.9506
<b>Total</b>		<b>11,701.6494</b>	<b>0.4622</b>	<b>0.0880</b>	<b>11,738.6434</b>

### 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	65.1416	0.7902	68.3564	3.6000e-003		0.8295	0.8295		0.8247	0.8247	0.0000	6,611.7065	6,611.7065	0.2331	0.1192	6,653.5454
Unmitigated	65.1416	0.7902	68.3564	3.6000e-003		0.8295	0.8295		0.8247	0.8247	0.0000	6,611.7065	6,611.7065	0.2331	0.1192	6,653.5454

## 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	17.6071					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	44.7969					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6568	3.0000e-005	0.0358	0.0000		0.4538	0.4538		0.4490	0.4490	0.0000	6,500.4739	6,500.4739	0.1246	0.1192	6,540.0347
Landscaping	2.0808	0.7902	68.3206	3.6000e-003		0.3757	0.3757		0.3757	0.3757	0.0000	111.2326	111.2326	0.1085	0.0000	113.5107
<b>Total</b>	<b>65.1416</b>	<b>0.7902</b>	<b>68.3564</b>	<b>3.6000e-003</b>		<b>0.8295</b>	<b>0.8295</b>		<b>0.8247</b>	<b>0.8247</b>	<b>0.0000</b>	<b>6,611.7065</b>	<b>6,611.7065</b>	<b>0.2331</b>	<b>0.1192</b>	<b>6,653.5454</b>

## 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	17.6071					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	44.7969					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6568	3.0000e-005	0.0358	0.0000		0.4538	0.4538		0.4490	0.4490	0.0000	6,500.4739	6,500.4739	0.1246	0.1192	6,540.0347
Landscaping	2.0808	0.7902	68.3206	3.6000e-003		0.3757	0.3757		0.3757	0.3757	0.0000	111.2326	111.2326	0.1085	0.0000	113.5107
<b>Total</b>	<b>65.1416</b>	<b>0.7902</b>	<b>68.3564</b>	<b>3.6000e-003</b>		<b>0.8295</b>	<b>0.8295</b>		<b>0.8247</b>	<b>0.8247</b>	<b>0.0000</b>	<b>6,611.7065</b>	<b>6,611.7065</b>	<b>0.2331</b>	<b>0.1192</b>	<b>6,653.5454</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2,989.3387	17.6195	0.4342	3,493.9573
Unmitigated	2,989.3387	17.6218	0.4347	3,494.1424

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	370.075 / 291.635	2,061.0650	12.1357	0.2994	2,408.7149
Government (Civic Center)	33.858 / 25.9396	186.5777	1.1102	0.0274	218.3777
Single Family Housing	107.895 / 85.026	600.9020	3.5381	0.0873	702.2591
Strip Mall	25.5497 / 19.5744	140.7941	0.8378	0.0207	164.7908
<b>Total</b>		<b>2,989.3387</b>	<b>17.6218</b>	<b>0.4347</b>	<b>3,494.1424</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	370.075 / 291.635	2,061.065 0	12.1341	0.2991	2,408.587 3
Government (Civic Center)	33.858 / 25.9396	186.5777	1.1101	0.0274	218.3660
Single Family Housing	107.895 / 85.026	600.9020	3.5377	0.0872	702.2219
Strip Mall	25.5497 / 19.5744	140.7941	0.8377	0.0206	164.7820
<b>Total</b>		<b>2,989.338 7</b>	<b>17.6195</b>	<b>0.4342</b>	<b>3,493.957 3</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1,494.064 2	88.2967	0.0000	3,348.294 2
Unmitigated	1,494.064 2	88.2967	0.0000	3,348.294 2

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3266	662.9685	39.1803	0.0000	1,485.755 1
Government (Civic Center)	1214.33	246.4980	14.5676	0.0000	552.4179
Single Family Housing	2427.2	492.6997	29.1177	0.0000	1,104.171 7
Strip Mall	452.72	91.8981	5.4310	0.0000	205.9495
<b>Total</b>		<b>1,494.064 2</b>	<b>88.2967</b>	<b>0.0000</b>	<b>3,348.294 2</b>

## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3266	662.9685	39.1803	0.0000	1,485.7551
Government (Civic Center)	1214.33	246.4980	14.5676	0.0000	552.4179
Single Family Housing	2427.2	492.6997	29.1177	0.0000	1,104.1717
Strip Mall	452.72	91.8981	5.4310	0.0000	205.9495
<b>Total</b>		<b>1,494.0642</b>	<b>88.2967</b>	<b>0.0000</b>	<b>3,348.2942</b>

## 9.0 Operational Offroad

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

## **ATTACHMENT 6a**

Year 2035 GHG Emissions of the CPU  
Uptown



**6086 Uptown - Proposed Plan 2035**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	2,485.70	1000sqft	57.06	2,485,700.00	0
Hotel	220.00	Room	7.33	174,000.00	0
Racquet Club	31.10	1000sqft	0.71	31,100.00	0
Apartments Low Rise	27,180.00	Dwelling Unit	1,698.75	27,180,000.00	77735
Single Family Housing	5,500.00	Dwelling Unit	1,785.71	9,900,000.00	15730
Strip Mall	4,785.20	1000sqft	109.85	4,785,200.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2035
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MW hr)</b>	433.73	<b>CH4 Intensity (lb/MW hr)</b>	0.017	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS 2030 goal  
 CalEEMod accounts for 10.2%  
 Additional 39.8% reduction applied  
 (433.73, 0.017, 0.004)

Land Use - Uptown proposed land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	5.84	4.57
tblEnergyUse	T24E	1.48	1.16
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	49.75	41.39
tblEnergyUse	T24NG	4.54	3.78
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	14,949.00	24,462.00
tblFireplaces	NumberGas	3,025.00	4,950.00
tblFireplaces	NumberWood	9,513.00	0.00

tblFireplaces	NumberWood	1,925.00	0.00
tblLandUse	LandUseSquareFeet	319,440.00	174,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.017
tblProjectCharacteristics	CO2IntensityFactor	720.49	433.73
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2035
tblWater	IndoorWaterUseRate	1,770,886,416.39	1,416,709,133.11
tblWater	IndoorWaterUseRate	493,808,381.15	395,046,704.92
tblWater	IndoorWaterUseRate	5,580,689.40	4,464,551.52
tblWater	IndoorWaterUseRate	1,839,351.78	1,471,481.42
tblWater	IndoorWaterUseRate	358,347,140.92	286,677,712.74
tblWater	IndoorWaterUseRate	354,451,829.81	283,561,463.85
tblWoodstoves	NumberCatalytic	1,359.00	0.00
tblWoodstoves	NumberCatalytic	275.00	0.00
tblWoodstoves	NumberNoncatalytic	1,359.00	0.00
tblWoodstoves	NumberNoncatalytic	275.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	249.3916	2.7904	241.9962	0.0128		2.9632	2.9632		2.9462	2.9462	0.0000	23,562.8596	23,562.8596	0.8217	0.4247	23,711.7772
Energy	2.6613	22.9319	11.0731	0.1452		1.8387	1.8387		1.8387	1.8387	0.0000	72,715.0062	72,715.0062	2.3226	0.9106	73,046.0538
Mobile	164.3097	272.9861	1,555.9027	5.8620	398.6791	6.6023	405.2814	106.6099	6.0993	112.7092	0.0000	370,447.3471	370,447.3471	11.2200	0.0000	370,682.9665
Waste						0.0000	0.0000		0.0000	0.0000	7,803.5349	0.0000	7,803.5349	461.1757	0.0000	17,488.2246
Water						0.0000	0.0000		0.0000	0.0000	757.5804	10,191.3893	10,948.9697	78.2102	1.9313	13,190.0777
<b>Total</b>	<b>416.3625</b>	<b>298.7084</b>	<b>1,808.9721</b>	<b>6.0199</b>	<b>398.6791</b>	<b>11.4042</b>	<b>410.0833</b>	<b>106.6099</b>	<b>10.8842</b>	<b>117.4941</b>	<b>8,561.1153</b>	<b>476,916.6022</b>	<b>485,477.7175</b>	<b>553.7502</b>	<b>3.2666</b>	<b>498,119.0998</b>

## 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	249.3916	2.7904	241.9962	0.0128		2.9632	2.9632		2.9462	2.9462	0.0000	23,562.8596	23,562.8596	0.8217	0.4247	23,711.7772
Energy	2.6613	22.9319	11.0731	0.1452		1.8387	1.8387		1.8387	1.8387	0.0000	72,715.0062	72,715.0062	2.3226	0.9106	73,046.0538
Mobile	164.3097	272.9861	1,555.9027	5.8620	398.6791	6.6023	405.2814	106.6099	6.0993	112.7092	0.0000	370,447.3471	370,447.3471	11.2200	0.0000	370,682.9665
Waste						0.0000	0.0000		0.0000	0.0000	7,803.5349	0.0000	7,803.5349	461.1757	0.0000	17,488.2246
Water						0.0000	0.0000		0.0000	0.0000	757.5804	10,191.3893	10,948.9697	78.2019	1.9293	13,189.2960
<b>Total</b>	<b>416.3625</b>	<b>298.7084</b>	<b>1,808.9721</b>	<b>6.0199</b>	<b>398.6791</b>	<b>11.4042</b>	<b>410.0833</b>	<b>106.6099</b>	<b>10.8842</b>	<b>117.4941</b>	<b>8,561.1153</b>	<b>476,916.6022</b>	<b>485,477.7175</b>	<b>553.7418</b>	<b>3.2646</b>	<b>498,118.3180</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	23,962.00	4,719.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Building Construction - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0246	0.2061	0.3051	5.6000e-004	0.0154	2.9500e-003	0.0183	4.3900e-003	2.7100e-003	7.1000e-003	0.0000	50.0450	50.0450	3.8000e-004	0.0000	50.0529
Worker	0.0372	0.0493	0.4664	1.1800e-003	0.0961	7.2000e-004	0.0968	0.0255	6.6000e-004	0.0262	0.0000	86.0759	86.0759	4.3800e-003	0.0000	86.1678
<b>Total</b>	<b>0.0618</b>	<b>0.2554</b>	<b>0.7716</b>	<b>1.7400e-003</b>	<b>0.1114</b>	<b>3.6700e-003</b>	<b>0.1151</b>	<b>0.0299</b>	<b>3.3700e-003</b>	<b>0.0333</b>	<b>0.0000</b>	<b>136.1208</b>	<b>136.1208</b>	<b>4.7600e-003</b>	<b>0.0000</b>	<b>136.2207</b>



### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0246	0.2061	0.3051	5.6000e-004	0.0154	2.9500e-003	0.0183	4.3900e-003	2.7100e-003	7.1000e-003	0.0000	50.0450	50.0450	3.8000e-004	0.0000	50.0529
Worker	0.0372	0.0493	0.4664	1.1800e-003	0.0961	7.2000e-004	0.0968	0.0255	6.6000e-004	0.0262	0.0000	86.0759	86.0759	4.3800e-003	0.0000	86.1678
<b>Total</b>	<b>0.0618</b>	<b>0.2554</b>	<b>0.7716</b>	<b>1.7400e-003</b>	<b>0.1114</b>	<b>3.6700e-003</b>	<b>0.1151</b>	<b>0.0299</b>	<b>3.3700e-003</b>	<b>0.0333</b>	<b>0.0000</b>	<b>136.1208</b>	<b>136.1208</b>	<b>4.7600e-003</b>	<b>0.0000</b>	<b>136.2207</b>

### 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	164.3097	272.9861	1,555,902.7	5.8620	398.6791	6.6023	405.2814	106.6099	6.0993	112.7092	0.0000	370,447.3471	370,447.3471	11.2200	0.0000	370,682.9665
Unmitigated	164.3097	272.9861	1,555,902.7	5.8620	398.6791	6.6023	405.2814	106.6099	6.0993	112.7092	0.0000	370,447.3471	370,447.3471	11.2200	0.0000	370,682.9665

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	179,116.20	194,608.80	164,982.60	511,985,424	511,985,424
Government (Civic Center)	69,400.74	0.00	0.00	94,763,593	94,763,593
Hotel	1,797.40	1,801.80	1,309.00	3,283,569	3,283,569
Racquet Club	1,024.12	649.06	831.30	1,604,003	1,604,003
Single Family Housing	52,635.00	55,440.00	48,235.00	149,638,291	149,638,291
Strip Mall	212,080.06	201,169.81	97,761.64	299,059,404	299,059,404
<b>Total</b>	<b>516,053.53</b>	<b>453,669.47</b>	<b>313,119.54</b>	<b>1,060,334,284</b>	<b>1,060,334,284</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511887	0.074493	0.190892	0.129437	0.036275	0.005211	0.012579	0.024993	0.001957	0.001971	0.006467	0.000450	0.003389

### 5.0 Energy Detail

#### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46,377.7968	46,377.7968	1.8178	0.4277	46,548.5605
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46,377.7968	46,377.7968	1.8178	0.4277	46,548.5605
NaturalGas Mitigated	2.6613	22.9319	11.0731	0.1452		1.8387	1.8387		1.8387	1.8387	0.0000	26,337.2094	26,337.2094	0.5048	0.4829	26,497.4933
NaturalGas Unmitigated	2.6613	22.9319	11.0731	0.1452		1.8387	1.8387		1.8387	1.8387	0.0000	26,337.2094	26,337.2094	0.5048	0.4829	26,497.4933

### 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					
Government (Civic Center)	4.52397e+007	0.2439	2.2176	1.8628	0.0133		0.1685	0.1685		0.1685	0.1685	0.0000	2,414.1648	2,414.1648	0.0463	0.0443	2,428.8570
Hotel	9.13326e+006	0.0493	0.4477	0.3761	2.6900e-003		0.0340	0.0340		0.0340	0.0340	0.0000	487.3855	487.3855	9.3400e-003	8.9400e-003	490.3517
Racquet Club	343033	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3056	18.3056	3.5000e-004	3.4000e-004	18.4170
Single Family Housing	1.44288e+008	0.7780	6.6486	2.8292	0.0424		0.5375	0.5375		0.5375	0.5375	0.0000	7,699.7772	7,699.7772	0.1476	0.1412	7,746.6367
Strip Mall	1.00011e+007	0.0539	0.4903	0.4118	2.9400e-003		0.0373	0.0373		0.0373	0.0373	0.0000	533.6951	533.6951	0.0102	9.7800e-003	536.9431
Apartments Low Rise	2.84535e+008	1.5343	13.1109	5.5791	0.0837		1.0600	1.0600		1.0600	1.0600	0.0000	15,183.8813	15,183.8813	0.2910	0.2784	15,276.2878
<b>Total</b>		<b>2.6613</b>	<b>22.9319</b>	<b>11.0731</b>	<b>0.1452</b>		<b>1.8387</b>	<b>1.8387</b>		<b>1.8387</b>	<b>1.8387</b>	<b>0.0000</b>	<b>26,337.2094</b>	<b>26,337.2094</b>	<b>0.5048</b>	<b>0.4829</b>	<b>26,497.4933</b>

### 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					
Hotel	9.13326e+006	0.0493	0.4477	0.3761	2.6900e-003		0.0340	0.0340		0.0340	0.0340	0.0000	487.3855	487.3855	9.3400e-003	8.9400e-003	490.3517
Racquet Club	343033	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3056	18.3056	3.5000e-004	3.4000e-004	18.4170
Single Family Housing	1.44288e+008	0.7780	6.6486	2.8292	0.0424		0.5375	0.5375		0.5375	0.5375	0.0000	7,699.7772	7,699.7772	0.1476	0.1412	7,746.6367
Strip Mall	1.00011e+007	0.0539	0.4903	0.4118	2.9400e-003		0.0373	0.0373		0.0373	0.0373	0.0000	533.6951	533.6951	0.0102	9.7800e-003	536.9431
Apartments Low Rise	2.84535e+008	1.5343	13.1109	5.5791	0.0837		1.0600	1.0600		1.0600	1.0600	0.0000	15,183.8813	15,183.8813	0.2910	0.2784	15,276.2878
Government (Civic Center)	4.52397e+007	0.2439	2.2176	1.8628	0.0133		0.1685	0.1685		0.1685	0.1685	0.0000	2,414.1648	2,414.1648	0.0463	0.0443	2,428.8570
<b>Total</b>		<b>2.6613</b>	<b>22.9319</b>	<b>11.0731</b>	<b>0.1452</b>		<b>1.8387</b>	<b>1.8387</b>		<b>1.8387</b>	<b>1.8387</b>	<b>0.0000</b>	<b>26,337.2094</b>	<b>26,337.2094</b>	<b>0.5048</b>	<b>0.4829</b>	<b>26,497.4933</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9.75213e+007	19,186.0101	0.7520	0.1769	19,256.6533
Government (Civic Center)	3.41784e+007	6,724.1379	0.2636	0.0620	6,748.8963
Hotel	2.31768e+006	455.9725	0.0179	4.2100e-003	457.6514
Racquet Club	269948	53.1087	2.0800e-003	4.9000e-004	53.3042
Single Family Housing	3.83314e+007	7,541.1841	0.2956	0.0696	7,568.9509
Strip Mall	6.31168e+007	12,417.3835	0.4867	0.1145	12,463.1044
<b>Total</b>		<b>46,377.7968</b>	<b>1.8178</b>	<b>0.4277</b>	<b>46,548.5605</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9.75213e+007	19,186.0101	0.7520	0.1769	19,256.6533
Government (Civic Center)	3.41784e+007	6,724.1379	0.2636	0.0620	6,748.8963
Hotel	2.31768e+006	455.9725	0.0179	4.2100e-003	457.6514
Racquet Club	269948	53.1087	2.0800e-003	4.9000e-004	53.3042
Single Family Housing	3.83314e+007	7,541.1841	0.2956	0.0696	7,568.9509
Strip Mall	6.31168e+007	12,417.3835	0.4867	0.1145	12,463.1044
<b>Total</b>		<b>46,377.7968</b>	<b>1.8178</b>	<b>0.4277</b>	<b>46,548.5605</b>

### 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	249.3916	2.7904	241.9962	0.0128		2.9632	2.9632		2.9462	2.9462	0.0000	23,562.85 96	23,562.85 96	0.8217	0.4247	23,711.77 72
Unmitigated	249.3916	2.7904	241.9962	0.0128		2.9632	2.9632		2.9462	2.9462	0.0000	23,562.85 96	23,562.85 96	0.8217	0.4247	23,711.77 72

## 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	65.8012					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	174.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.3409	1.1000e-004	0.1277	0.0000		1.6173	1.6173		1.6003	1.6003	0.0000	23,166.35 62	23,166.35 62	0.4440	0.4247	23,307.34 28
Landscaping	7.2360	2.7903	241.8685	0.0128		1.3459	1.3459		1.3459	1.3459	0.0000	396.5034	396.5034	0.3777	0.0000	404.4344
<b>Total</b>	<b>249.3916</b>	<b>2.7904</b>	<b>241.9962</b>	<b>0.0128</b>		<b>2.9632</b>	<b>2.9632</b>		<b>2.9462</b>	<b>2.9462</b>	<b>0.0000</b>	<b>23,562.85 96</b>	<b>23,562.85 96</b>	<b>0.8217</b>	<b>0.4247</b>	<b>23,711.77 72</b>



## 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	65.8012					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	174.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.3409	1.1000e-004	0.1277	0.0000		1.6173	1.6173		1.6003	1.6003	0.0000	23,166.3562	23,166.3562	0.4440	0.4247	23,307.3428
Landscaping	7.2360	2.7903	241.8685	0.0128		1.3459	1.3459		1.3459	1.3459	0.0000	396.5034	396.5034	0.3777	0.0000	404.4344
<b>Total</b>	<b>249.3916</b>	<b>2.7904</b>	<b>241.9962</b>	<b>0.0128</b>		<b>2.9632</b>	<b>2.9632</b>		<b>2.9462</b>	<b>2.9462</b>	<b>0.0000</b>	<b>23,562.8596</b>	<b>23,562.8596</b>	<b>0.8217</b>	<b>0.4247</b>	<b>23,711.7772</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10,948.9697	78.2019	1.9293	13,189.2960
Unmitigated	10,948.9697	78.2102	1.9313	13,190.0777

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1416.71 / 1116.43	6,518.877 4	46.4014	1.1460	7,848.564 5
Government (Civic Center)	395.047 / 302.657	1,798.854 3	12.9382	0.3194	2,169.565 4
Hotel	4.46455 / 0.620077	14.2086	0.1460	3.5500e- 003	18.3756
Racquet Club	1.47148 / 1.12734	6.7004	0.0482	1.1900e- 003	8.0813
Single Family Housing	286.678 / 225.915	1,319.125 3	9.3895	0.2319	1,588.193 7
Strip Mall	283.561 / 217.245	1,291.203 7	9.2869	0.2293	1,557.297 3
<b>Total</b>		<b>10,948.96 97</b>	<b>78.2102</b>	<b>1.9313</b>	<b>13,190.07 77</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1416.71 / 1116.43	6,518.8774	46.3964	1.1448	7,848.1007
Government (Civic Center)	395.047 / 302.657	1,798.8543	12.9368	0.3191	2,169.4361
Hotel	4.46455 / 0.620077	14.2086	0.1460	3.5500e-003	18.3741
Racquet Club	1.47148 / 1.12734	6.7004	0.0482	1.1900e-003	8.0808
Single Family Housing	286.678 / 225.915	1,319.1253	9.3885	0.2317	1,588.0998
Strip Mall	283.561 / 217.245	1,291.2037	9.2860	0.2290	1,557.2044
<b>Total</b>		<b>10,948.9697</b>	<b>78.2019</b>	<b>1.9293</b>	<b>13,189.2960</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	7,803.534 9	461.1757	0.0000	17,488.22 46
Mitigated	7,803.534 9	461.1757	0.0000	17,488.22 46

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	12502.8	2,537.955 4	149.9889	0.0000	5,687.721 6
Government (Civic Center)	14168.5	2,876.075 4	169.9712	0.0000	6,445.470 4
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.27	35.9842	2.1266	0.0000	80.6429
Single Family Housing	6449.3	1,309.149 6	77.3685	0.0000	2,933.888 7
Strip Mall	5024.46	1,019.920 0	60.2755	0.0000	2,285.706 4
<b>Total</b>		<b>7,803.534 9</b>	<b>461.1757</b>	<b>0.0000</b>	<b>17,488.22 46</b>

## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	12502.8	2,537.955 4	149.9889	0.0000	5,687.721 6
Government (Civic Center)	14168.5	2,876.075 4	169.9712	0.0000	6,445.470 4
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.27	35.9842	2.1266	0.0000	80.6429
Single Family Housing	6449.3	1,309.149 6	77.3685	0.0000	2,933.888 7
Strip Mall	5024.46	1,019.920 0	60.2755	0.0000	2,285.706 4
<b>Total</b>		<b>7,803.534 9</b>	<b>461.1757</b>	<b>0.0000</b>	<b>17,488.22 46</b>

## 9.0 Operational Offroad

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

## **ATTACHMENT 6b**

Year 2035 GHG Emissions of the Adopted Plan  
Uptown

**6086 Uptown - Adopted Plan 2035**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	2,314.90	1000sqft	53.14	2,314,900.00	0
Hotel	220.00	Room	7.33	174,000.00	0
Racquet Club	31.10	1000sqft	0.71	31,100.00	0
Apartments Low Rise	29,060.00	Dwelling Unit	1,816.25	29,060,000.00	83112
Single Family Housing	5,540.00	Dwelling Unit	1,798.70	9,972,000.00	15844
Strip Mall	4,783.00	1000sqft	109.80	4,783,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2035
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	433.73	<b>CH4 Intensity (lb/MWhr)</b>	0.017	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS 2030 goal 50%

CalEEMod accounts for 10.2%

Additional 39.8% reduction applied

(433.73, 0.017, 0.004)

Land Use - Uptown adopted land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	5.84	4.57
tblEnergyUse	T24E	1.48	1.16
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	49.75	41.39
tblEnergyUse	T24NG	4.54	3.78
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	15,983.00	26,154.00
tblFireplaces	NumberGas	3,047.00	4,986.00
tblFireplaces	NumberWood	10,171.00	0.00



tblFireplaces	NumberWood	1,939.00	0.00
tblLandUse	LandUseSquareFeet	319,440.00	174,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.017
tblProjectCharacteristics	CO2IntensityFactor	720.49	433.73
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2035
tblWater	IndoorWaterUseRate	1,893,375,984.56	1,514,700,787.65
tblWater	IndoorWaterUseRate	459,877,306.81	367,901,845.45
tblWater	IndoorWaterUseRate	5,580,689.40	4,464,551.52
tblWater	IndoorWaterUseRate	1,839,351.78	1,471,481.42
tblWater	IndoorWaterUseRate	360,953,301.94	288,762,641.55
tblWater	IndoorWaterUseRate	354,288,870.26	283,431,096.21
tblWoodstoves	NumberCatalytic	1,453.00	0.00
tblWoodstoves	NumberCatalytic	277.00	0.00
tblWoodstoves	NumberNoncatalytic	1,453.00	0.00
tblWoodstoves	NumberNoncatalytic	277.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	259.7747	2.9543	256.2083	0.0136		3.1373	3.1373		3.1192	3.1192	0.0000	24,947.20 27	24,947.20 27	0.8699	0.4497	25,104.86 88
Energy	2.7562	23.7345	11.3514	0.1503		1.9043	1.9043		1.9043	1.9043	0.0000	74,569.28 88	74,569.28 88	2.3764	0.9362	74,909.42 37
Mobile	167.9453	280.0904	1,594.698 0	6.0251	409.9034	6.7797	416.6831	109.6113	6.2631	115.8745	0.0000	380,759.4 831	380,759.4 831	11.5261	0.0000	381,001.5 321
Waste						0.0000	0.0000		0.0000	0.0000	7,790.476 5	0.0000	7,790.476 5	460.4040	0.0000	17,458.95 99
Water						0.0000	0.0000		0.0000	0.0000	780.6769	10,504.58 91	11,285.26 60	80.5947	1.9902	13,594.70 83
<b>Total</b>	<b>430.4762</b>	<b>306.7793</b>	<b>1,862.257 7</b>	<b>6.1890</b>	<b>409.9034</b>	<b>11.8212</b>	<b>421.7247</b>	<b>109.6113</b>	<b>11.2867</b>	<b>120.8980</b>	<b>8,571.153 4</b>	<b>490,780.5 636</b>	<b>499,351.7 169</b>	<b>555.7712</b>	<b>3.3761</b>	<b>512,069.4 927</b>

## 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	259.7747	2.9543	256.2083	0.0136		3.1373	3.1373		3.1192	3.1192	0.0000	24,947.2027	24,947.2027	0.8699	0.4497	25,104.8688
Energy	2.7562	23.7345	11.3514	0.1503		1.9043	1.9043		1.9043	1.9043	0.0000	74,569.2888	74,569.2888	2.3764	0.9362	74,909.4237
Mobile	167.9453	280.0904	1,594.6980	6.0251	409.9034	6.7797	416.6831	109.6113	6.2631	115.8745	0.0000	380,759.4831	380,759.4831	11.5261	0.0000	381,001.5321
Waste						0.0000	0.0000		0.0000	0.0000	7,790.4765	0.0000	7,790.4765	460.4040	0.0000	17,458.9599
Water						0.0000	0.0000		0.0000	0.0000	780.6769	10,504.5891	11,285.2660	80.5862	1.9882	13,593.9027
<b>Total</b>	<b>430.4762</b>	<b>306.7793</b>	<b>1,862.2577</b>	<b>6.1890</b>	<b>409.9034</b>	<b>11.8212</b>	<b>421.7247</b>	<b>109.6113</b>	<b>11.2867</b>	<b>120.8980</b>	<b>8,571.1534</b>	<b>490,780.5636</b>	<b>499,351.7169</b>	<b>555.7626</b>	<b>3.3741</b>	<b>512,068.6871</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	25,275.00	4,896.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

### 3.2 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0255	0.2138	0.3166	5.8000e-004	0.0159	3.0600e-003	0.0190	4.5600e-003	2.8100e-003	7.3700e-003	0.0000	51.9221	51.9221	3.9000e-004	0.0000	51.9303
Worker	0.0393	0.0520	0.4920	1.2500e-003	0.1013	7.5000e-004	0.1021	0.0269	7.0000e-004	0.0276	0.0000	90.7924	90.7924	4.6200e-003	0.0000	90.8893
<b>Total</b>	<b>0.0648</b>	<b>0.2658</b>	<b>0.8086</b>	<b>1.8300e-003</b>	<b>0.1173</b>	<b>3.8100e-003</b>	<b>0.1211</b>	<b>0.0315</b>	<b>3.5100e-003</b>	<b>0.0350</b>	<b>0.0000</b>	<b>142.7145</b>	<b>142.7145</b>	<b>5.0100e-003</b>	<b>0.0000</b>	<b>142.8196</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0255	0.2138	0.3166	5.8000e-004	0.0159	3.0600e-003	0.0190	4.5600e-003	2.8100e-003	7.3700e-003	0.0000	51.9221	51.9221	3.9000e-004	0.0000	51.9303
Worker	0.0393	0.0520	0.4920	1.2500e-003	0.1013	7.5000e-004	0.1021	0.0269	7.0000e-004	0.0276	0.0000	90.7924	90.7924	4.6200e-003	0.0000	90.8893
<b>Total</b>	<b>0.0648</b>	<b>0.2658</b>	<b>0.8086</b>	<b>1.8300e-003</b>	<b>0.1173</b>	<b>3.8100e-003</b>	<b>0.1211</b>	<b>0.0315</b>	<b>3.5100e-003</b>	<b>0.0350</b>	<b>0.0000</b>	<b>142.7145</b>	<b>142.7145</b>	<b>5.0100e-003</b>	<b>0.0000</b>	<b>142.8196</b>

### 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	167.9453	280.0904	1,594.6980	6.0251	409.9034	6.7797	416.6831	109.6113	6.2631	115.8745	0.0000	380,759.4831	380,759.4831	11.5261	0.0000	381,001.5321
Unmitigated	167.9453	280.0904	1,594.6980	6.0251	409.9034	6.7797	416.6831	109.6113	6.2631	115.8745	0.0000	380,759.4831	380,759.4831	11.5261	0.0000	381,001.5321

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	191,505.40	208,069.60	176,394.20	547,398,691	547,398,691
Government (Civic Center)	64,632.01	0.00	0.00	88,252,098	88,252,098
Hotel	1,797.40	1,801.80	1,309.00	3,283,569	3,283,569
Racquet Club	1,024.12	649.06	831.30	1,604,003	1,604,003
Single Family Housing	53,017.80	55,843.20	48,585.80	150,726,570	150,726,570
Strip Mall	211,982.56	201,077.32	97,716.69	298,921,911	298,921,911
<b>Total</b>	<b>523,959.29</b>	<b>467,440.98</b>	<b>324,836.99</b>	<b>1,090,186,843</b>	<b>1,090,186,843</b>

### 4.3 Trip Type Information



Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511887	0.074493	0.190892	0.129437	0.036275	0.005211	0.012579	0.024993	0.001957	0.001971	0.006467	0.000450	0.003389

### 5.0 Energy Detail

#### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	47,291.9646	47,291.9646	1.8536	0.4361	47,466.0943
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	47,291.9646	47,291.9646	1.8536	0.4361	47,466.0943
NaturalGas Mitigated	2.7562	23.7345	11.3514	0.1503		1.9043	1.9043		1.9043	1.9043	0.0000	27,277.3242	27,277.3242	0.5228	0.5001	27,443.3295
NaturalGas Unmitigated	2.7562	23.7345	11.3514	0.1503		1.9043	1.9043		1.9043	1.9043	0.0000	27,277.3242	27,277.3242	0.5228	0.5001	27,443.3295

**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					
Government (Civic Center)	4.21312e+007	0.2272	2.0653	1.7348	0.0124		0.1570	0.1570		0.1570	0.1570	0.0000	2,248.2802	2,248.2802	0.0431	0.0412	2,261.9629
Hotel	9.13326e+006	0.0493	0.4477	0.3761	2.6900e-003		0.0340	0.0340		0.0340	0.0340	0.0000	487.3855	487.3855	9.3400e-003	8.9400e-003	490.3517
Racquet Club	343033	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3056	18.3056	3.5000e-004	3.4000e-004	18.4170
Single Family Housing	1.45338e+008	0.7837	6.6969	2.8498	0.0428		0.5415	0.5415		0.5415	0.5415	0.0000	7,755.7756	7,755.7756	0.1487	0.1422	7,802.9759
Strip Mall	9.99647e+006	0.0539	0.4900	0.4116	2.9400e-003		0.0372	0.0372		0.0372	0.0372	0.0000	533.4497	533.4497	0.0102	9.7800e-003	536.6962
Apartments Low Rise	3.04216e+008	1.6404	14.0178	5.9650	0.0895		1.1334	1.1334		1.1334	1.1334	0.0000	16,234.1277	16,234.1277	0.3112	0.2976	16,332.9258
<b>Total</b>		<b>2.7562</b>	<b>23.7345</b>	<b>11.3514</b>	<b>0.1504</b>		<b>1.9043</b>	<b>1.9043</b>		<b>1.9043</b>	<b>1.9043</b>	<b>0.0000</b>	<b>27,277.3242</b>	<b>27,277.3242</b>	<b>0.5228</b>	<b>0.5001</b>	<b>27,443.3294</b>

### 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					
Hotel	9.13326e+006	0.0493	0.4477	0.3761	2.6900e-003		0.0340	0.0340		0.0340	0.0340	0.0000	487.3855	487.3855	9.3400e-003	8.9400e-003	490.3517
Racquet Club	343033	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3056	18.3056	3.5000e-004	3.4000e-004	18.4170
Single Family Housing	1.45338e+008	0.7837	6.6969	2.8498	0.0428		0.5415	0.5415		0.5415	0.5415	0.0000	7,755.7756	7,755.7756	0.1487	0.1422	7,802.9759
Strip Mall	9.99647e+006	0.0539	0.4900	0.4116	2.9400e-003		0.0372	0.0372		0.0372	0.0372	0.0000	533.4497	533.4497	0.0102	9.7800e-003	536.6962
Apartments Low Rise	3.04216e+008	1.6404	14.0178	5.9650	0.0895		1.1334	1.1334		1.1334	1.1334	0.0000	16,234.1277	16,234.1277	0.3112	0.2976	16,332.9258
Government (Civic Center)	4.21312e+007	0.2272	2.0653	1.7348	0.0124		0.1570	0.1570		0.1570	0.1570	0.0000	2,248.2802	2,248.2802	0.0431	0.0412	2,261.9629
<b>Total</b>		<b>2.7562</b>	<b>23.7345</b>	<b>11.3514</b>	<b>0.1504</b>		<b>1.9043</b>	<b>1.9043</b>		<b>1.9043</b>	<b>1.9043</b>	<b>0.0000</b>	<b>27,277.3242</b>	<b>27,277.3242</b>	<b>0.5228</b>	<b>0.5001</b>	<b>27,443.3294</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.04267e+008	20,513.0778	0.8040	0.1892	20,588.6072
Government (Civic Center)	3.18299e+007	6,262.1020	0.2454	0.0578	6,285.1591
Hotel	2.31768e+006	455.9725	0.0179	4.2100e-003	457.6514
Racquet Club	269948	53.1087	2.0800e-003	4.9000e-004	53.3042
Single Family Housing	3.86101e+007	7,596.0291	0.2977	0.0701	7,623.9978
Strip Mall	6.30878e+007	12,411.6746	0.4865	0.1145	12,457.3745
<b>Total</b>		<b>47,291.9646</b>	<b>1.8536</b>	<b>0.4361</b>	<b>47,466.0942</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.04267e+008	20,513.0778	0.8040	0.1892	20,588.6072
Government (Civic Center)	3.18299e+007	6,262.1020	0.2454	0.0578	6,285.1591
Hotel	2.31768e+006	455.9725	0.0179	4.2100e-003	457.6514
Racquet Club	269948	53.1087	2.0800e-003	4.9000e-004	53.3042
Single Family Housing	3.86101e+007	7,596.0291	0.2977	0.0701	7,623.9978
Strip Mall	6.30878e+007	12,411.6746	0.4865	0.1145	12,457.3745
<b>Total</b>		<b>47,291.9646</b>	<b>1.8536</b>	<b>0.4361</b>	<b>47,466.0942</b>

### 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	259.7747	2.9543	256.2083	0.0136		3.1373	3.1373		3.1192	3.1192	0.0000	24,947.20 27	24,947.20 27	0.8699	0.4497	25,104.86 88
Unmitigated	259.7747	2.9543	256.2083	0.0136		3.1373	3.1373		3.1192	3.1192	0.0000	24,947.20 27	24,947.20 27	0.8699	0.4497	25,104.86 88

## 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	68.6744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	180.9613					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4784	1.1000e-004	0.1352	0.0000		1.7123	1.7123		1.6943	1.6943	0.0000	24,527.41 51	24,527.41 51	0.4701	0.4497	24,676.68 48
Landscaping	7.6606	2.9542	256.0731	0.0136		1.4249	1.4249		1.4249	1.4249	0.0000	419.7876	419.7876	0.3998	0.0000	428.1840
<b>Total</b>	<b>259.7747</b>	<b>2.9543</b>	<b>256.2083</b>	<b>0.0136</b>		<b>3.1373</b>	<b>3.1373</b>		<b>3.1192</b>	<b>3.1192</b>	<b>0.0000</b>	<b>24,947.20 27</b>	<b>24,947.20 27</b>	<b>0.8699</b>	<b>0.4497</b>	<b>25,104.86 88</b>

## 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	68.6744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	180.9613					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4784	1.1000e-004	0.1352	0.0000		1.7123	1.7123		1.6943	1.6943	0.0000	24,527.4151	24,527.4151	0.4701	0.4497	24,676.6848
Landscaping	7.6606	2.9542	256.0731	0.0136		1.4249	1.4249		1.4249	1.4249	0.0000	419.7876	419.7876	0.3998	0.0000	428.1840
<b>Total</b>	<b>259.7747</b>	<b>2.9543</b>	<b>256.2083</b>	<b>0.0136</b>		<b>3.1373</b>	<b>3.1373</b>		<b>3.1192</b>	<b>3.1192</b>	<b>0.0000</b>	<b>24,947.2027</b>	<b>24,947.2027</b>	<b>0.8699</b>	<b>0.4497</b>	<b>25,104.8688</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11,285.2660	80.5862	1.9882	13,593.9027
Unmitigated	11,285.2660	80.5947	1.9902	13,594.7083

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1514.7 / 1193.65	6,969.778 4	49.6109	1.2253	8,391.438 0
Government (Civic Center)	367.902 / 281.86	1,675.249 6	12.0492	0.2974	2,020.488 0
Hotel	4.46455 / 0.620077	14.2086	0.1460	3.5500e-003	18.3756
Racquet Club	1.47148 / 1.12734	6.7004	0.0482	1.1900e-003	8.0813
Single Family Housing	288.763 / 227.558	1,328.718 9	9.4578	0.2336	1,599.744 2
Strip Mall	283.431 / 217.145	1,290.610 1	9.2827	0.2292	1,556.581 3
<b>Total</b>		<b>11,285.26 60</b>	<b>80.5947</b>	<b>1.9902</b>	<b>13,594.70 83</b>



## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1514.7 / 1193.65	6,969.778 4	49.6056	1.2240	8,390.942 1
Government (Civic Center)	367.902 / 281.86	1,675.249 6	12.0479	0.2971	2,020.367 6
Hotel	4.46455 / 0.620077	14.2086	0.1460	3.5500e-003	18.3741
Racquet Club	1.47148 / 1.12734	6.7004	0.0482	1.1900e-003	8.0808
Single Family Housing	288.763 / 227.558	1,328.718 9	9.4568	0.2334	1,599.649 7
Strip Mall	283.431 / 217.145	1,290.610 1	9.2817	0.2289	1,556.488 5
<b>Total</b>		<b>11,285.26 60</b>	<b>80.5862</b>	<b>1.9882</b>	<b>13,593.90 27</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	7,790.4765	460.4040	0.0000	17,458.9599
Mitigated	7,790.4765	460.4040	0.0000	17,458.9599

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13367.6	2,713.5020	160.3634	0.0000	6,081.1328
Government (Civic Center)	13194.9	2,678.4516	158.2920	0.0000	6,002.5825
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.27	35.9842	2.1266	0.0000	80.6429
Single Family Housing	6496.04	1,318.6374	77.9292	0.0000	2,955.1514
Strip Mall	5022.15	1,019.4511	60.2478	0.0000	2,284.6555
<b>Total</b>		<b>7,790.4765</b>	<b>460.4040</b>	<b>0.0000</b>	<b>17,458.9599</b>

### 8.2 Waste by Land Use

#### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13367.6	2,713.5020	160.3634	0.0000	6,081.1328
Government (Civic Center)	13194.9	2,678.4516	158.2920	0.0000	6,002.5825
Hotel	120.45	24.4503	1.4450	0.0000	54.7946
Racquet Club	177.27	35.9842	2.1266	0.0000	80.6429
Single Family Housing	6496.04	1,318.6374	77.9292	0.0000	2,955.1514
Strip Mall	5022.15	1,019.4511	60.2478	0.0000	2,284.6555
<b>Total</b>		<b>7,790.4765</b>	<b>460.4040</b>	<b>0.0000</b>	<b>17,458.9599</b>

### 9.0 Operational Offroad

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

## **ATTACHMENT 7a**

Year 2035 GHG Emissions of the CPU  
North Park

**6086 North Park - Proposed Plan 2035**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	870.44	1000sqft	19.98	870,440.00	0
Hotel	205.00	Room	6.83	158,900.00	0
Racquet Club	27.45	1000sqft	0.63	27,450.00	0
Apartments Low Rise	31,453.00	Dwelling Unit	1,965.81	31,453,000.00	89956
Single Family Housing	5,117.00	Dwelling Unit	1,661.36	9,210,600.00	14635
Strip Mall	2,138.21	1000sqft	49.09	2,138,210.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2035
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MW hr)</b>	433.73	<b>CH4 Intensity (lb/MW hr)</b>	0.017	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS 2030 50% goal

CalEEMod accounts for 10.2%

Additional 39.8% reduction applied

(433.73, 0.017, 0.004)

Land Use - North Park proposed land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	5.84	4.57
tblEnergyUse	T24E	1.48	1.16
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	49.75	41.39
tblEnergyUse	T24NG	4.54	3.78
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	17,299.15	28,307.70
tblFireplaces	NumberGas	2,814.35	4,605.30
tblFireplaces	NumberWood	11,008.55	0.00

tblFireplaces	NumberWood	1,790.95	0.00
tblLandUse	LandUseSquareFeet	297,660.00	158,900.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.017
tblProjectCharacteristics	CO2IntensityFactor	720.49	433.73
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2035
tblWater	IndoorWaterUseRate	2,049,289,567.87	1,639,431,654.30
tblWater	IndoorWaterUseRate	172,921,336.96	138,337,069.57
tblWater	IndoorWaterUseRate	5,200,187.85	4,160,150.28
tblWater	IndoorWaterUseRate	1,623,479.30	1,298,783.44
tblWater	IndoorWaterUseRate	333,393,149.10	266,714,519.28
tblWater	IndoorWaterUseRate	158,382,606.16	126,706,084.93
tblWoodstoves	NumberCatalytic	1,572.65	0.00
tblWoodstoves	NumberCatalytic	255.85	0.00
tblWoodstoves	NumberNoncatalytic	1,572.65	0.00
tblWoodstoves	NumberNoncatalytic	255.85	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	248.9448	3.1221	270.7545	0.0143		3.3158	3.3158		3.2967	3.2967	0.0000	26,367.5261	26,367.5261	0.9193	0.4753	26,534.1648
Energy	2.6554	22.7771	10.2806	0.1448		1.8347	1.8347		1.8347	1.8347	0.0000	63,864.4617	63,864.4617	1.9768	0.8284	64,162.7831
Mobile	129.3990	226.2971	1,271.7630	4.9720	339.5164	5.5316	345.0480	90.7893	5.1099	95.8992	0.0000	314,226.1648	314,226.1648	9.4517	0.0000	314,424.6500
Waste						0.0000	0.0000		0.0000	0.0000	5,672.3937	0.0000	5,672.3937	335.2289	0.0000	12,712.1998
Water						0.0000	0.0000		0.0000	0.0000	690.5501	9,306.4679	9,997.0180	71.2909	1.7606	12,039.8959
<b>Total</b>	<b>380.9992</b>	<b>252.1963</b>	<b>1,552.7981</b>	<b>5.1312</b>	<b>339.5164</b>	<b>10.6820</b>	<b>350.1984</b>	<b>90.7893</b>	<b>10.2412</b>	<b>101.0305</b>	<b>6,362.9437</b>	<b>413,764.6205</b>	<b>420,127.5643</b>	<b>418.8675</b>	<b>3.0642</b>	<b>429,873.6936</b>

**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	248.9448	3.1221	270.7545	0.0143		3.3158	3.3158		3.2967	3.2967	0.0000	26,367.5261	26,367.5261	0.9193	0.4753	26,534.1648
Energy	2.6554	22.7771	10.2806	0.1448		1.8347	1.8347		1.8347	1.8347	0.0000	63,864.4617	63,864.4617	1.9768	0.8284	64,162.7831
Mobile	129.3990	226.2971	1,271.7630	4.9720	339.5164	5.5316	345.0480	90.7893	5.1099	95.8992	0.0000	314,226.1648	314,226.1648	9.4517	0.0000	314,424.6500
Waste						0.0000	0.0000		0.0000	0.0000	5,672.3937	0.0000	5,672.3937	335.2289	0.0000	12,712.1998
Water						0.0000	0.0000		0.0000	0.0000	690.5501	9,306.4679	9,997.0180	71.2833	1.7588	12,039.1834
<b>Total</b>	<b>380.9992</b>	<b>252.1963</b>	<b>1,552.7981</b>	<b>5.1312</b>	<b>339.5164</b>	<b>10.6820</b>	<b>350.1984</b>	<b>90.7893</b>	<b>10.2412</b>	<b>101.0305</b>	<b>6,362.9437</b>	<b>413,764.6205</b>	<b>420,127.5643</b>	<b>418.8599</b>	<b>3.0624</b>	<b>429,872.9810</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	25,529.00	4,433.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

### 3.2 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0231	0.1936	0.2866	5.3000e-004	0.0144	2.7700e-003	0.0172	4.1300e-003	2.5500e-003	6.6700e-003	0.0000	47.0120	47.0120	3.5000e-004	0.0000	47.0194
Worker	0.0397	0.0526	0.4969	1.2600e-003	0.1024	7.6000e-004	0.1031	0.0272	7.0000e-004	0.0279	0.0000	91.7048	91.7048	4.6600e-003	0.0000	91.8027
<b>Total</b>	<b>0.0628</b>	<b>0.2461</b>	<b>0.7836</b>	<b>1.7900e-003</b>	<b>0.1168</b>	<b>3.5300e-003</b>	<b>0.1203</b>	<b>0.0313</b>	<b>3.2500e-003</b>	<b>0.0346</b>	<b>0.0000</b>	<b>138.7168</b>	<b>138.7168</b>	<b>5.0100e-003</b>	<b>0.0000</b>	<b>138.8221</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0231	0.1936	0.2866	5.3000e-004	0.0144	2.7700e-003	0.0172	4.1300e-003	2.5500e-003	6.6700e-003	0.0000	47.0120	47.0120	3.5000e-004	0.0000	47.0194
Worker	0.0397	0.0526	0.4969	1.2600e-003	0.1024	7.6000e-004	0.1031	0.0272	7.0000e-004	0.0279	0.0000	91.7048	91.7048	4.6600e-003	0.0000	91.8027
<b>Total</b>	<b>0.0628</b>	<b>0.2461</b>	<b>0.7836</b>	<b>1.7900e-003</b>	<b>0.1168</b>	<b>3.5300e-003</b>	<b>0.1203</b>	<b>0.0313</b>	<b>3.2500e-003</b>	<b>0.0346</b>	<b>0.0000</b>	<b>138.7168</b>	<b>138.7168</b>	<b>5.0100e-003</b>	<b>0.0000</b>	<b>138.8221</b>

### 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	129.3990	226.2971	1,271.7630	4.9720	339.5164	5.5316	345.0480	90.7893	5.1099	95.8992	0.0000	314,226.1648	314,226.1648	9.4517	0.0000	314,424.6500
Unmitigated	129.3990	226.2971	1,271.7630	4.9720	339.5164	5.5316	345.0480	90.7893	5.1099	95.8992	0.0000	314,226.1648	314,226.1648	9.4517	0.0000	314,424.6500

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	207,275.27	225,203.48	190919.71	592,475,260	592,475,260
Government (Civic Center)	24,302.68	0.00	0.00	33,184,222	33,184,222
Hotel	1,674.85	1,678.95	1219.75	3,059,689	3,059,689
Racquet Club	903.93	572.88	733.74	1,415,752	1,415,752
Single Family Housing	48,969.69	51,579.36	44876.09	139,218,025	139,218,025
Strip Mall	94,765.47	89,890.35	43683.63	133,631,156	133,631,156
<b>Total</b>	<b>377,891.89</b>	<b>368,925.02</b>	<b>281,432.92</b>	<b>902,984,104</b>	<b>902,984,104</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511887	0.074493	0.190892	0.129437	0.036275	0.005211	0.012579	0.024993	0.001957	0.001971	0.006467	0.000450	0.003389

### 5.0 Energy Detail

#### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	37,584.8000	37,584.8000	1.4731	0.3466	37,723.1878
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	37,584.8000	37,584.8000	1.4731	0.3466	37,723.1878
NaturalGas Mitigated	2.6554	22.7771	10.2806	0.1448		1.8347	1.8347		1.8347	1.8347	0.0000	26,279.6617	26,279.6617	0.5037	0.4818	26,439.5953
NaturalGas Unmitigated	2.6554	22.7771	10.2806	0.1448		1.8347	1.8347		1.8347	1.8347	0.0000	26,279.6617	26,279.6617	0.5037	0.4818	26,439.5953

### 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					
Hotel	8.34066e+006	0.0450	0.4089	0.3434	2.4500e-003		0.0311	0.0311		0.0311	0.0311	0.0000	445.0894	445.0894	8.5300e-003	8.1600e-003	447.7982
Racquet Club	302774	1.6300e-003	0.0148	0.0125	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1572	16.1572	3.1000e-004	3.0000e-004	16.2555
Single Family Housing	1.34241e+008	0.7239	6.1856	2.6322	0.0395		0.5001	0.5001		0.5001	0.5001	0.0000	7,163.5927	7,163.5927	0.1373	0.1313	7,207.1891
Strip Mall	4.46886e+006	0.0241	0.2191	0.1840	1.3100e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.4753	238.4753	4.5700e-003	4.3700e-003	239.9267
Apartments Low Rise	3.29267e+008	1.7755	15.1721	6.4562	0.0968		1.2267	1.2267		1.2267	1.2267	0.0000	17,570.9572	17,570.9572	0.3368	0.3221	17,677.8911
Government (Civic Center)	1.5842e+007	0.0854	0.7766	0.6523	4.6600e-003		0.0590	0.0590		0.0590	0.0590	0.0000	845.3899	845.3899	0.0162	0.0155	850.5348
<b>Total</b>		<b>2.6554</b>	<b>22.7771</b>	<b>10.2806</b>	<b>0.1448</b>		<b>1.8347</b>	<b>1.8347</b>		<b>1.8347</b>	<b>1.8347</b>	<b>0.0000</b>	<b>26,279.6617</b>	<b>26,279.6617</b>	<b>0.5037</b>	<b>0.4818</b>	<b>26,439.5953</b>



### 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					
Hotel	8.34066e+006	0.0450	0.4089	0.3434	2.4500e-003		0.0311	0.0311		0.0311	0.0311	0.0000	445.0894	445.0894	8.5300e-003	8.1600e-003	447.7982
Racquet Club	302774	1.6300e-003	0.0148	0.0125	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1572	16.1572	3.1000e-004	3.0000e-004	16.2555
Single Family Housing	1.34241e+008	0.7239	6.1856	2.6322	0.0395		0.5001	0.5001		0.5001	0.5001	0.0000	7,163.5927	7,163.5927	0.1373	0.1313	7,207.1891
Strip Mall	4.46886e+006	0.0241	0.2191	0.1840	1.3100e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.4753	238.4753	4.5700e-003	4.3700e-003	239.9267
Apartments Low Rise	3.29267e+008	1.7755	15.1721	6.4562	0.0968		1.2267	1.2267		1.2267	1.2267	0.0000	17,570.9572	17,570.9572	0.3368	0.3221	17,677.8911
Government (Civic Center)	1.5842e+007	0.0854	0.7766	0.6523	4.6600e-003		0.0590	0.0590		0.0590	0.0590	0.0000	845.3899	845.3899	0.0162	0.0155	850.5348
<b>Total</b>		<b>2.6554</b>	<b>22.7771</b>	<b>10.2806</b>	<b>0.1448</b>		<b>1.8347</b>	<b>1.8347</b>		<b>1.8347</b>	<b>1.8347</b>	<b>0.0000</b>	<b>26,279.6617</b>	<b>26,279.6617</b>	<b>0.5037</b>	<b>0.4818</b>	<b>26,439.5953</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.12853e+008	22,202.2655	0.8702	0.2048	22,284.0145
Government (Civic Center)	1.19686e+007	2,354.6521	0.0923	0.0217	2,363.3219
Hotel	2.11655e+006	416.4025	0.0163	3.8400e-003	417.9357
Racquet Club	238266	46.8757	1.8400e-003	4.3000e-004	47.0482
Single Family Housing	3.56621e+007	7,016.0435	0.2750	0.0647	7,041.8767
Strip Mall	2.8203e+007	5,548.5609	0.2175	0.0512	5,568.9908
<b>Total</b>		<b>37,584.8000</b>	<b>1.4731</b>	<b>0.3466</b>	<b>37,723.1878</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.12853e+008	22,202.2655	0.8702	0.2048	22,284.0145
Government (Civic Center)	1.19686e+007	2,354.6521	0.0923	0.0217	2,363.3219
Hotel	2.11655e+006	416.4025	0.0163	3.8400e-003	417.9357
Racquet Club	238266	46.8757	1.8400e-003	4.3000e-004	47.0482
Single Family Housing	3.56621e+007	7,016.0435	0.2750	0.0647	7,041.8767
Strip Mall	2.8203e+007	5,548.5609	0.2175	0.0512	5,568.9908
<b>Total</b>		<b>37,584.8000</b>	<b>1.4731</b>	<b>0.3466</b>	<b>37,723.1878</b>

### 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	248.9448	3.1221	270.7545	0.0143		3.3158	3.3158		3.2967	3.2967	0.0000	26,367.5261	26,367.5261	0.9193	0.4753	26,534.1648
Unmitigated	248.9448	3.1221	270.7545	0.0143		3.3158	3.3158		3.2967	3.2967	0.0000	26,367.5261	26,367.5261	0.9193	0.4753	26,534.1648

## 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	66.9426					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	171.2898					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.6195	1.2000e-004	0.1429	0.0000		1.8098	1.8098		1.7908	1.7908	0.0000	25,923.9182	25,923.9182	0.4969	0.4753	26,081.6868
Landscaping	8.0930	3.1220	270.6116	0.0143		1.5059	1.5059		1.5059	1.5059	0.0000	443.6079	443.6079	0.4224	0.0000	452.4780
<b>Total</b>	<b>248.9448</b>	<b>3.1221</b>	<b>270.7545</b>	<b>0.0143</b>		<b>3.3158</b>	<b>3.3158</b>		<b>3.2967</b>	<b>3.2967</b>	<b>0.0000</b>	<b>26,367.5261</b>	<b>26,367.5261</b>	<b>0.9193</b>	<b>0.4753</b>	<b>26,534.1648</b>

### 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	66.9426					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	171.2898					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.6195	1.2000e-004	0.1429	0.0000		1.8098	1.8098		1.7908	1.7908	0.0000	25,923.9182	25,923.9182	0.4969	0.4753	26,081.6868
Landscaping	8.0930	3.1220	270.6116	0.0143		1.5059	1.5059		1.5059	1.5059	0.0000	443.6079	443.6079	0.4224	0.0000	452.4780
<b>Total</b>	<b>248.9448</b>	<b>3.1221</b>	<b>270.7545</b>	<b>0.0143</b>		<b>3.3158</b>	<b>3.3158</b>		<b>3.2967</b>	<b>3.2967</b>	<b>0.0000</b>	<b>26,367.5261</b>	<b>26,367.5261</b>	<b>0.9193</b>	<b>0.4753</b>	<b>26,534.1648</b>

### 7.0 Water Detail

#### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9,997.0180	71.2833	1.7588	12,039.1834
Unmitigated	9,997.0180	71.2909	1.7606	12,039.8959

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1639.43 / 1291.94	7,543.7178	53.6962	1.3262	9,082.4466
Government (Civic Center)	138.337 / 105.984	629.9211	4.5307	0.1118	759.7363
Hotel	4.16015 / 0.577799	13.2398	0.1360	3.3100e-003	17.1227
Racquet Club	1.29878 / 0.995036	5.9140	0.0425	1.0500e-003	7.1328
Single Family Housing	266.715 / 210.183	1,227.2662	8.7357	0.2158	1,477.5977
Strip Mall	126.706 / 97.0732	576.9591	4.1498	0.1024	695.8599
<b>Total</b>		<b>9,997.0180</b>	<b>71.2909</b>	<b>1.7606</b>	<b>12,039.8959</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1639.43 / 1291.94	7,543.7178	53.6905	1.3248	9,081.9099
Government (Civic Center)	138.337 / 105.984	629.9211	4.5302	0.1117	759.6910
Hotel	4.16015 / 0.577799	13.2398	0.1360	3.3100e-003	17.1214
Racquet Club	1.29878 / 0.995036	5.9140	0.0425	1.0500e-003	7.1324
Single Family Housing	266.715 / 210.183	1,227.2662	8.7348	0.2155	1,477.5103
Strip Mall	126.706 / 97.0732	576.9591	4.1493	0.1023	695.8184
<b>Total</b>		<b>9,997.0180</b>	<b>71.2833</b>	<b>1.7588</b>	<b>12,039.1834</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	5,672.393 7	335.2289	0.0000	12,712.19 98
Mitigated	5,672.393 7	335.2289	0.0000	12,712.19 98

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	14468.4	2,936.950 4	173.5688	0.0000	6,581.895 1
Government (Civic Center)	4961.51	1,007.141 7	59.5204	0.0000	2,257.069 4
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.47	31.7620	1.8771	0.0000	71.1807
Single Family Housing	6000.35	1,218.016 8	71.9827	0.0000	2,729.654 2
Strip Mall	2245.12	455.7391	26.9334	0.0000	1,021.340 6
<b>Total</b>		<b>5,672.393 7</b>	<b>335.2289</b>	<b>0.0000</b>	<b>12,712.19 98</b>



### 8.2 Waste by Land Use

#### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	14468.4	2,936.9504	173.5688	0.0000	6,581.8951
Government (Civic Center)	4961.51	1,007.1417	59.5204	0.0000	2,257.0694
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.47	31.7620	1.8771	0.0000	71.1807
Single Family Housing	6000.35	1,218.0168	71.9827	0.0000	2,729.6542
Strip Mall	2245.12	455.7391	26.9334	0.0000	1,021.3406
<b>Total</b>		<b>5,672.3937</b>	<b>335.2289</b>	<b>0.0000</b>	<b>12,712.1998</b>

### 9.0 Operational Offroad

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

## **ATTACHMENT 7b**

Year 2035 GHG Emissions of the Adopted Plan  
North Park

**6086 Golden Hill - Proposed Plan 2035**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	213.04	1000sqft	4.89	213,040.00	0
Apartments Low Rise	7,120.00	Dwelling Unit	445.00	7,120,000.00	20363
Single Family Housing	2,095.00	Dwelling Unit	680.19	3,771,000.00	5992
Strip Mall	393.96	1000sqft	9.04	393,960.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2035
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	433.73	<b>CH4 Intensity (lb/MWhr)</b>	0.017	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS 2030 50% goal

CalEEMod accounts for 10.2%

Additional 39.8% reduction applied

(433.73, 0.017, 0.004)

Land Use - Golden Hill proposed land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	3,916.00	6,408.00
tblFireplaces	NumberGas	1,152.25	1,885.50
tblFireplaces	NumberWood	2,492.00	0.00
tblFireplaces	NumberWood	733.25	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.017
tblProjectCharacteristics	CO2IntensityFactor	720.49	433.73
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

tblProjectCharacteristics	OperationalYear	2014	2035
tblWater	IndoorWaterUseRate	463,896,662.42	371,117,329.94
tblWater	IndoorWaterUseRate	42,322,459.48	33,857,967.58
tblWater	IndoorWaterUseRate	136,497,683.68	109,198,146.94
tblWater	IndoorWaterUseRate	29,181,610.56	23,345,288.45
tblWoodstoves	NumberCatalytic	356.00	0.00
tblWoodstoves	NumberCatalytic	104.75	0.00
tblWoodstoves	NumberNoncatalytic	356.00	0.00
tblWoodstoves	NumberNoncatalytic	104.75	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	65.2746	0.7867	68.2235	3.6100e-003		0.8355	0.8355		0.8307	0.8307	0.0000	6,644.1514	6,644.1514	0.2316	0.1198	6,686.1412
Energy	0.7236	6.1974	2.7327	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	16,658.3223	16,658.3223	0.5095	0.2189	16,736.8730
Mobile	31.4198	55.7145	311.9479	1.2314	84.1700	1.3656	85.5356	22.5077	1.2615	23.7692	0.0000	77,822.0183	77,822.0183	2.3367	0.0000	77,871.0891
Waste						0.0000	0.0000		0.0000	0.0000	1,493.9952	0.0000	1,493.9952	88.2926	0.0000	3,348.1396
Water						0.0000	0.0000		0.0000	0.0000	170.5299	2,300.0809	2,470.6108	17.6052	0.4348	2,975.1021
<b>Total</b>	<b>97.4180</b>	<b>62.6986</b>	<b>382.9041</b>	<b>1.2745</b>	<b>84.1700</b>	<b>2.7011</b>	<b>86.8710</b>	<b>22.5077</b>	<b>2.5922</b>	<b>25.0999</b>	<b>1,664.5251</b>	<b>103,424.5729</b>	<b>105,089.0981</b>	<b>108.9756</b>	<b>0.7734</b>	<b>107,617.3450</b>

## 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	65.2746	0.7867	68.2235	3.6100e-003		0.8355	0.8355		0.8307	0.8307	0.0000	6,644.1514	6,644.1514	0.2316	0.1198	6,686.1412
Energy	0.7236	6.1974	2.7327	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	16,658.3223	16,658.3223	0.5095	0.2189	16,736.8730
Mobile	31.4198	55.7145	311.9479	1.2314	84.1700	1.3656	85.5356	22.5077	1.2615	23.7692	0.0000	77,822.0183	77,822.0183	2.3367	0.0000	77,871.0891
Waste						0.0000	0.0000		0.0000	0.0000	1,493.9952	0.0000	1,493.9952	88.2926	0.0000	3,348.1396
Water						0.0000	0.0000		0.0000	0.0000	170.5299	2,300.0809	2,470.6108	17.6033	0.4343	2,974.9262
<b>Total</b>	<b>97.4180</b>	<b>62.6986</b>	<b>382.9041</b>	<b>1.2745</b>	<b>84.1700</b>	<b>2.7011</b>	<b>86.8710</b>	<b>22.5077</b>	<b>2.5922</b>	<b>25.0999</b>	<b>1,664.5251</b>	<b>103,424.5729</b>	<b>105,089.0981</b>	<b>108.9738</b>	<b>0.7730</b>	<b>107,617.1690</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0



**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	6,075.00	1,085.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Building Construction - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6500e-003	0.0474	0.0702	1.3000e-004	3.5300e-003	6.8000e-004	4.2100e-003	1.0100e-003	6.2000e-004	1.6300e-003	0.0000	11.5064	11.5064	9.0000e-005	0.0000	11.5082
Worker	9.4400e-003	0.0125	0.1183	3.0000e-004	0.0244	1.8000e-004	0.0245	6.4700e-003	1.7000e-004	6.6400e-003	0.0000	21.8225	21.8225	1.1100e-003	0.0000	21.8458
<b>Total</b>	<b>0.0151</b>	<b>0.0599</b>	<b>0.1884</b>	<b>4.3000e-004</b>	<b>0.0279</b>	<b>8.6000e-004</b>	<b>0.0288</b>	<b>7.4800e-003</b>	<b>7.9000e-004</b>	<b>8.2700e-003</b>	<b>0.0000</b>	<b>33.3289</b>	<b>33.3289</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>33.3540</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6500e-003	0.0474	0.0702	1.3000e-004	3.5300e-003	6.8000e-004	4.2100e-003	1.0100e-003	6.2000e-004	1.6300e-003	0.0000	11.5064	11.5064	9.0000e-005	0.0000	11.5082
Worker	9.4400e-003	0.0125	0.1183	3.0000e-004	0.0244	1.8000e-004	0.0245	6.4700e-003	1.7000e-004	6.6400e-003	0.0000	21.8225	21.8225	1.1100e-003	0.0000	21.8458
<b>Total</b>	<b>0.0151</b>	<b>0.0599</b>	<b>0.1884</b>	<b>4.3000e-004</b>	<b>0.0279</b>	<b>8.6000e-004</b>	<b>0.0288</b>	<b>7.4800e-003</b>	<b>7.9000e-004</b>	<b>8.2700e-003</b>	<b>0.0000</b>	<b>33.3289</b>	<b>33.3289</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>33.3540</b>

### 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	31.4198	55.7145	311.9479	1.2314	84.1700	1.3656	85.5356	22.5077	1.2615	23.7692	0.0000	77,822.0183	77,822.0183	2.3367	0.0000	77,871.0891
Unmitigated	31.4198	55.7145	311.9479	1.2314	84.1700	1.3656	85.5356	22.5077	1.2615	23.7692	0.0000	77,822.0183	77,822.0183	2.3367	0.0000	77,871.0891

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	46,920.80	50,979.20	43218.40	134,118,330	134,118,330
Government (Civic Center)	5,948.08	0.00	0.00	8,121,831	8,121,831
Single Family Housing	20,049.15	21,117.60	18373.15	56,998,585	56,998,585
Strip Mall	17,460.31	16,562.08	8048.60	24,621,216	24,621,216
<b>Total</b>	<b>90,378.33</b>	<b>88,658.88</b>	<b>69,640.15</b>	<b>223,859,963</b>	<b>223,859,963</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511887	0.074493	0.190892	0.129437	0.036275	0.005211	0.012579	0.024993	0.001957	0.001971	0.006467	0.000450	0.003389

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	9,497.0309	9,497.0309	0.3722	0.0876	9,531.9991
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	9,497.0309	9,497.0309	0.3722	0.0876	9,531.9991
NaturalGas Mitigated	0.7236	6.1974	2.7327	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	7,161.2915	7,161.2915	0.1373	0.1313	7,204.8739
NaturalGas Unmitigated	0.7236	6.1974	2.7327	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	7,161.2915	7,161.2915	0.1373	0.1313	7,204.8739

### 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					
Government (Civic Center)	3.87733e+006	0.0209	0.1901	0.1597	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.9090	206.9090	3.9700e-003	3.7900e-003	208.1682
Single Family Housing	5.49608e+007	0.2964	2.5325	1.0777	0.0162		0.2048	0.2048		0.2048	0.2048	0.0000	2,932.9151	2,932.9151	0.0562	0.0538	2,950.7644
Strip Mall	823376	4.4400e-003	0.0404	0.0339	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	43.9385	43.9385	8.4000e-004	8.1000e-004	44.2059
Apartments Low Rise	7.45361e+007	0.4019	3.4345	1.4615	0.0219		0.2777	0.2777		0.2777	0.2777	0.0000	3,977.5289	3,977.5289	0.0762	0.0729	4,001.7354
<b>Total</b>		<b>0.7236</b>	<b>6.1975</b>	<b>2.7327</b>	<b>0.0395</b>		<b>0.5000</b>	<b>0.5000</b>		<b>0.5000</b>	<b>0.5000</b>	<b>0.0000</b>	<b>7,161.2915</b>	<b>7,161.2915</b>	<b>0.1373</b>	<b>0.1313</b>	<b>7,204.8739</b>

### 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					
Single Family Housing	5.49608e+007	0.2964	2.5325	1.0777	0.0162		0.2048	0.2048		0.2048	0.2048	0.0000	2,932.9151	2,932.9151	0.0562	0.0538	2,950.7644
Strip Mall	823376	4.4400e-003	0.0404	0.0339	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	43.9385	43.9385	8.4000e-004	8.1000e-004	44.2059
Apartments Low Rise	7.45361e+007	0.4019	3.4345	1.4615	0.0219		0.2777	0.2777		0.2777	0.2777	0.0000	3,977.5289	3,977.5289	0.0762	0.0729	4,001.7354
Government (Civic Center)	3.87733e+006	0.0209	0.1901	0.1597	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.9090	206.9090	3.9700e-003	3.7900e-003	208.1682
<b>Total</b>		<b>0.7236</b>	<b>6.1975</b>	<b>2.7327</b>	<b>0.0395</b>		<b>0.5000</b>	<b>0.5000</b>		<b>0.5000</b>	<b>0.5000</b>	<b>0.0000</b>	<b>7,161.2915</b>	<b>7,161.2915</b>	<b>0.1373</b>	<b>0.1313</b>	<b>7,204.8739</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.55464e+007	5,025.9158	0.1970	0.0464	5,044.4213
Government (Civic Center)	2.9293e+006	576.3006	0.0226	5.3100e-003	578.4225
Single Family Housing	1.46008e+007	2,872.5056	0.1126	0.0265	2,883.0822
Strip Mall	5.19633e+006	1,022.3089	0.0401	9.4300e-003	1,026.0730
<b>Total</b>		<b>9,497.0309</b>	<b>0.3722</b>	<b>0.0876</b>	<b>9,531.9990</b>



### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.55464e+007	5,025.9158	0.1970	0.0464	5,044.4213
Government (Civic Center)	2.9293e+006	576.3006	0.0226	5.3100e-003	578.4225
Single Family Housing	1.46008e+007	2,872.5056	0.1126	0.0265	2,883.0822
Strip Mall	5.19633e+006	1,022.3089	0.0401	9.4300e-003	1,026.0730
<b>Total</b>		<b>9,497.0309</b>	<b>0.3722</b>	<b>0.0876</b>	<b>9,531.9990</b>

### 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	65.2746	0.7867	68.2235	3.6100e-003		0.8355	0.8355		0.8307	0.8307	0.0000	6,644.1514	6,644.1514	0.2316	0.1198	6,686.1412
Unmitigated	65.2746	0.7867	68.2235	3.6100e-003		0.8355	0.8355		0.8307	0.8307	0.0000	6,644.1514	6,644.1514	0.2316	0.1198	6,686.1412

## 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	17.6700					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	44.9054					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6601	3.0000e-005	0.0360	0.0000		0.4560	0.4560		0.4512	0.4512	0.0000	6,532.3737	6,532.3737	0.1252	0.1198	6,572.1286
Landscaping	2.0391	0.7867	68.1875	3.6100e-003		0.3795	0.3795		0.3795	0.3795	0.0000	111.7777	111.7777	0.1064	0.0000	114.0126
<b>Total</b>	<b>65.2746</b>	<b>0.7867</b>	<b>68.2235</b>	<b>3.6100e-003</b>		<b>0.8355</b>	<b>0.8355</b>		<b>0.8307</b>	<b>0.8307</b>	<b>0.0000</b>	<b>6,644.1514</b>	<b>6,644.1514</b>	<b>0.2316</b>	<b>0.1198</b>	<b>6,686.1412</b>

### 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	17.6700					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	44.9054					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6601	3.0000e-005	0.0360	0.0000		0.4560	0.4560		0.4512	0.4512	0.0000	6,532.3737	6,532.3737	0.1252	0.1198	6,572.1286
Landscaping	2.0391	0.7867	68.1875	3.6100e-003		0.3795	0.3795		0.3795	0.3795	0.0000	111.7777	111.7777	0.1064	0.0000	114.0126
<b>Total</b>	<b>65.2746</b>	<b>0.7867</b>	<b>68.2235</b>	<b>3.6100e-003</b>		<b>0.8355</b>	<b>0.8355</b>		<b>0.8307</b>	<b>0.8307</b>	<b>0.0000</b>	<b>6,644.1514</b>	<b>6,644.1514</b>	<b>0.2316</b>	<b>0.1198</b>	<b>6,686.1412</b>

### 7.0 Water Detail

#### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2,470.6108	17.6033	0.4343	2,974.9262
Unmitigated	2,470.6108	17.6052	0.4348	2,975.1021

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	371.117 / 292.457	1,707.6677	12.1552	0.3002	2,055.9889
Government (Civic Center)	33.858 / 25.9396	154.1730	1.1089	0.0274	185.9453
Single Family Housing	109.198 / 86.0529	502.4668	3.5766	0.0883	604.9574
Strip Mall	23.3453 / 17.8855	106.3033	0.7646	0.0189	128.2105
<b>Total</b>		<b>2,470.6108</b>	<b>17.6052</b>	<b>0.4348</b>	<b>2,975.1021</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	371.117 / 292.457	1,707.667 7	12.1539	0.2999	2,055.867 4
Government (Civic Center)	33.858 / 25.9396	154.1730	1.1088	0.0274	185.9342
Single Family Housing	109.198 / 86.0529	502.4668	3.5762	0.0882	604.9217
Strip Mall	23.3453 / 17.8855	106.3033	0.7645	0.0189	128.2029
<b>Total</b>		<b>2,470.610 8</b>	<b>17.6033</b>	<b>0.4343</b>	<b>2,974.926 2</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	1,493.995 2	88.2926	0.0000	3,348.139 6
Mitigated	1,493.995 2	88.2926	0.0000	3,348.139 6

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3275.2	664.8360	39.2907	0.0000	1,489.940 3
Government (Civic Center)	1214.33	246.4980	14.5676	0.0000	552.4179
Single Family Housing	2456.72	498.6920	29.4719	0.0000	1,117.6008
Strip Mall	413.66	83.9692	4.9624	0.0000	188.1805
<b>Total</b>		<b>1,493.995 2</b>	<b>88.2926</b>	<b>0.0000</b>	<b>3,348.139 6</b>

## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3275.2	664.8360	39.2907	0.0000	1,489.9403
Government (Civic Center)	1214.33	246.4980	14.5676	0.0000	552.4179
Single Family Housing	2456.72	498.6920	29.4719	0.0000	1,117.6008
Strip Mall	413.66	83.9692	4.9624	0.0000	188.1805
<b>Total</b>		<b>1,493.9952</b>	<b>88.2926</b>	<b>0.0000</b>	<b>3,348.1396</b>

## 9.0 Operational Offroad

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

## **ATTACHMENT 8a**

Year 2035 GHG Emissions of the CPU  
Golden Hill



**6086 North Park - Adopted Plan 2035**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	870.44	1000sqft	19.98	870,440.00	0
Hotel	205.00	Room	6.83	158,870.00	0
Racquet Club	27.46	1000sqft	0.63	27,460.00	0
Apartments Low Rise	29,179.00	Dwelling Unit	1,823.69	29,179,000.00	83452
Single Family Housing	5,116.00	Dwelling Unit	1,661.04	9,208,800.00	14632
Strip Mall	2,175.46	1000sqft	49.94	2,175,460.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2035
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MW hr)</b>	433.73	<b>CH4 Intensity (lb/MW hr)</b>	0.017	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS 2030 goal 50%

CalEEMod accounts for 10.2%

Additional 39.8% reduction applied

(433.73, 0.017, 0.004)

Land Use - North Park adopted land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	5.84	4.57
tblEnergyUse	T24E	1.48	1.16
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	49.75	41.39
tblEnergyUse	T24NG	4.54	3.78
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	16,048.45	26,261.10
tblFireplaces	NumberGas	2,813.80	4,604.40
tblFireplaces	NumberWood	10,212.65	0.00

tblFireplaces	NumberWood	1,790.60	0.00
tblLandUse	LandUseSquareFeet	297,660.00	158,870.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.017
tblProjectCharacteristics	CO2IntensityFactor	720.49	433.73
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2014	2035
tblWater	IndoorWaterUseRate	1,901,129,313.61	1,520,903,450.89
tblWater	IndoorWaterUseRate	172,921,336.96	138,337,069.57
tblWater	IndoorWaterUseRate	5,200,187.85	4,160,150.28
tblWater	IndoorWaterUseRate	1,624,070.74	1,299,256.59
tblWater	IndoorWaterUseRate	333,327,995.08	266,662,396.06
tblWater	IndoorWaterUseRate	161,141,807.59	128,913,446.07
tblWoodstoves	NumberCatalytic	1,458.95	0.00
tblWoodstoves	NumberCatalytic	255.80	0.00
tblWoodstoves	NumberNoncatalytic	1,458.95	0.00
tblWoodstoves	NumberNoncatalytic	255.80	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	236.0146	2.9279	253.9132	0.0135		3.1095	3.1095		3.0916	3.0916	0.0000	24,727.2208	24,727.2208	0.8621	0.4457	24,883.4932
Energy	2.5273	21.6827	9.8165	0.1379		1.7462	1.7462		1.7462	1.7462	0.0000	61,086.8292	61,086.8292	1.8934	0.7913	61,371.8761
Mobile	124.2519	216.5272	1,218.0211	4.7501	324.2760	5.2890	329.5650	86.7139	4.8858	91.5997	0.0000	300,199.4142	300,199.4142	9.0339	0.0000	300,389.1260
Waste						0.0000	0.0000		0.0000	0.0000	5,467.7565	0.0000	5,467.7565	323.1352	0.0000	12,253.5946
Water						0.0000	0.0000		0.0000	0.0000	653.6305	8,807.8028	9,461.4332	67.4793	1.6664	11,395.0865
<b>Total</b>	<b>362.7939</b>	<b>241.1378</b>	<b>1,481.7508</b>	<b>4.9014</b>	<b>324.2760</b>	<b>10.1446</b>	<b>334.4206</b>	<b>86.7139</b>	<b>9.7236</b>	<b>96.4375</b>	<b>6,121.3869</b>	<b>394,821.2670</b>	<b>400,942.6539</b>	<b>402.4038</b>	<b>2.9034</b>	<b>410,293.1764</b>

**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	236.0146	2.9279	253.9132	0.0135		3.1095	3.1095		3.0916	3.0916	0.0000	24,727.2208	24,727.2208	0.8621	0.4457	24,883.4932
Energy	2.5273	21.6827	9.8165	0.1379		1.7462	1.7462		1.7462	1.7462	0.0000	61,086.8292	61,086.8292	1.8934	0.7913	61,371.8761
Mobile	124.2519	216.5272	1,218.0211	4.7501	324.2760	5.2890	329.5650	86.7139	4.8858	91.5997	0.0000	300,199.4142	300,199.4142	9.0339	0.0000	300,389.1260
Waste						0.0000	0.0000		0.0000	0.0000	5,467.7565	0.0000	5,467.7565	323.1352	0.0000	12,253.5946
Water						0.0000	0.0000		0.0000	0.0000	653.6305	8,807.8028	9,461.4332	67.4722	1.6647	11,394.4120
<b>Total</b>	<b>362.7939</b>	<b>241.1378</b>	<b>1,481.7508</b>	<b>4.9014</b>	<b>324.2760</b>	<b>10.1446</b>	<b>334.4206</b>	<b>86.7139</b>	<b>9.7236</b>	<b>96.4375</b>	<b>6,121.3869</b>	<b>394,821.2670</b>	<b>400,942.6539</b>	<b>402.3966</b>	<b>2.9017</b>	<b>410,292.5019</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	23,904.00	4,196.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

### 3.2 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0218	0.1832	0.2713	5.0000e-004	0.0137	2.6200e-003	0.0163	3.9100e-003	2.4100e-003	6.3200e-003	0.0000	44.4986	44.4986	3.4000e-004	0.0000	44.5056
Worker	0.0372	0.0492	0.4653	1.1800e-003	0.0959	7.1000e-004	0.0966	0.0255	6.6000e-004	0.0261	0.0000	85.8675	85.8675	4.3700e-003	0.0000	85.9592
<b>Total</b>	<b>0.0590</b>	<b>0.2324</b>	<b>0.7366</b>	<b>1.6800e-003</b>	<b>0.1095</b>	<b>3.3300e-003</b>	<b>0.1128</b>	<b>0.0294</b>	<b>3.0700e-003</b>	<b>0.0325</b>	<b>0.0000</b>	<b>130.3661</b>	<b>130.3661</b>	<b>4.7100e-003</b>	<b>0.0000</b>	<b>130.4648</b>



### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0218	0.1832	0.2713	5.0000e-004	0.0137	2.6200e-003	0.0163	3.9100e-003	2.4100e-003	6.3200e-003	0.0000	44.4986	44.4986	3.4000e-004	0.0000	44.5056
Worker	0.0372	0.0492	0.4653	1.1800e-003	0.0959	7.1000e-004	0.0966	0.0255	6.6000e-004	0.0261	0.0000	85.8675	85.8675	4.3700e-003	0.0000	85.9592
<b>Total</b>	<b>0.0590</b>	<b>0.2324</b>	<b>0.7366</b>	<b>1.6800e-003</b>	<b>0.1095</b>	<b>3.3300e-003</b>	<b>0.1128</b>	<b>0.0294</b>	<b>3.0700e-003</b>	<b>0.0325</b>	<b>0.0000</b>	<b>130.3661</b>	<b>130.3661</b>	<b>4.7100e-003</b>	<b>0.0000</b>	<b>130.4648</b>

### 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	124.2519	216.5272	1,218.0211	4.7501	324.2760	5.2890	329.5650	86.7139	4.8858	91.5997	0.0000	300,199.4142	300,199.4142	9.0339	0.0000	300,389.1260
Unmitigated	124.2519	216.5272	1,218.0211	4.7501	324.2760	5.2890	329.5650	86.7139	4.8858	91.5997	0.0000	300,199.4142	300,199.4142	9.0339	0.0000	300,389.1260

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	192,289.61	208,921.64	177,116.53	549,640,276	549,640,276
Government (Civic Center)	24,302.68	0.00	0.00	33,184,222	33,184,222
Hotel	1,674.85	1,678.95	1,219.75	3,059,689	3,059,689
Racquet Club	904.26	573.09	734.01	1,416,267	1,416,267
Single Family Housing	48,960.12	51,569.28	44,867.32	139,190,818	139,190,818
Strip Mall	96,416.39	91,456.34	44,444.65	135,959,160	135,959,160
<b>Total</b>	<b>364,547.91</b>	<b>354,199.30</b>	<b>268,382.25</b>	<b>862,450,432</b>	<b>862,450,432</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511887	0.074493	0.190892	0.129437	0.036275	0.005211	0.012579	0.024993	0.001957	0.001971	0.006467	0.000450	0.003389

### 5.0 Energy Detail

#### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	36,074.8423	36,074.8423	1.4140	0.3327	36,207.6704
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	36,074.8423	36,074.8423	1.4140	0.3327	36,207.6704
NaturalGas Mitigated	2.5273	21.6827	9.8165	0.1379		1.7462	1.7462		1.7462	1.7462	0.0000	25,011.9869	25,011.9869	0.4794	0.4586	25,164.2057
NaturalGas Unmitigated	2.5273	21.6827	9.8165	0.1379		1.7462	1.7462		1.7462	1.7462	0.0000	25,011.9869	25,011.9869	0.4794	0.4586	25,164.2057

### 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					
Hotel	8.33909e+006	0.0450	0.4088	0.3434	2.4500e-003		0.0311	0.0311		0.0311	0.0311	0.0000	445.0054	445.0054	8.5300e-003	8.1600e-003	447.7136
Racquet Club	302884	1.6300e-003	0.0149	0.0125	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1630	16.1630	3.1000e-004	3.0000e-004	16.2614
Single Family Housing	1.34214e+008	0.7237	6.1844	2.6317	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	7,162.1927	7,162.1927	0.1373	0.1313	7,205.7806
Strip Mall	4.54671e+006	0.0245	0.2229	0.1872	1.3400e-003		0.0169	0.0169		0.0169	0.0169	0.0000	242.6298	242.6298	4.6500e-003	4.4500e-003	244.1064
Apartments Low Rise	3.05462e+008	1.6471	14.0752	5.9895	0.0898		1.1380	1.1380		1.1380	1.1380	0.0000	16,300.6060	16,300.6060	0.3124	0.2988	16,399.8088
Government (Civic Center)	1.5842e+007	0.0854	0.7766	0.6523	4.6600e-003		0.0590	0.0590		0.0590	0.0590	0.0000	845.3899	845.3899	0.0162	0.0155	850.5348
<b>Total</b>		<b>2.5274</b>	<b>21.6827</b>	<b>9.8165</b>	<b>0.1379</b>		<b>1.7462</b>	<b>1.7462</b>		<b>1.7462</b>	<b>1.7462</b>	<b>0.0000</b>	<b>25,011.9869</b>	<b>25,011.9869</b>	<b>0.4794</b>	<b>0.4586</b>	<b>25,164.2057</b>

### 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					
Hotel	8.33909e+006	0.0450	0.4088	0.3434	2.4500e-003		0.0311	0.0311		0.0311	0.0311	0.0000	445.0054	445.0054	8.5300e-003	8.1600e-003	447.7136
Racquet Club	302884	1.6300e-003	0.0149	0.0125	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1630	16.1630	3.1000e-004	3.0000e-004	16.2614
Single Family Housing	1.34214e+008	0.7237	6.1844	2.6317	0.0395		0.5000	0.5000		0.5000	0.5000	0.0000	7,162.1927	7,162.1927	0.1373	0.1313	7,205.7806
Strip Mall	4.54671e+006	0.0245	0.2229	0.1872	1.3400e-003		0.0169	0.0169		0.0169	0.0169	0.0000	242.6298	242.6298	4.6500e-003	4.4500e-003	244.1064
Apartments Low Rise	3.05462e+008	1.6471	14.0752	5.9895	0.0898		1.1380	1.1380		1.1380	1.1380	0.0000	16,300.6060	16,300.6060	0.3124	0.2988	16,399.8088
Government (Civic Center)	1.5842e+007	0.0854	0.7766	0.6523	4.6600e-003		0.0590	0.0590		0.0590	0.0590	0.0000	845.3899	845.3899	0.0162	0.0155	850.5348
<b>Total</b>		<b>2.5274</b>	<b>21.6827</b>	<b>9.8165</b>	<b>0.1379</b>		<b>1.7462</b>	<b>1.7462</b>		<b>1.7462</b>	<b>1.7462</b>	<b>0.0000</b>	<b>25,011.9869</b>	<b>25,011.9869</b>	<b>0.4794</b>	<b>0.4586</b>	<b>25,164.2057</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.04694e+008	20,597.0783	0.8073	0.1900	20,672.9171
Government (Civic Center)	1.19686e+007	2,354.6521	0.0923	0.0217	2,363.3219
Hotel	2.11615e+006	416.3239	0.0163	3.8400e-003	417.8568
Racquet Club	238353	46.8927	1.8400e-003	4.3000e-004	47.0654
Single Family Housing	3.56551e+007	7,014.6724	0.2749	0.0647	7,040.5005
Strip Mall	2.86943e+007	5,645.2230	0.2213	0.0521	5,666.0088
<b>Total</b>		<b>36,074.8423</b>	<b>1.4140</b>	<b>0.3327</b>	<b>36,207.6704</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.04694e+008	20,597.0783	0.8073	0.1900	20,672.9171
Government (Civic Center)	1.19686e+007	2,354.6521	0.0923	0.0217	2,363.3219
Hotel	2.11615e+006	416.3239	0.0163	3.8400e-003	417.8568
Racquet Club	238353	46.8927	1.8400e-003	4.3000e-004	47.0654
Single Family Housing	3.56551e+007	7,014.6724	0.2749	0.0647	7,040.5005
Strip Mall	2.86943e+007	5,645.2230	0.2213	0.0521	5,666.0088
<b>Total</b>		<b>36,074.8423</b>	<b>1.4140</b>	<b>0.3327</b>	<b>36,207.6704</b>

### 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	236.0146	2.9279	253.9132	0.0135		3.1095	3.1095		3.0916	3.0916	0.0000	24,727.2208	24,727.2208	0.8621	0.4457	24,883.4932
Unmitigated	236.0146	2.9279	253.9132	0.0135		3.1095	3.1095		3.0916	3.0916	0.0000	24,727.2208	24,727.2208	0.8621	0.4457	24,883.4932

## 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	63.4213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	162.5470					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4565	1.1000e-004	0.1340	0.0000		1.6972	1.6972		1.6794	1.6794	0.0000	24,311.2052	24,311.2052	0.4660	0.4457	24,459.1591
Landscaping	7.5897	2.9278	253.7792	0.0135		1.4122	1.4122		1.4122	1.4122	0.0000	416.0156	416.0156	0.3961	0.0000	424.3341
<b>Total</b>	<b>236.0146</b>	<b>2.9279</b>	<b>253.9132</b>	<b>0.0135</b>		<b>3.1095</b>	<b>3.1095</b>		<b>3.0916</b>	<b>3.0916</b>	<b>0.0000</b>	<b>24,727.2208</b>	<b>24,727.2208</b>	<b>0.8621</b>	<b>0.4457</b>	<b>24,883.4932</b>



## 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	63.4213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	162.5470					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4565	1.1000e-004	0.1340	0.0000		1.6972	1.6972		1.6794	1.6794	0.0000	24,311.2052	24,311.2052	0.4660	0.4457	24,459.1591
Landscaping	7.5897	2.9278	253.7792	0.0135		1.4122	1.4122		1.4122	1.4122	0.0000	416.0156	416.0156	0.3961	0.0000	424.3341
<b>Total</b>	<b>236.0146</b>	<b>2.9279</b>	<b>253.9132</b>	<b>0.0135</b>		<b>3.1095</b>	<b>3.1095</b>		<b>3.0916</b>	<b>3.0916</b>	<b>0.0000</b>	<b>24,727.2208</b>	<b>24,727.2208</b>	<b>0.8621</b>	<b>0.4457</b>	<b>24,883.4932</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9,461.4332	67.4722	1.6647	11,394.4120
Unmitigated	9,461.4332	67.4793	1.6664	11,395.0865

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1520.9 / 1198.54	6,998.3194	49.8141	1.2303	8,425.8007
Government (Civic Center)	138.337 / 105.984	629.9211	4.5307	0.1118	759.7363
Hotel	4.16015 / 0.577799	13.2398	0.1360	3.3100e-003	17.1227
Racquet Club	1.29926 / 0.995398	5.9162	0.0426	1.0500e-003	7.1354
Single Family Housing	266.662 / 210.142	1,227.0264	8.7340	0.2157	1,477.3089
Strip Mall	128.913 / 98.7643	587.0104	4.2221	0.1042	707.9825
<b>Total</b>		<b>9,461.4332</b>	<b>67.4793</b>	<b>1.6664</b>	<b>11,395.0865</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1520.9 / 1198.54	6,998.3194	49.8088	1.2290	8,425.3028
Government (Civic Center)	138.337 / 105.984	629.9211	4.5302	0.1117	759.6910
Hotel	4.16015 / 0.577799	13.2398	0.1360	3.3100e-003	17.1214
Racquet Club	1.29926 / 0.995398	5.9162	0.0426	1.0500e-003	7.1350
Single Family Housing	266.662 / 210.142	1,227.0264	8.7331	0.2155	1,477.2216
Strip Mall	128.913 / 98.7643	587.0104	4.2216	0.1041	707.9403
<b>Total</b>		<b>9,461.4332</b>	<b>67.4722</b>	<b>1.6647</b>	<b>11,394.4120</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	5,467.756 5	323.1352	0.0000	12,253.59 46
Mitigated	5,467.756 5	323.1352	0.0000	12,253.59 46

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13422.3	2,724.613 7	161.0201	0.0000	6,106.034 9
Government (Civic Center)	4961.51	1,007.141 7	59.5204	0.0000	2,257.069 4
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.52	31.7722	1.8777	0.0000	71.2034
Single Family Housing	5999.12	1,217.767 1	71.9680	0.0000	2,729.094 7
Strip Mall	2284.23	463.6781	27.4026	0.0000	1,039.132 4
<b>Total</b>		<b>5,467.756 5</b>	<b>323.1352</b>	<b>0.0000</b>	<b>12,253.59 46</b>

### 8.2 Waste by Land Use

#### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	13422.3	2,724.6137	161.0201	0.0000	6,106.0349
Government (Civic Center)	4961.51	1,007.1417	59.5204	0.0000	2,257.0694
Hotel	112.24	22.7837	1.3465	0.0000	51.0598
Racquet Club	156.52	31.7722	1.8777	0.0000	71.2034
Single Family Housing	5999.12	1,217.7671	71.9680	0.0000	2,729.0947
Strip Mall	2284.23	463.6781	27.4026	0.0000	1,039.1324
<b>Total</b>		<b>5,467.7565</b>	<b>323.1352</b>	<b>0.0000</b>	<b>12,253.5946</b>

### 9.0 Operational Offroad

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

## **ATTACHMENT 8b**

Year 2035 GHG Emissions of the Adopted Plan  
Golden Hill

**6086 Golden Hill - Adopted Plan 2035**  
**San Diego County APCD Air District, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	213.04	1000sqft	4.89	213,040.00	0
Apartments Low Rise	7,100.00	Dwelling Unit	443.75	7,100,000.00	20306
Single Family Housing	2,070.00	Dwelling Unit	672.08	3,726,000.00	5920
Strip Mall	431.16	1000sqft	9.90	431,160.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2035
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	433.73	<b>CH4 Intensity (lb/MWhr)</b>	0.017	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - RPS 2030 goal 50%

CalEEMod accounts for 10.2%

Additional 39.8% reduction applied

(433.73, 0.017, 0.004)

Land Use - Golden Hill adopted land uses

Construction Phase - Construction calculated separately

Woodstoves - No woodstoves or woodburning fireplaces

Area Coating - SDAPCD Rule 67

Energy Use - 2013 Title 24

Water And Wastewater - CalGreen 20% indoor water reduction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblConstructionPhase	NumDays	155,000.00	1.00
tblEnergyUse	T24E	184.75	141.70
tblEnergyUse	T24E	5.69	4.45
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24E	3.89	3.04
tblEnergyUse	T24NG	8,285.40	7,970.55
tblEnergyUse	T24NG	16.83	14.00
tblEnergyUse	T24NG	21,834.49	20,415.25
tblEnergyUse	T24NG	1.20	1.00
tblFireplaces	NumberGas	3,905.00	6,390.00
tblFireplaces	NumberGas	1,138.50	1,863.00
tblFireplaces	NumberWood	2,485.00	0.00
tblFireplaces	NumberWood	724.50	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.017
tblProjectCharacteristics	CO2IntensityFactor	720.49	433.73
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004



tblProjectCharacteristics	OperationalYear	2014	2035
tblWater	IndoorWaterUseRate	462,593,581.91	370,074,865.53
tblWater	IndoorWaterUseRate	42,322,459.48	33,857,967.58
tblWater	IndoorWaterUseRate	134,868,833.04	107,895,066.43
tblWater	IndoorWaterUseRate	31,937,108.36	25,549,686.69
tblWoodstoves	NumberCatalytic	355.00	0.00
tblWoodstoves	NumberCatalytic	103.50	0.00
tblWoodstoves	NumberNoncatalytic	355.00	0.00
tblWoodstoves	NumberNoncatalytic	103.50	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

## 2.0 Emissions Summary

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**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	65.0900	0.7829	67.8907	3.6000e-003		0.8314	0.8314		0.8267	0.8267	0.0000	6,611.7064	6,611.7064	0.2305	0.1192	6,653.4913
Energy	0.7194	6.1614	2.7190	0.0392		0.4970	0.4970		0.4970	0.4970	0.0000	16,664.4360	16,664.4360	0.5106	0.2186	16,742.9081
Mobile	31.7510	56.1200	314.4898	1.2386	84.6467	1.3747	86.0214	22.6352	1.2699	23.9051	0.0000	78,280.9759	78,280.9759	2.3514	0.0000	78,330.3562
Waste						0.0000	0.0000		0.0000	0.0000	1,494.0642	0.0000	1,494.0642	88.2967	0.0000	3,348.2942
Water						0.0000	0.0000		0.0000	0.0000	170.4851	2,299.3706	2,469.8558	17.6006	0.4347	2,974.2142
<b>Total</b>	<b>97.5604</b>	<b>63.0642</b>	<b>385.0995</b>	<b>1.2815</b>	<b>84.6467</b>	<b>2.7031</b>	<b>87.3498</b>	<b>22.6352</b>	<b>2.5936</b>	<b>25.2287</b>	<b>1,664.5494</b>	<b>103,856.4889</b>	<b>105,521.0382</b>	<b>108.9898</b>	<b>0.7724</b>	<b>108,049.2640</b>

## 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	65.0900	0.7829	67.8907	3.6000e-003		0.8314	0.8314		0.8267	0.8267	0.0000	6,611.7064	6,611.7064	0.2305	0.1192	6,653.4913
Energy	0.7194	6.1614	2.7190	0.0392		0.4970	0.4970		0.4970	0.4970	0.0000	16,664.4360	16,664.4360	0.5106	0.2186	16,742.9081
Mobile	31.7510	56.1200	314.4898	1.2386	84.6467	1.3747	86.0214	22.6352	1.2699	23.9051	0.0000	78,280.9759	78,280.9759	2.3514	0.0000	78,330.3562
Waste						0.0000	0.0000		0.0000	0.0000	1,494.0642	0.0000	1,494.0642	88.2967	0.0000	3,348.2942
Water						0.0000	0.0000		0.0000	0.0000	170.4851	2,299.3706	2,469.8558	17.5987	0.4342	2,974.0383
<b>Total</b>	<b>97.5604</b>	<b>63.0642</b>	<b>385.0995</b>	<b>1.2815</b>	<b>84.6467</b>	<b>2.7031</b>	<b>87.3498</b>	<b>22.6352</b>	<b>2.5936</b>	<b>25.2287</b>	<b>1,664.5494</b>	<b>103,856.4889</b>	<b>105,521.0382</b>	<b>108.9879</b>	<b>0.7720</b>	<b>108,049.0880</b>

	ROG	NOx	CO	SO2	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	Building Construction	Building Construction	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	9	6,063.00	1,086.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Building Construction - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6500e-003	0.0474	0.0702	1.3000e-004	3.5300e-003	6.8000e-004	4.2100e-003	1.0100e-003	6.2000e-004	1.6300e-003	0.0000	11.5170	11.5170	9.0000e-005	0.0000	11.5189
Worker	9.4200e-003	0.0125	0.1180	3.0000e-004	0.0243	1.8000e-004	0.0245	6.4600e-003	1.7000e-004	6.6300e-003	0.0000	21.7794	21.7794	1.1100e-003	0.0000	21.8027
<b>Total</b>	<b>0.0151</b>	<b>0.0599</b>	<b>0.1882</b>	<b>4.3000e-004</b>	<b>0.0278</b>	<b>8.6000e-004</b>	<b>0.0287</b>	<b>7.4700e-003</b>	<b>7.9000e-004</b>	<b>8.2600e-003</b>	<b>0.0000</b>	<b>33.2964</b>	<b>33.2964</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>33.3215</b>

### 3.2 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5500e-003	0.0132	9.0600e-003	1.0000e-005		8.9000e-004	8.9000e-004		8.4000e-004	8.4000e-004	0.0000	1.1974	1.1974	2.9000e-004	0.0000	1.2036
<b>Total</b>	<b>1.5500e-003</b>	<b>0.0132</b>	<b>9.0600e-003</b>	<b>1.0000e-005</b>		<b>8.9000e-004</b>	<b>8.9000e-004</b>		<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>1.1974</b>	<b>1.1974</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.2036</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6500e-003	0.0474	0.0702	1.3000e-004	3.5300e-003	6.8000e-004	4.2100e-003	1.0100e-003	6.2000e-004	1.6300e-003	0.0000	11.5170	11.5170	9.0000e-005	0.0000	11.5189
Worker	9.4200e-003	0.0125	0.1180	3.0000e-004	0.0243	1.8000e-004	0.0245	6.4600e-003	1.7000e-004	6.6300e-003	0.0000	21.7794	21.7794	1.1100e-003	0.0000	21.8027
<b>Total</b>	<b>0.0151</b>	<b>0.0599</b>	<b>0.1882</b>	<b>4.3000e-004</b>	<b>0.0278</b>	<b>8.6000e-004</b>	<b>0.0287</b>	<b>7.4700e-003</b>	<b>7.9000e-004</b>	<b>8.2600e-003</b>	<b>0.0000</b>	<b>33.2964</b>	<b>33.2964</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>33.3215</b>

### 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	31.7510	56.1200	314.4898	1.2386	84.6467	1.3747	86.0214	22.6352	1.2699	23.9051	0.0000	78,280.97 59	78,280.97 59	2.3514	0.0000	78,330.35 62
Unmitigated	31.7510	56.1200	314.4898	1.2386	84.6467	1.3747	86.0214	22.6352	1.2699	23.9051	0.0000	78,280.97 59	78,280.97 59	2.3514	0.0000	78,330.35 62

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	46,789.00	50,836.00	43097.00	133,741,594	133,741,594
Government (Civic Center)	5,948.08	0.00	0.00	8,121,831	8,121,831
Single Family Housing	19,809.90	20,865.60	18153.90	56,318,411	56,318,411
Strip Mall	19,109.01	18,125.97	8808.60	26,946,095	26,946,095
Total	91,655.99	89,827.57	70,059.50	225,127,931	225,127,931

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
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



LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511887	0.074493	0.190892	0.129437	0.036275	0.005211	0.012579	0.024993	0.001957	0.001971	0.006467	0.000450	0.003389

**5.0 Energy Detail**

**4.4 Fleet Mix**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	9,545.1674	9,545.1674	0.3741	0.0880	9,580.3128
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	9,545.1674	9,545.1674	0.3741	0.0880	9,580.3128
NaturalGas Mitigated	0.7194	6.1614	2.7190	0.0392		0.4970	0.4970		0.4970	0.4970	0.0000	7,119.2686	7,119.2686	0.1365	0.1305	7,162.5953
NaturalGas Unmitigated	0.7194	6.1614	2.7190	0.0392		0.4970	0.4970		0.4970	0.4970	0.0000	7,119.2686	7,119.2686	0.1365	0.1305	7,162.5953

### 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					
Government (Civic Center)	3.87733e+006	0.0209	0.1901	0.1597	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.9090	206.9090	3.9700e-003	3.7900e-003	208.1682
Single Family Housing	5.43049e+007	0.2928	2.5023	1.0648	0.0160		0.2023	0.2023		0.2023	0.2023	0.0000	2,897.9161	2,897.9161	0.0555	0.0531	2,915.5524
Strip Mall	901124	4.8600e-003	0.0442	0.0371	2.7000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	48.0874	48.0874	9.2000e-004	8.8000e-004	48.3801
Apartments Low Rise	7.43267e+007	0.4008	3.4249	1.4574	0.0219		0.2769	0.2769		0.2769	0.2769	0.0000	3,966.3560	3,966.3560	0.0760	0.0727	3,990.4946
<b>Total</b>		<b>0.7194</b>	<b>6.1614</b>	<b>2.7190</b>	<b>0.0392</b>		<b>0.4970</b>	<b>0.4970</b>		<b>0.4970</b>	<b>0.4970</b>	<b>0.0000</b>	<b>7,119.2686</b>	<b>7,119.2686</b>	<b>0.1365</b>	<b>0.1305</b>	<b>7,162.5953</b>

### 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					
Single Family Housing	5.43049e+007	0.2928	2.5023	1.0648	0.0160		0.2023	0.2023		0.2023	0.2023	0.0000	2,897.9161	2,897.9161	0.0555	0.0531	2,915.5524
Strip Mall	901124	4.8600e-003	0.0442	0.0371	2.7000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	48.0874	48.0874	9.2000e-004	8.8000e-004	48.3801
Apartments Low Rise	7.43267e+007	0.4008	3.4249	1.4574	0.0219		0.2769	0.2769		0.2769	0.2769	0.0000	3,966.3560	3,966.3560	0.0760	0.0727	3,990.4946
Government (Civic Center)	3.87733e+006	0.0209	0.1901	0.1597	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.9090	206.9090	3.9700e-003	3.7900e-003	208.1682
<b>Total</b>		<b>0.7194</b>	<b>6.1614</b>	<b>2.7190</b>	<b>0.0392</b>		<b>0.4970</b>	<b>0.4970</b>		<b>0.4970</b>	<b>0.4970</b>	<b>0.0000</b>	<b>7,119.2686</b>	<b>7,119.2686</b>	<b>0.1365</b>	<b>0.1305</b>	<b>7,162.5953</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.54747e+007	5,011.7981	0.1964	0.0462	5,030.2516
Government (Civic Center)	2.9293e+006	576.3006	0.0226	5.3100e-003	578.4225
Single Family Housing	1.44265e+007	2,838.2275	0.1112	0.0262	2,848.6779
Strip Mall	5.687e+006	1,118.8412	0.0439	0.0103	1,122.9608
<b>Total</b>		<b>9,545.1674</b>	<b>0.3741</b>	<b>0.0880</b>	<b>9,580.3128</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.54747e+007	5,011.7981	0.1964	0.0462	5,030.2516
Government (Civic Center)	2.9293e+006	576.3006	0.0226	5.3100e-003	578.4225
Single Family Housing	1.44265e+007	2,838.2275	0.1112	0.0262	2,848.6779
Strip Mall	5.687e+006	1,118.8412	0.0439	0.0103	1,122.9608
<b>Total</b>		<b>9,545.1674</b>	<b>0.3741</b>	<b>0.0880</b>	<b>9,580.3128</b>

### 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	65.0900	0.7829	67.8907	3.6000e-003		0.8314	0.8314		0.8267	0.8267	0.0000	6,611.7064	6,611.7064	0.2305	0.1192	6,653.4913
Unmitigated	65.0900	0.7829	67.8907	3.6000e-003		0.8314	0.8314		0.8267	0.8267	0.0000	6,611.7064	6,611.7064	0.2305	0.1192	6,653.4913

## 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	17.6071					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	44.7969					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6568	3.0000e-005	0.0358	0.0000		0.4538	0.4538		0.4490	0.4490	0.0000	6,500.4739	6,500.4739	0.1246	0.1192	6,540.0347
Landscaping	2.0292	0.7828	67.8549	3.6000e-003		0.3776	0.3776		0.3776	0.3776	0.0000	111.2326	111.2326	0.1059	0.0000	113.4566
<b>Total</b>	<b>65.0900</b>	<b>0.7829</b>	<b>67.8907</b>	<b>3.6000e-003</b>		<b>0.8314</b>	<b>0.8314</b>		<b>0.8267</b>	<b>0.8267</b>	<b>0.0000</b>	<b>6,611.7064</b>	<b>6,611.7064</b>	<b>0.2305</b>	<b>0.1192</b>	<b>6,653.4913</b>

### 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	17.6071					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	44.7969					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6568	3.0000e-005	0.0358	0.0000		0.4538	0.4538		0.4490	0.4490	0.0000	6,500.4739	6,500.4739	0.1246	0.1192	6,540.0347
Landscaping	2.0292	0.7828	67.8549	3.6000e-003		0.3776	0.3776		0.3776	0.3776	0.0000	111.2326	111.2326	0.1059	0.0000	113.4566
<b>Total</b>	<b>65.0900</b>	<b>0.7829</b>	<b>67.8907</b>	<b>3.6000e-003</b>		<b>0.8314</b>	<b>0.8314</b>		<b>0.8267</b>	<b>0.8267</b>	<b>0.0000</b>	<b>6,611.7064</b>	<b>6,611.7064</b>	<b>0.2305</b>	<b>0.1192</b>	<b>6,653.4913</b>

### 7.0 Water Detail

#### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2,469.8558	17.5987	0.4342	2,974.0383
Unmitigated	2,469.8558	17.6006	0.4347	2,974.2142

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	370.075 / 291.635	1,702.8708	12.1210	0.2994	2,050.2137
Government (Civic Center)	33.858 / 25.9396	154.1730	1.1089	0.0274	185.9453
Single Family Housing	107.895 / 85.026	496.4708	3.5339	0.0873	597.7384
Strip Mall	25.5497 / 19.5744	116.3411	0.8368	0.0207	140.3169
<b>Total</b>		<b>2,469.8558</b>	<b>17.6006</b>	<b>0.4347</b>	<b>2,974.2142</b>



## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	370.075 / 291.635	1,702.870 8	12.1198	0.2991	2,050.092 5
Government (Civic Center)	33.858 / 25.9396	154.1730	1.1088	0.0274	185.9342
Single Family Housing	107.895 / 85.026	496.4708	3.5335	0.0872	597.7030
Strip Mall	25.5497 / 19.5744	116.3411	0.8367	0.0206	140.3085
<b>Total</b>		<b>2,469.855 8</b>	<b>17.5987</b>	<b>0.4342</b>	<b>2,974.038 3</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	1,494.064 2	88.2967	0.0000	3,348.294 2
Mitigated	1,494.064 2	88.2967	0.0000	3,348.294 2

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3266	662.9685	39.1803	0.0000	1,485.755 1
Government (Civic Center)	1214.33	246.4980	14.5676	0.0000	552.4179
Single Family Housing	2427.2	492.6997	29.1177	0.0000	1,104.171 7
Strip Mall	452.72	91.8981	5.4310	0.0000	205.9495
<b>Total</b>		<b>1,494.064 2</b>	<b>88.2967</b>	<b>0.0000</b>	<b>3,348.294 2</b>

## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3266	662.9685	39.1803	0.0000	1,485.7551
Government (Civic Center)	1214.33	246.4980	14.5676	0.0000	552.4179
Single Family Housing	2427.2	492.6997	29.1177	0.0000	1,104.1717
Strip Mall	452.72	91.8981	5.4310	0.0000	205.9495
<b>Total</b>		<b>1,494.0642</b>	<b>88.2967</b>	<b>0.0000</b>	<b>3,348.2942</b>

## 9.0 Operational Offroad

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