

# **459 & 469 PIERCY ROAD HOTEL PROJECTS**

## **GREENHOUSE GAS EMISSIONS ASSESSMENT**

*San Jose, California*

April 12, 2018

**Prepared for:**

Natalie Noyes, AICP  
David J. Powers & Associates, Inc.  
1611 Telegraph Avenue, Suite 1002  
Oakland, CA 94612

**Prepared by:**

Joshua Carman

**ILLINGWORTH & RODKIN, INC.**  
Acoustics • Air Quality  
1 Willowbrook Court, Suite 120  
Petaluma, CA 94954  
(707) 794-0400

Project: 18-020

## **Introduction**

The purpose of this report is to address greenhouse gas (GHG) emission impacts associated with the proposed hotel projects located at 459 and 469 Piercy Road in San Jose, California. GHG impacts could occur due to temporary construction emissions and as a result of direct and indirect emissions from new employees and customers. This analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD).

## **Setting**

The project is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO<sub>2</sub>) and water vapor but there are also several others, most importantly methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO<sub>2</sub> and N<sub>2</sub>O are byproducts of fossil fuel combustion.
- N<sub>2</sub>O is associated with agricultural operations such as fertilization of crops.
- CH<sub>4</sub> is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and sulfur hexafluoride emissions are commonly created by industries such as aluminum production and semi-conductor manufacturing.

Each GHG has its own potency and effect upon the earth's energy balance. This is expressed in terms of a global warming potential (GWP), with CO<sub>2</sub> being assigned a value of 1 and sulfur hexafluoride being several orders of magnitude stronger. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of equivalent CO<sub>2</sub> (CO<sub>2</sub>e).

An expanding body of scientific research supports the theory that global warming is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species will occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

## **Regulatory Framework**

AB 32, the Global Warming Solutions Act of 2006, codifies the State of California's GHG emissions target by directing CARB to reduce the state's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, CARB, CEC, the California Public Utilities Commission (CPUC), and the Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the State of California's main strategies to reduce GHGs from BAU emissions projected in 2020 back down to 1990 levels. BAU is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. It required CARB and other state agencies to develop and adopt regulations and other initiatives reducing GHGs by 2012.

As directed by AB 32, CARB has also approved a statewide GHG emissions limit. On December 6, 2007, CARB staff resolved an amount of 427 MMT of CO<sub>2</sub>e as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector- or facility-specific limit. CARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 MMT of CO<sub>2</sub>e. Two GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 MMT of CO<sub>2</sub>e. Thus, an estimated reduction of 80 MMT of CO<sub>2</sub>e is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

SB 32 was passed in 2016, which codified a 2030 GHG emissions reduction target of 40 percent below 1990 levels. CARB is currently working on a second update to the Scoping Plan to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32. The proposed Scoping Plan Update was adopted December 14, 2017. The mid-term 2030 target is considered critical by CARB on the path to obtaining an even deeper GHG emissions target of 80 percent below 1990 levels by 2050, as directed in Executive Order S-3-05. The Scoping Plan outlines the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure, providing a blueprint to continue driving down GHG emissions and obtain the statewide goals.

## Significance Thresholds

The BAAQMD CEQA Air Quality Guidelines<sup>1</sup> contain methodology and thresholds of significance for evaluating greenhouse GHG emissions from land use development projects. The BAAQMD thresholds were developed specifically for the Bay Area after considering the latest Bay Area GHG inventory and the effects of Assembly Bill 32 – California Global Warming Solutions Act (AB 32) scoping plan measures that would reduce regional emissions. BAAQMD

---

<sup>1</sup> BAAQMD, 2017. *CEQA Air Quality Guidelines*. May.

provides guidance to achieve GHG reductions from new land use developments to close the gap between projected regional emissions with AB 32 scoping plan measures and the AB 32 targets. The recommendations include a bright-line emissions threshold of 1,100 metric tons (MT) of CO<sub>2</sub>e (equivalent carbon dioxide) per year. There are no other quantified thresholds adopted by other agencies relevant to the proposed projects or the City to evaluate GHG emissions from land use projects.

GHG emissions resulting from operation of the project have been compared to an efficiency metric threshold consistent with State goals detailed in EO B-30-15 and Executive Order S-3-05 to reduce GHG emissions by 40 percent below 1990 levels by 2030. Though BAAQMD has not published a quantified threshold for 2030 yet, this assessment uses a “Substantial Progress” bright-line threshold of 660 MT CO<sub>2</sub>e/year (or a 40 percent reduction of the 2020 1,100 MT CO<sub>2</sub>e/year threshold).

## **Impacts and Project Measures**

**Impact:** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. ***Less Than Significant with Mitigation.***

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy and water usage, and solid waste disposal. Emissions for the proposed project are discussed below and were analyzed using the methodology recommended in the BAAQMD CEQA Air Quality Guidelines.

## Methodology

GHG emissions for the construction period and the full-build out scenario of the proposed project were computed using the California Emissions Estimator Model version 2016.3.2 (CalEEMod). Construction emissions were based on CalEEMod defaults for the size and type of the project. The model calculates emissions of GHG in the form of equivalent carbon dioxide emissions or CO<sub>2</sub>e. CalEEMod also computes emissions from traffic generated by the project as well as emissions associated with energy usage, water usage and solid waste generation. CalEEMod is the model recommended by BAAQMD for predicting emissions from land use development projects, such as this one. *Attachment 1* includes the CalEEMod output worksheets.

## Land Use Types

The following land use types were input to the model.

### *459 Piercy Road*

- Hotel = 112 rooms

- Parking Lot = 126 parking spaces

*469 Piercy Road*

- Hotel = 175 rooms
- Parking Lot = 274 parking spaces

Existing GHG emissions from the one single-family residence were conservatively not netted from project emissions, as they are considered negligible when compared to the proposed projects.

Construction Emissions

The CalEEMod model was used to estimate total construction GHG emissions of 530 MT of CO<sub>2</sub>e for the 459 Piercy Road project and 694 MT of CO<sub>2</sub>e for the 469 Piercy Road project. Neither the City nor BAAQMD have quantified thresholds for construction activities. BAAQMD encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable. Best management practices assumed to be incorporated into construction of the proposed project include, but are not limited to: using local building materials of at least 10 percent and recycling or reusing at least 50 percent of construction waste or demolition materials.

Operational Emissions

The CalEEMod model along with the project-specific information was used to calculate operational period GHG emissions associated with operation of a fully developed site under the proposed project. The model uses mobile emission factors from the California Air Resources Board's EMFAC2014 model. This model is sensitive to the year selected, since vehicle emissions have and continue to be reduced due to fuel efficiency standards and low carbon fuels. Adjustments to the modeling are described below.

*Year of Analysis*

Emissions associated with vehicle travel depend on the year of analysis. The earlier the year, the higher the emission rates, as CalEEMod uses the California Air Resources Board's EMFAC2014 motor vehicle emissions model. This model assumes reduced emission rates as newer vehicles with lower emission rates replace older, more polluting vehicles through attrition of the overall vehicle fleet. The hotel applicants have indicated a desire to begin construction of each hotel in April 2019, and construction for each hotel is expected to take up to 19 months, meaning the hotels could be in operation prior to the end of 2020 and thereby subject to the 2020 GHG targets based on AB 32. However, this timing is not guaranteed, and the possibility exists either or both hotels could be in operation after 2020, and therefore this analysis also accounts for a condition where the 2030 GHG targets based on SB 32 apply to the hotels.

### *CalEEMod Traffic Inputs*

The CalEEMod default daily trip rates were modified based on the trip generation rates contained in the project traffic report.

### *Energy Consumption*

CalEEMod has a default rate of 641.3 pounds of CO<sub>2</sub> per megawatt of electricity produced, which is based on PG&E's 2008 emissions rate. The rate was adjusted to account for PG&E's projected 2020 CO<sub>2</sub> intensity rate. This 2020 rate is based, in part, on the requirement of a renewable energy portfolio standard of 33 percent by the year 2020. The derived 2020 rate for PG&E was estimated at 290 pounds of CO<sub>2</sub> per megawatt of electricity delivered.<sup>2</sup> The model includes the 2016 Title 24 Building Standards. Default rates for energy consumption were assumed in the model.

### *Solid Waste Generation*

Emissions from solid waste generation are based on CalEEMod model defaults that are based on the project type and size. These are emissions associated with transporting and landfilling of solid waste generated by the project.

### *Water Usage*

Emissions from water usage are based on CalEEMod model defaults that are based on the project type and size. These are emissions associated with electricity usage associated with conveyance and treatment of water and wastewater associated with the project.

### *Operational Emissions*

The CalEEMod model, along with project-specific information, was used to estimate annual emissions associated with operation of the fully-developed sites under the proposed projects. As shown in Table 1, annual GHG emissions resulting from operation of each proposed project are estimated to be exceed the BAAQMD significance thresholds of 1,100 MT of CO<sub>2</sub>e/ year for 2020 and 660 MT of CO<sub>2</sub>e/ year for 2030. This would be considered a significant impact. Implementation of Mitigation Measure GHG-1 would reduce this impact to a level of less than significant.

---

<sup>2</sup> Pacific Gas & Electric, 2015. *Greenhouse Gas Emission Factors: Guidance for PG&E Customers*. November.

**Table 1. Annual GHG emissions of CO<sub>2</sub>e (MT/year)**

Source Category	459 Piercy Road	469 Piercy Road
Area	<1	<1
Energy Consumption	554	866
Mobile	967	1,512
Waste	31	48
Water Usage	6	9
<i>Total</i>	1,558	2,435
<b>BAAQMD 2020 Threshold</b>	<b>1,100 MT of CO<sub>2</sub>e/year</b>	<b>1,100 MT of CO<sub>2</sub>e/year</b>
<b>2030 Substantial Progress Threshold</b>	<b>660 MT of CO<sub>2</sub>e/year</b>	<b>660 MT of CO<sub>2</sub>e/year</b>

***Mitigation Measure GHG-1: Develop and Implement Greenhouse Gas Reduction Plan***

A GHG reduction plan that includes the proper elements would reduce emissions from implementation of the projects shall be developed and demonstrate that GHG emission from the 459 Piercy project would be reduced by at least 898 MT of CO<sub>2</sub>e/ year and at least 1,775 MT of CO<sub>2</sub>e/ year for the 469 Piercy project, such that each project would have GHG emissions not exceeding 660 MT of CO<sub>2</sub>e/ year. Elements of this plan may include, but would not be limited to, the following:

- Installation of solar power systems or other renewable electric generating systems that provide electricity to power on-site equipment and possibly provide excess electric power;
- Develop and implement a transportation demand management (TDM) program to reduce mobile GHG emissions;
- Construct onsite or fund off-site carbon sequestration projects (such as a forestry or wetlands projects for which inventory and reporting protocols have been adopted). If the project develops an off-site project, it must be registered with the Climate Action Reserve or otherwise approved by the BAAQMD in order to be used to offset Project emissions;
- Purchase of carbon credits to offset Project annual emissions. Carbon offset credits must be verified and registered with The Climate Registry, the Climate Action Reserve, or another source approved by the California Air Resources Board or BAAQMD. The preference for offset carbon credit purchases include those that can be achieved as follows: 1) within the City; 2) within the San Francisco Bay Area Air Basin; 3) within the State of California; then 4) elsewhere in the United States. Provisions of evidence of payments, and funding of an escrow-type account or endowment fund would be overseen by the County.



## **Attachment 1: CalEEMod Output Worksheets**

459 Piercy/Residence Inn, San Jose - Santa Clara County, Annual

## **459 Piercy/Residence Inn, San Jose**

### **Santa Clara County, Annual**

## **1.0 Project Characteristics**

---

### **1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	112.00	Room	3.73	162,624.00	0
Parking Lot	126.00	Space	1.13	50,400.00	0

### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

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

Project Characteristics - PG&amp;E 2020 rate

Land Use -

Grading - 950cy soil import, 300cy soil export

Vehicle Trips - trip rates from traffic report

Energy Use -

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialExported	0.00	300.00

tblGrading	MaterialImported	0.00	950.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	ST_TR	8.19	12.29
tblVehicleTrips	SU_TR	5.95	8.93
tblVehicleTrips	WD_TR	8.17	12.23

## 2.0 Emissions Summary

---

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2921	2.7207	2.0614	4.2500e-003	0.1516	0.1384	0.2899	0.0601	0.1297	0.1898	0.0000	381.1461	381.1461	0.0681	0.0000	382.8497
2020	0.9582	0.8939	0.8001	1.6500e-003	0.0336	0.0445	0.0781	9.1100e-003	0.0418	0.0510	0.0000	145.9628	145.9628	0.0254	0.0000	146.5974
Maximum	0.9582	2.7207	2.0614	4.2500e-003	0.1516	0.1384	0.2899	0.0601	0.1297	0.1898	0.0000	381.1461	381.1461	0.0681	0.0000	382.8497

#### 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					
2019	0.2921	2.7207	2.0614	4.2500e-003	0.1516	0.1384	0.2899	0.0601	0.1297	0.1898	0.0000	381.1458	381.1458	0.0681	0.0000	382.8494
2020	0.9582	0.8938	0.8001	1.6500e-003	0.0336	0.0445	0.0781	9.1100e-003	0.0418	0.0510	0.0000	145.9627	145.9627	0.0254	0.0000	146.5973

Maximum	0.9582	2.7207	2.0614	4.2500e-003	0.1516	0.1384	0.2899	0.0601	0.1297	0.1898	0.0000	381.1458	381.1458	0.0681	0.0000	382.8494
---------	--------	--------	--------	-------------	--------	--------	--------	--------	--------	--------	--------	----------	----------	--------	--------	----------

	ROG	NOx	CO	SO2	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2019	6-30-2019	1.1185	1.1185
2	7-1-2019	9-30-2019	0.9371	0.9371
3	10-1-2019	12-31-2019	0.9416	0.9416
4	1-1-2020	3-31-2020	0.8447	0.8447
5	4-1-2020	6-30-2020	0.9674	0.9674
		Highest	1.1185	1.1185

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7244	2.0000e-005	2.2000e-003	0.0000	1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2500e-003	4.2500e-003	1.0000e-005	0.0000	4.5400e-003	
Energy	0.0389	0.3532	0.2967	2.1200e-003	0.0269	0.0269		0.0269	0.0269	0.0000	549.8589	549.8589	0.0239	0.0105	553.5767	
Mobile	0.3099	1.2406	3.3463	0.0106	0.9311	9.2700e-003	0.9404	0.2493	8.6600e-003	0.2579	0.0000	966.5572	966.5572	0.0352	0.0000	967.4383
Waste					0.0000	0.0000		0.0000	0.0000	12.4474	0.0000	12.4474	0.7356	0.0000	30.8379	
Water					0.0000	0.0000		0.0000	0.0000	0.9013	2.1675	3.0689	0.0928	2.2300e-003	6.0535	
Total	1.0732	1.5938	3.6452	0.0127	0.9311	0.0361	0.9672	0.2493	0.0355	0.2848	13.3488	1,518.5879	1,531.9367	0.8876	0.0127	1,557.9109

## Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Area	0.7244	2.0000e-005	2.2000e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.2500e-003	4.2500e-003	1.0000e-005	0.0000	4.5400e-003			
Energy	0.0389	0.3532	0.2967	2.1200e-003	0.0269	0.0269		0.0269	0.0269	0.0000	549.8589	549.8589	0.0239	0.0105	553.5767		
Mobile	0.3099	1.2406	3.3463	0.0106	0.9311	9.2700e-003	0.9404	0.2493	8.6600e-003	0.2579	0.0000	966.5572	966.5572	0.0352	0.0000	967.4383	
Waste					0.0000	0.0000		0.0000	0.0000	12.4474	0.0000	12.4474	0.7356	0.0000	30.8379		
Water					0.0000	0.0000		0.0000	0.0000	0.9013	2.1675	3.0689	0.0928	2.2300e-003	6.0535		
<b>Total</b>	<b>1.0732</b>	<b>1.5938</b>	<b>3.6452</b>	<b>0.0127</b>	<b>0.9311</b>	<b>0.0361</b>	<b>0.9672</b>	<b>0.2493</b>	<b>0.0355</b>	<b>0.2848</b>	<b>13.3488</b>	<b>1,518.5879</b>	<b>1,531.9367</b>	<b>0.8876</b>	<b>0.0127</b>	<b>1,557.9109</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	

## 3.0 Construction Detail

---

### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	4/26/2019	5	20	
2	Site Preparation	Site Preparation	4/27/2019	5/3/2019	5	5	
3	Grading	Grading	5/4/2019	5/15/2019	5	8	
4	Building Construction	Building Construction	5/16/2019	4/1/2020	5	230	
5	Paving	Paving	4/2/2020	4/27/2020	5	18	
6	Architectural Coating	Architectural Coating	4/28/2020	5/21/2020	5	18	

Acres of Grading (Site Preparation Phase): 0

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 1.13**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 243,936; Non-Residential Outdoor: 81,312; Striped Parking Area:**

### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
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
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	156.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	89.00	35.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

### 3.2 Demolition - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672

#### 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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.1000e-004	4.1900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0531	1.0531	3.0000e-005	0.0000	1.0538	
Total	5.4000e-004	4.1000e-004	4.1900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0531	1.0531	3.0000e-005	0.0000	1.0538	

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.0351	0.3578	0.2206	3.9000e-004			0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	0.0351	0.3578	0.2206	3.9000e-004			0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.1000e-004	4.1900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0531	1.0531	3.0000e-005	0.0000	1.0538

Total	5.4000e-004	4.1000e-004	4.1900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0531	1.0531	3.0000e-005	0.0000	1.0538
-------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	--------	--------	--------	-------------	--------	--------

### 3.3 Site Preparation - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0108	0.1139	0.0552	9.0000e-005		5.9800e-003	5.9800e-003		5.5000e-003	5.5000e-003	0.0000	8.5422	8.5422	2.7000e-003	0.0000	8.6097
Total	0.0108	0.1139	0.0552	9.0000e-005	0.0452	5.9800e-003	0.0512	0.0248	5.5000e-003	0.0303	0.0000	8.5422	8.5422	2.7000e-003	0.0000	8.6097

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.2600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3159	0.3159	1.0000e-005	0.0000	0.3162
Total	1.6000e-004	1.2000e-004	1.2600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3159	0.3159	1.0000e-005	0.0000	0.3162

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0108	0.1139	0.0552	9.0000e-005		5.9800e-003	5.9800e-003		5.5000e-003	5.5000e-003	0.0000	8.5422	8.5422	2.7000e-003	0.0000	8.6097	
Total	0.0108	0.1139	0.0552	9.0000e-005	0.0452	5.9800e-003	0.0512	0.0248	5.5000e-003	0.0303	0.0000	8.5422	8.5422	2.7000e-003	0.0000	8.6097	

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.6000e-004	1.2000e-004	1.2600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3159	0.3159	1.0000e-005	0.0000	0.3162	
Total	1.6000e-004	1.2000e-004	1.2600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3159	0.3159	1.0000e-005	0.0000	0.3162	

#### **3.4 Grading - 2019**

#### Unmitigated Construction On-Site

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

Fugitive Dust					0.0263	0.0000	0.0263	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0103	0.1134	0.0652	1.2000e-004	5.5900e-003	5.5900e-003	5.1400e-003	5.1400e-003	0.0000	10.6569	10.6569	3.3700e-003	0.0000	10.7412			
Total	0.0103	0.1134	0.0652	1.2000e-004	0.0263	5.5900e-003	0.0319	0.0135	5.1400e-003	0.0186	0.0000	10.6569	10.6569	3.3700e-003	0.0000	10.7412	

### 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	7.1000e-004	0.0243	4.8000e-003	6.0000e-005	1.3200e-003	9.0000e-005	1.4200e-003	3.6000e-004	9.0000e-005	4.5000e-004	0.0000	6.0110	6.0110	2.8000e-004	0.0000	6.0181
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.6800e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4213	0.4213	1.0000e-005	0.0000	0.4215
Total	9.3000e-004	0.0245	6.4800e-003	6.0000e-005	1.8000e-003	9.0000e-005	1.9000e-003	4.9000e-004	9.0000e-005	5.8000e-004	0.0000	6.4323	6.4323	2.9000e-004	0.0000	6.4396

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0263	0.0000	0.0263	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0103	0.1134	0.0652	1.2000e-004	5.5900e-003	5.5900e-003	5.1400e-003	5.1400e-003	0.0000	10.6569	10.6569	3.3700e-003	0.0000	10.7412		
Total	0.0103	0.1134	0.0652	1.2000e-004	0.0263	5.5900e-003	0.0319	0.0135	5.1400e-003	0.0186	0.0000	10.6569	10.6569	3.3700e-003	0.0000	10.7412

## 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	7.1000e-004	0.0243	4.8000e-003	6.0000e-005	1.3200e-003	9.0000e-005	1.4200e-003	3.6000e-004	9.0000e-005	4.5000e-004	0.0000	6.0110	6.0110	2.8000e-004	0.0000	6.0181	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.2000e-004	1.6000e-004	1.6800e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4213	0.4213	1.0000e-005	0.0000	0.4215	
<b>Total</b>	<b>9.3000e-004</b>	<b>0.0245</b>	<b>6.4800e-003</b>	<b>6.0000e-005</b>	<b>1.8000e-003</b>	<b>9.0000e-005</b>	<b>1.9000e-003</b>	<b>4.9000e-004</b>	<b>9.0000e-005</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>6.4323</b>	<b>6.4323</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>6.4396</b>	

## **3.5 Building Construction - 2019**

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1936	1.7285	1.4074	2.2100e-003		0.1058	0.1058		0.0994	0.0994	0.0000	192.7854	192.7854	0.0470	0.0000	193.9596
<b>Total</b>	<b>0.1936</b>	<b>1.7285</b>	<b>1.4074</b>	<b>2.2100e-003</b>		<b>0.1058</b>	<b>0.1058</b>		<b>0.0994</b>	<b>0.0994</b>	<b>0.0000</b>	<b>192.7854</b>	<b>192.7854</b>	<b>0.0470</b>	<b>0.0000</b>	<b>193.9596</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	0.0141	0.3624	0.0973	7.9000e-004	0.0189	2.6000e-003	0.0215	5.4600e-003	2.4900e-003	7.9500e-003	0.0000	75.4959	75.4959	3.7500e-003	0.0000	75.5895	
Worker	0.0265	0.0197	0.2039	5.7000e-004	0.0579	3.8000e-004	0.0583	0.0154	3.5000e-004	0.0158	0.0000	51.2380	51.2380	1.4000e-003	0.0000	51.2729	
<b>Total</b>	<b>0.0406</b>	<b>0.3822</b>	<b>0.3012</b>	<b>1.3600e-003</b>	<b>0.0768</b>	<b>2.9800e-003</b>	<b>0.0797</b>	<b>0.0209</b>	<b>2.8400e-003</b>	<b>0.0237</b>	<b>0.0000</b>	<b>126.7339</b>	<b>126.7339</b>	<b>5.1500e-003</b>	<b>0.0000</b>	<b>126.8624</b>	

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1936	1.7285	1.4074	2.2100e-003		0.1058	0.1058		0.0994	0.0994	0.0000	192.7852	192.7852	0.0470	0.0000	193.9593
Total	0.1936	1.7285	1.4074	2.2100e-003		0.1058	0.1058		0.0994	0.0994	0.0000	192.7852	192.7852	0.0470	0.0000	193.9593

## **Mitigated Construction Off-Site**

Vendor	0.0141	0.3624	0.0973	7.9000e-004	0.0189	2.6000e-003	0.0215	5.4600e-003	2.4900e-003	7.9500e-003	0.0000	75.4959	75.4959	3.7500e-003	0.0000	75.5895
Worker	0.0265	0.0197	0.2039	5.7000e-004	0.0579	3.8000e-004	0.0583	0.0154	3.5000e-004	0.0158	0.0000	51.2380	51.2380	1.4000e-003	0.0000	51.2729
Total	0.0406	0.3822	0.3012	1.3600e-003	0.0768	2.9800e-003	0.0797	0.0209	2.8400e-003	0.0237	0.0000	126.7339	126.7339	5.1500e-003	0.0000	126.8624

### 3.5 Building Construction - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0700	0.6331	0.5560	8.9000e-004		0.0369	0.0369		0.0347	0.0347	0.0000	76.4313	76.4313	0.0187	0.0000	76.8975
Total	0.0700	0.6331	0.5560	8.9000e-004		0.0369	0.0369		0.0347	0.0347	0.0000	76.4313	76.4313	0.0187	0.0000	76.8975

#### 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	
Vendor	4.5800e-003	0.1315	0.0350	3.1000e-004	7.6000e-003	6.5000e-004	8.2500e-003	2.2000e-003	6.2000e-004	2.8200e-003	0.0000	30.1966	30.1966	1.3800e-003	0.0000	30.2313
Worker	9.7600e-003	7.0100e-003	0.0735	2.2000e-004	0.0233	1.5000e-004	0.0234	6.2000e-003	1.4000e-004	6.3300e-003	0.0000	19.9760	19.9760	4.9000e-004	0.0000	19.9882
Total	0.0143	0.1385	0.1085	5.3000e-004	0.0309	8.0000e-004	0.0317	8.4000e-003	7.6000e-004	9.1500e-003	0.0000	50.1726	50.1726	1.8700e-003	0.0000	50.2195

## Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0700	0.6331	0.5560	8.9000e-004		0.0369	0.0369		0.0347	0.0347	0.0000	76.4312	76.4312	0.0187	0.0000	76.8974	
Total	0.0700	0.6331	0.5560	8.9000e-004		0.0369	0.0369		0.0347	0.0347	0.0000	76.4312	76.4312	0.0187	0.0000	76.8974	

## 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	4.5800e-003	0.1315	0.0350	3.1000e-004	7.6000e-003	6.5000e-004	8.2500e-003	2.2000e-003	6.2000e-004	2.8200e-003	0.0000	30.1966	30.1966	1.3800e-003	0.0000	30.2313	
Worker	9.7600e-003	7.0100e-003	0.0735	2.2000e-004	0.0233	1.5000e-004	0.0234	6.2000e-003	1.4000e-004	6.3300e-003	0.0000	19.9760	19.9760	4.9000e-004	0.0000	19.9882	
Total	0.0143	0.1385	0.1085	5.3000e-004	0.0309	8.0000e-004	0.0317	8.4000e-003	7.6000e-004	9.1500e-003	0.0000	50.1726	50.1726	1.8700e-003	0.0000	50.2195	

## 3.6 Paving - 2020

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0107	0.1062	0.1105	1.7000e-004			5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	1.4800e-003						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0121	0.1062	0.1105	1.7000e-004			5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.0000e-004	4.3000e-004	4.5000e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2243	1.2243	3.0000e-005	0.0000	1.2250	
Total	6.0000e-004	4.3000e-004	4.5000e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2243	1.2243	3.0000e-005	0.0000	1.2250	

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0107	0.1062	0.1105	1.7000e-004			5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506

Paving	1.4800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0121	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506	

## **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.0000e-004	4.3000e-004	4.5000e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2243	1.2243	3.0000e-005	0.0000	1.2250	
Total	6.0000e-004	4.3000e-004	4.5000e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2243	1.2243	3.0000e-005	0.0000	1.2250	

**3.7 Architectural Coating - 2020**

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Archit. Coating	0.8585					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	2.1800e-003	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024	
Total	0.8607	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024	

## **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.9000e-004	4.0500e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1018	1.1018	3.0000e-005	0.0000	1.1025
Total	5.4000e-004	3.9000e-004	4.0500e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1018	1.1018	3.0000e-005	0.0000	1.1025

## Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8585					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1800e-003	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024
<b>Total</b>	<b>0.8607</b>	<b>0.0152</b>	<b>0.0165</b>	<b>3.0000e-005</b>		<b>1.0000e-003</b>	<b>1.0000e-003</b>		<b>1.0000e-003</b>	<b>1.0000e-003</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>2.3024</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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.9000e-004	4.0500e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1018	1.1018	3.0000e-005	0.0000	1.1025		
Total	5.4000e-004	3.9000e-004	4.0500e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1018	1.1018	3.0000e-005	0.0000	1.1025		

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Mitigated	0.3099	1.2406	3.3463	0.0106	0.9311	9.2700e-003	0.9404	0.2493	8.6600e-003	0.2579	0.0000	966.5572	966.5572	0.0352	0.0000	967.4383	
Unmitigated	0.3099	1.2406	3.3463	0.0106	0.9311	9.2700e-003	0.9404	0.2493	8.6600e-003	0.2579	0.0000	966.5572	966.5572	0.0352	0.0000	967.4383	

### 4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated		Mitigated	
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Hotel	1,369.76	1,376.48	1000.16	2,503,957	2,503,957	2,503,957	2,503,957
Parking Lot	0.00	0.00	0.00				
Total	1,369.76	1,376.48	1,000.16	2,503,957	2,503,957	2,503,957	2,503,957

### 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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.607897	0.037434	0.184004	0.107261	0.014919	0.004991	0.012447	0.020659	0.002115	0.001554	0.005334	0.000623	0.000761
Parking Lot	0.607897	0.037434	0.184004	0.107261	0.014919	0.004991	0.012447	0.020659	0.002115	0.001554	0.005334	0.000623	0.000761

#### 5.0 Energy Detail

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	165.3263	165.3263	0.0165	3.4200e-003	166.7589	
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	165.3263	165.3263	0.0165	3.4200e-003	166.7589	
NaturalGas Mitigated	0.0389	0.3532	0.2967	2.1200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	384.5326	384.5326	7.3700e-003	7.0500e-003	386.8177	
NaturalGas Unmitigated	0.0389	0.3532	0.2967	2.1200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	384.5326	384.5326	7.3700e-003	7.0500e-003	386.8177	

#### 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	7.20587e+006	0.0389	0.3532	0.2967	2.1200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	384.5326	384.5326	7.3700e-003	7.0500e-003	386.8177	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
<b>Total</b>		<b>0.0389</b>	<b>0.3532</b>	<b>0.2967</b>	<b>2.1200e-003</b>		<b>0.0269</b>	<b>0.0269</b>		<b>0.0269</b>	<b>0.0269</b>	<b>0.0000</b>	<b>384.5326</b>	<b>384.5326</b>	<b>7.3700e-003</b>	<b>7.0500e-003</b>	<b>386.8177</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					
Hotel	7.20587e+006	0.0389	0.3532	0.2967	2.1200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	384.5326	384.5326	7.3700e-003	7.0500e-003	386.8177	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
<b>Total</b>		<b>0.0389</b>	<b>0.3532</b>	<b>0.2967</b>	<b>2.1200e-003</b>		<b>0.0269</b>	<b>0.0269</b>		<b>0.0269</b>	<b>0.0269</b>	<b>0.0000</b>	<b>384.5326</b>	<b>384.5326</b>	<b>7.3700e-003</b>	<b>7.0500e-003</b>	<b>386.8177</b>	

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.23919e+006	163.0059	0.0163	3.3700e-003	164.4184

Parking Lot	17640	2.3204	2.3000e-004	5.0000e-005	2.3405
Total		165.3263	0.0165	3.4200e-003	166.7589

## Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.23919e+006	163.0059	0.0163	3.3700e-003	164.4184
Parking Lot	17640	2.3204	2.3000e-004	5.0000e-005	2.3405
Total		165.3263	0.0165	3.4200e-003	166.7589

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7244	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.2500e-003	4.2500e-003	1.0000e-005	0.0000	4.5400e-003	
Unmitigated	0.7244	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.2500e-003	4.2500e-003	1.0000e-005	0.0000	4.5400e-003	

## 6.2 Area by SubCategory

### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.0859						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.6384						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	2.1000e-004	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2500e-003	4.2500e-003	1.0000e-005	0.0000	4.5400e-003	
<b>Total</b>	<b>0.7245</b>	<b>2.0000e-005</b>	<b>2.2000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.2500e-003</b>	<b>4.2500e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.5400e-003</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	0.0859						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.6384						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	2.1000e-004	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2500e-003	4.2500e-003	1.0000e-005	0.0000	4.5400e-003	
<b>Total</b>	<b>0.7245</b>	<b>2.0000e-005</b>	<b>2.2000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.2500e-003</b>	<b>4.2500e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.5400e-003</b>	

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.0689	0.0928	2.2300e-003	6.0535
Unmitigated	3.0689	0.0928	2.2300e-003	6.0535

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.84108 / 0.315675	3.0689	0.0928	2.2300e-003	6.0535
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>3.0689</b>	<b>0.0928</b>	<b>2.2300e-003</b>	<b>6.0535</b>

### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr		
Hotel	2.84108 / 0.315675	3.0689	0.0928	2.2300e-003 6.0535
Parking Lot	0 / 0	0.0000	0.0000	0.0000 0.0000
Total		3.0689	0.0928	2.2300e-003 6.0535

## 8.0 Waste Detail

---

### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	12.4474	0.7356	0.0000	30.8379
Unmitigated	12.4474	0.7356	0.0000	30.8379

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	61.32	12.4474	0.7356	0.0000	30.8379

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		12.4474	0.7356	0.0000	30.8379

## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	61.32	12.4474	0.7356	0.0000	30.8379
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		12.4474	0.7356	0.0000	30.8379

## 9.0 Operational Offroad

---

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

## 10.0 Stationary Equipment

---

### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

Equipment Type	Number
----------------	--------

## **11.0 Vegetation**

---

469 Piercy/Residence Inn, San Jose - Santa Clara County, Annual

## **469 Piercy/Residence Inn, San Jose**

### **Santa Clara County, Annual**

## **1.0 Project Characteristics**

---

### **1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	175.00	Room	5.83	254,100.00	0
Parking Lot	274.00	Space	2.47	109,600.00	0

### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

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

Project Characteristics - PG&E 2020 rate

Land Use -

Grading - 1,500cy soil import, 1,000cy soil export

Vehicle Trips - trip rates from traffic report

Energy Use -

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialExported	0.00	1,000.00

tblGrading	MaterialImported	0.00	1,500.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	HaulingTripNumber	313.00	312.00
tblVehicleTrips	ST_TR	8.19	12.29
tblVehicleTrips	SU_TR	5.95	8.93
tblVehicleTrips	WD_TR	8.17	12.23

## 2.0 Emissions Summary

---

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3215	3.0554	2.2395	5.0900e-003	0.2799	0.1435	0.4234	0.1170	0.1343	0.2513	0.0000	460.8733	460.8733	0.0741	0.0000	462.7260
2020	1.4875	1.2535	1.1100	2.5700e-003	0.0704	0.0568	0.1271	0.0191	0.0533	0.0724	0.0000	230.1137	230.1137	0.0343	0.0000	230.9698
Maximum	1.4875	3.0554	2.2395	5.0900e-003	0.2799	0.1435	0.4234	0.1170	0.1343	0.2513	0.0000	460.8733	460.8733	0.0741	0.0000	462.7260

#### 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					
2019	0.3215	3.0554	2.2395	5.0900e-003	0.2799	0.1435	0.4234	0.1170	0.1343	0.2513	0.0000	460.8730	460.8730	0.0741	0.0000	462.7257
2020	1.4875	1.2535	1.1100	2.5700e-003	0.0704	0.0568	0.1271	0.0191	0.0533	0.0724	0.0000	230.1135	230.1135	0.0343	0.0000	230.9697

Maximum	1.4875	3.0554	2.2395	5.0900e-003	0.2799	0.1435	0.4234	0.1170	0.1343	0.2513	0.0000	460.8730	460.8730	0.0741	0.0000	462.7257
---------	--------	--------	--------	-------------	--------	--------	--------	--------	--------	--------	--------	----------	----------	--------	--------	----------

	ROG	NOx	CO	SO2	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2019	6-30-2019	1.2391	1.2391
2	7-1-2019	9-30-2019	1.0564	1.0564
3	10-1-2019	12-31-2019	1.0642	1.0642
4	1-1-2020	3-31-2020	0.9536	0.9536
5	4-1-2020	6-30-2020	1.7769	1.7769
		Highest	1.7769	1.7769

## 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	1.1346	4.0000e-005	4.1400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.0200e-003	8.0200e-003	2.0000e-005	0.0000	8.5600e-003
Energy	0.0607	0.5519	0.4636	3.3100e-003		0.0420	0.0420		0.0420	0.0420	0.0000	860.5749	860.5749	0.0375	0.0164	866.3962
Mobile	0.4841	1.9384	5.2286	0.0165	1.4549	0.0145	1.4693	0.3895	0.0135	0.4030	0.0000	1,510.2456	1,510.2456	0.0551	0.0000	1,511.6223
Waste						0.0000	0.0000		0.0000	0.0000	19.4486	0.0000	19.4486	1.1494	0.0000	48.1830
Water						0.0000	0.0000		0.0000	0.0000	1.4084	3.3868	4.7951	0.1450	3.4900e-003	9.4586
Total	1.6795	2.4904	5.6964	0.0198	1.4549	0.0564	1.5113	0.3895	0.0555	0.4449	20.8569	2,374.2153	2,395.0722	1.3870	0.0199	2,435.6686

## 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	1.1346	4.0000e-005	4.1400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.0200e-003	8.0200e-003	2.0000e-005	0.0000	8.5600e-003	
Energy	0.0607	0.5519	0.4636	3.3100e-003		0.0420	0.0420		0.0420	0.0420	0.0000	860.5749	860.5749	0.0375	0.0164	866.3962	
Mobile	0.4841	1.9384	5.2286	0.0165	1.4549	0.0145	1.4693	0.3895	0.0135	0.4030	0.0000	1,510.2456	1,510.2456	0.0551	0.0000	1,511.6223	
Waste						0.0000	0.0000		0.0000	0.0000	19.4486	0.0000	19.4486	1.1494	0.0000	48.1830	
Water						0.0000	0.0000		0.0000	0.0000	1.4084	3.3868	4.7951	0.1450	3.4900e-003	9.4586	
<b>Total</b>	<b>1.6795</b>	<b>2.4904</b>	<b>5.6964</b>	<b>0.0198</b>	<b>1.4549</b>	<b>0.0564</b>	<b>1.5113</b>	<b>0.3895</b>	<b>0.0555</b>	<b>0.4449</b>	<b>20.8569</b>	<b>2,374.2153</b>	<b>2,395.0722</b>	<b>1.3870</b>	<b>0.0199</b>	<b>2,435.6686</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	

## 3.0 Construction Detail

---

### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	4/26/2019	5	20	
2	Site Preparation	Site Preparation	4/27/2019	5/10/2019	5	10	
3	Grading	Grading	5/11/2019	6/7/2019	5	20	
4	Building Construction	Building Construction	6/8/2019	4/24/2020	5	230	
5	Paving	Paving	4/25/2020	5/22/2020	5	20	
6	Architectural Coating	Architectural Coating	5/23/2020	6/19/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

**Acres of Grading (Grading Phase): 10**

**Acres of Paving: 2.47**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 381,150; Non-Residential Outdoor: 127,050; Striped Parking Area:**

### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
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
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	312.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	153.00	60.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### **3.1 Mitigation Measures Construction**

### **3.2 Demolition - 2019**

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672

## **Unmitigated Construction Off-Site**

Worker	5.4000e-004	4.1000e-004	4.1900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0531	1.0531	3.0000e-005	0.0000	1.0538
Total	5.4000e-004	4.1000e-004	4.1900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0531	1.0531	3.0000e-005	0.0000	1.0538

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.0351	0.3578	0.2206	3.9000e-004			0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	0.0351	0.3578	0.2206	3.9000e-004			0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.1000e-004	4.1900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0531	1.0531	3.0000e-005	0.0000	1.0538
Total	5.4000e-004	4.1000e-004	4.1900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0531	1.0531	3.0000e-005	0.0000	1.0538

### 3.3 Site Preparation - 2019

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004	0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	0.0000	17.2195
<b>Total</b>	<b>0.0217</b>	<b>0.2279</b>	<b>0.1103</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>0.0120</b>	<b>0.1023</b>	<b>0.0497</b>	<b>0.0110</b>	<b>0.0607</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.3000e-004	2.4000e-004	2.5100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6319	0.6319	2.0000e-005	0.0000	0.6323	
Total	3.3000e-004	2.4000e-004	2.5100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6319	0.6319	2.0000e-005	0.0000	0.6323	

## **Mitigated Construction On-Site**

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

Category	tons/yr												MT/yr						
	Fugitive Dust				0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	0.0000	17.2195		
Total	0.0217	0.2279	0.1103	1.9000e-004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e-003	0.0000	0.0000	17.2195		

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.3000e-004	2.4000e-004	2.5100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6319	0.6319	2.0000e-005	0.0000	0.6323	
Total	3.3000e-004	2.4000e-004	2.5100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6319	0.6319	2.0000e-005	0.0000	0.6323	

### **3.4 Grading - 2019**

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					0.0657	0.0000	0.0657	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6423	26.6423	8.4300e-003	0.0000	26.8530	

Total	0.0258	0.2835	0.1629	3.0000e-004	0.0657	0.0140	0.0796	0.0337	0.0129	0.0466	0.0000	26.6423	26.6423	8.4300e-003	0.0000	26.8530
-------	--------	--------	--------	-------------	--------	--------	--------	--------	--------	--------	--------	---------	---------	-------------	--------	---------

### 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	1.4200e-003	0.0486	9.5900e-003	1.2000e-004	2.6400e-003	1.9000e-004	2.8300e-003	7.3000e-004	1.8000e-004	9.1000e-004	0.0000	12.0221	12.0221	5.6000e-004	0.0000	12.0361
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.1000e-004	4.1900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0531	1.0531	3.0000e-005	0.0000	1.0538
<b>Total</b>	<b>1.9600e-003</b>	<b>0.0490</b>	<b>0.0138</b>	<b>1.3000e-004</b>	<b>3.8300e-003</b>	<b>2.0000e-004</b>	<b>4.0300e-003</b>	<b>1.0500e-003</b>	<b>1.9000e-004</b>	<b>1.2300e-003</b>	<b>0.0000</b>	<b>13.0752</b>	<b>13.0752</b>	<b>5.9000e-004</b>	<b>0.0000</b>	<b>13.0900</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Fugitive Dust					0.0657	0.0000	0.0657	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6422	26.6422	8.4300e-003	0.0000	26.8530
<b>Total</b>	<b>0.0258</b>	<b>0.2835</b>	<b>0.1629</b>	<b>3.0000e-004</b>	<b>0.0657</b>	<b>0.0140</b>	<b>0.0796</b>	<b>0.0337</b>	<b>0.0129</b>	<b>0.0466</b>	<b>0.0000</b>	<b>26.6422</b>	<b>26.6422</b>	<b>8.4300e-003</b>	<b>0.0000</b>	<b>26.8530</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	1.4200e-003	0.0486	9.5900e-003	1.2000e-004	2.6400e-003	1.9000e-004	2.8300e-003	7.3000e-004	1.8000e-004	9.1000e-004	0.0000	12.0221	12.0221	5.6000e-004	0.0000	12.0361	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.4000e-004	4.1000e-004	4.1900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0531	1.0531	3.0000e-005	0.0000	1.0538	
Total	1.9600e-003	0.0490	0.0138	1.3000e-004	3.8300e-003	2.0000e-004	4.0300e-003	1.0500e-003	1.9000e-004	1.2300e-003	0.0000	13.0752	13.0752	5.9000e-004	0.0000	13.0900	

### 3.5 Building Construction - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1736	1.5493	1.2615	1.9800e-003			0.0948	0.0948		0.0891	0.0891	0.0000	172.8016	172.8016	0.0421	0.0000	173.8540
Total	0.1736	1.5493	1.2615	1.9800e-003			0.0948	0.0948		0.0891	0.0891	0.0000	172.8016	172.8016	0.0421	0.0000	173.8540

#### 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	0.0000
Vendor	0.0216	0.5569	0.1495	1.2100e-003	0.0290	4.0000e-003	0.0330	8.3900e-003	3.8300e-003	0.0122	0.0000	116.0059	116.0059	5.7500e-003	0.0000	116.1497	
Worker	0.0408	0.0304	0.3142	8.7000e-004	0.0892	5.9000e-004	0.0898	0.0237	5.4000e-004	0.0243	0.0000	78.9528	78.9528	2.1500e-003	0.0000	79.0065	
Total	0.0625	0.5873	0.4636	2.0800e-003	0.1182	4.5900e-003	0.1228	0.0321	4.3700e-003	0.0365	0.0000	194.9586	194.9586	7.9000e-003	0.0000	195.1562	

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.1736	1.5493	1.2615	1.9800e-003			0.0948	0.0948		0.0891	0.0891	0.0000	172.8014	172.8014	0.0421	0.0000	173.8538
Total	0.1736	1.5493	1.2615	1.9800e-003			0.0948	0.0948		0.0891	0.0891	0.0000	172.8014	172.8014	0.0421	0.0000	173.8538

### 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	0.0216	0.5569	0.1495	1.2100e-003	0.0290	4.0000e-003	0.0330	8.3900e-003	3.8300e-003	0.0122	0.0000	116.0059	116.0059	5.7500e-003	0.0000	116.1497
Worker	0.0408	0.0304	0.3142	8.7000e-004	0.0892	5.9000e-004	0.0898	0.0237	5.4000e-004	0.0243	0.0000	78.9528	78.9528	2.1500e-003	0.0000	79.0065

Total	0.0625	0.5873	0.4636	2.0800e-003	0.1182	4.5900e-003	0.1228	0.0321	4.3700e-003	0.0365	0.0000	194.9586	194.9586	7.9000e-003	0.0000	195.1562
-------	--------	--------	--------	-------------	--------	-------------	--------	--------	-------------	--------	--------	----------	----------	-------------	--------	----------

### 3.5 Building Construction - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0880	0.7962	0.6992	1.1200e-003		0.0464	0.0464		0.0436	0.0436	0.0000	96.1181	96.1181	0.0235	0.0000	96.7044
Total	0.0880	0.7962	0.6992	1.1200e-003		0.0464	0.0464		0.0436	0.0436	0.0000	96.1181	96.1181	0.0235	0.0000	96.7044

#### 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	9.8700e-003	0.2835	0.0755	6.8000e-004	0.0164	1.4000e-003	0.0178	4.7400e-003	1.3400e-003	6.0800e-003	0.0000	65.0993	65.0993	2.9900e-003	0.0000	65.1739
Worker	0.0211	0.0152	0.1589	4.8000e-004	0.0504	3.3000e-004	0.0507	0.0134	3.0000e-004	0.0137	0.0000	43.1861	43.1861	1.0600e-003	0.0000	43.2126
Total	0.0310	0.2987	0.2344	1.1600e-003	0.0667	1.7300e-003	0.0685	0.0181	1.6400e-003	0.0198	0.0000	108.2853	108.2853	4.0500e-003	0.0000	108.3865

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0880	0.7962	0.6992	1.1200e-003		0.0464	0.0464		0.0436	0.0436	0.0000	96.1180	96.1180	0.0235	0.0000	96.7043	
Total	0.0880	0.7962	0.6992	1.1200e-003		0.0464	0.0464		0.0436	0.0436	0.0000	96.1180	96.1180	0.0235	0.0000	96.7043	

### 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	9.8700e-003	0.2835	0.0755	6.8000e-004	0.0164	1.4000e-003	0.0178	4.7400e-003	1.3400e-003	6.0800e-003	0.0000	65.0993	65.0993	2.9900e-003	0.0000	65.1739	
Worker	0.0211	0.0152	0.1589	4.8000e-004	0.0504	3.3000e-004	0.0507	0.0134	3.0000e-004	0.0137	0.0000	43.1861	43.1861	1.0600e-003	0.0000	43.2126	
Total	0.0310	0.2987	0.2344	1.1600e-003	0.0667	1.7300e-003	0.0685	0.0181	1.6400e-003	0.0198	0.0000	108.2853	108.2853	4.0500e-003	0.0000	108.3865	

### **3.6 Paving - 2020**

#### Unmitigated Construction On-Site

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

Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	3.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0168	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	3.6000e-004	3.7500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0202	1.0202	3.0000e-005	0.0000	1.0209
Total	5.0000e-004	3.6000e-004	3.7500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0202	1.0202	3.0000e-005	0.0000	1.0209

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	3.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0168	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901

## Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr												MT/yr				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.0000e-004	3.6000e-004	3.7500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0202	1.0202	3.0000e-005	0.0000	1.0209	
<b>Total</b>	<b>5.0000e-004</b>	<b>3.6000e-004</b>	<b>3.7500e-003</b>	<b>1.0000e-005</b>	<b>1.1900e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.0202</b>	<b>1.0202</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.0209</b>	

## 3.7 Architectural Coating - 2020

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3478						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
<b>Total</b>	<b>1.3503</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.0300e-003	7.4000e-004	7.7600e-003	2.0000e-005	2.4600e-003	2.0000e-005	2.4700e-003	6.5000e-004	1.0000e-005	6.7000e-004	0.0000	2.1085	2.1085	5.0000e-005	0.0000	2.1098	
<b>Total</b>	<b>1.0300e-003</b>	<b>7.4000e-004</b>	<b>7.7600e-003</b>	<b>2.0000e-005</b>	<b>2.4600e-003</b>	<b>2.0000e-005</b>	<b>2.4700e-003</b>	<b>6.5000e-004</b>	<b>1.0000e-005</b>	<b>6.7000e-004</b>	<b>0.0000</b>	<b>2.1085</b>	<b>2.1085</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>2.1098</b>	

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3478					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
<b>Total</b>	<b>1.3503</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>

## **Mitigated Construction Off-Site**

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	7.4000e-004	7.7600e-003	2.0000e-005	2.4600e-003	2.0000e-005	2.4700e-003	6.5000e-004	1.0000e-005	6.7000e-004	0.0000	2.1085	2.1085	5.0000e-005	0.0000	2.1098	
Total	1.0300e-003	7.4000e-004	7.7600e-003	2.0000e-005	2.4600e-003	2.0000e-005	2.4700e-003	6.5000e-004	1.0000e-005	6.7000e-004	0.0000	2.1085	2.1085	5.0000e-005	0.0000	2.1098	

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4841	1.9384	5.2286	0.0165	1.4549	0.0145	1.4693	0.3895	0.0135	0.4030	0.0000	1,510.2456	1,510.2456	0.0551	0.0000	1,511.6223
Unmitigated	0.4841	1.9384	5.2286	0.0165	1.4549	0.0145	1.4693	0.3895	0.0135	0.4030	0.0000	1,510.2456	1,510.2456	0.0551	0.0000	1,511.6223

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Hotel	2,140.25	2,150.75	1562.75	3,912,432		3,912,432	
Parking Lot	0.00	0.00	0.00				
Total	2,140.25	2,150.75	1,562.75	3,912,432		3,912,432	

### 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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
-------------	------	------	------	------	------	------	---	---	---

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.607897	0.037434	0.184004	0.107261	0.014919	0.004991	0.012447	0.020659	0.002115	0.001554	0.005334	0.000623	0.000761
Parking Lot	0.607897	0.037434	0.184004	0.107261	0.014919	0.004991	0.012447	0.020659	0.002115	0.001554	0.005334	0.000623	0.000761

#### 5.0 Energy Detail

---

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	259.7427	259.7427	0.0260	5.3700e-003	261.9935
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	259.7427	259.7427	0.0260	5.3700e-003	261.9935
NaturalGas Mitigated	0.0607	0.5519	0.4636	3.3100e-003			0.0420	0.0420		0.0420	0.0420	600.8322	600.8322	0.0115	0.0110	604.4027
NaturalGas Unmitigated	0.0607	0.5519	0.4636	3.3100e-003			0.0420	0.0420		0.0420	0.0420	600.8322	600.8322	0.0115	0.0110	604.4027

#### 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	1.12592e+007	0.0607	0.5519	0.4636	3.3100e-003		0.0420	0.0420		0.0420	0.0420	0.0000	600.8322	600.8322	0.0115	0.0110	604.4027	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total		<b>0.0607</b>	<b>0.5519</b>	<b>0.4636</b>	<b>3.3100e-003</b>		<b>0.0420</b>	<b>0.0420</b>		<b>0.0420</b>	<b>0.0420</b>	<b>0.0000</b>	<b>600.8322</b>	<b>600.8322</b>	<b>0.0115</b>	<b>0.0110</b>	<b>604.4027</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						
Hotel	1.12592e+007	0.0607	0.5519	0.4636	3.3100e-003		0.0420	0.0420		0.0420	0.0420	0.0000	600.8322	600.8322	0.0115	0.0110	604.4027	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total		<b>0.0607</b>	<b>0.5519</b>	<b>0.4636</b>	<b>3.3100e-003</b>		<b>0.0420</b>	<b>0.0420</b>		<b>0.0420</b>	<b>0.0420</b>	<b>0.0000</b>	<b>600.8322</b>	<b>600.8322</b>	<b>0.0115</b>	<b>0.0110</b>	<b>604.4027</b>	

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.93624e+006	254.6967	0.0255	5.2700e-003	256.9038
Parking Lot	38360	5.0459	5.0000e-004	1.0000e-004	5.0897
Total		<b>259.7427</b>	<b>0.0260</b>	<b>5.3700e-003</b>	<b>261.9935</b>

## Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.93624e+006	254.6967	0.0255	5.2700e-003	256.9038
Parking Lot	38360	5.0459	5.0000e-004	1.0000e-004	5.0897
Total		259.7427	0.0260	5.3700e-003	261.9935

## 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	1.1346	4.0000e-005	4.1400e-003	0.0000			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.0200e-003	8.0200e-003	2.0000e-005	0.0000	8.5600e-003
Unmitigated	1.1346	4.0000e-005	4.1400e-003	0.0000			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.0200e-003	8.0200e-003	2.0000e-005	0.0000	8.5600e-003

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.1348						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9995						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.9000e-004	4.0000e-005	4.1400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.0200e-003	8.0200e-003	2.0000e-005	0.0000	8.5600e-003	
<b>Total</b>	<b>1.1346</b>	<b>4.0000e-005</b>	<b>4.1400e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>8.0200e-003</b>	<b>8.0200e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>8.5600e-003</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	0.1348						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9995						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.9000e-004	4.0000e-005	4.1400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.0200e-003	8.0200e-003	2.0000e-005	0.0000	8.5600e-003	
<b>Total</b>	<b>1.1346</b>	<b>4.0000e-005</b>	<b>4.1400e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>8.0200e-003</b>	<b>8.0200e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>8.5600e-003</b>	

## 7.0 Water Detail

---

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.7951	0.1450	3.4900e-003	9.4586
Unmitigated	4.7951	0.1450	3.4900e-003	9.4586

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	4.43918 / 0.493243	4.7951	0.1450	3.4900e-003	9.4586
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>4.7951</b>	<b>0.1450</b>	<b>3.4900e-003</b>	<b>9.4586</b>

### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr		
Hotel	4.43918 / 0.493243	4.7951	0.1450	3.4900e-003 9.4586
Parking Lot	0 / 0	0.0000	0.0000	0.0000 0.0000
Total		4.7951	0.1450	3.4900e-003 9.4586

## 8.0 Waste Detail

---

### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.4486	1.1494	0.0000	48.1830
Unmitigated	19.4486	1.1494	0.0000	48.1830

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	95.81	19.4486	1.1494	0.0000	48.1830

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		19.4486	1.1494	0.0000	48.1830

## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		19.4486	1.1494	0.0000	48.1830

## 9.0 Operational Offroad

---

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

## 10.0 Stationary Equipment

---

### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

Equipment Type	Number
----------------	--------

## **11.0 Vegetation**

---