Appendix B

Technical Appendix for Air Quality and Greenhouse Gas

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Technical Appendix for Air Quality and Greenhouse Gas Emissions

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Appendix C-1-Air Quality and Greenhouse Gas Emissions Methodology

AIR QUALITY AND GREENHOUSE GAS EMISSIONS METHODLOGY

2143 Violet Street Project

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April 2020

2143 Violet Street Project

Air Quality and Greenhouse Gas Emissions Methodology

1. Introduction

Eyestone Environmental has been retained to conduct a comprehensive greenhouse gas (GHG) and criteria air pollutant emissions assessment for the Sunset Gower Studios Preservation and Enhancement Plan (the "Project"). Emissions during both construction and operation of the Project were quantified. This assessment describes the methodology used to estimate the GHG and air pollutant emissions from existing and Project conditions and describes the methodology used to quantify GHG and air pollutant emission reductions from project design features and mitigation measures.

2. Air Pollutant and Greenhouse Gas Emissions Methodology

The Project would result in direct emissions of criteria pollutants and direct and indirect GHG emissions generated by different types of emissions sources, including:[1]

- Direct Emissions:
  - Construction: emissions associated with demolition of existing uses, shoring, excavation, grading, and construction-related equipment and vehicular activity;
  - Area source: emissions associated with consumer products, architectural coatings, and landscape equipment;
  - Energy source (building operations): emissions associated with space heating and cooling, and water heating;

[1] *Direct sources of emissions include Project-related vehicular trips and onsite combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel). Whereas, indirect sources of emissions include offsite emissions associated with purchased electricity and embodied energy (e.g., energy used to convey, treat, and distribute water and wastewater)*

  - Mobile source: emissions associated with vehicles accessing the project site; and
  - Stationary source: emissions associated with stationary equipment (e.g., emergency generators).

- Indirect Emissions:
  - Energy source (building operations): emissions associated with energy consumption, and lighting;
  - Solid Waste: emissions associated with the decomposition of the waste, which generates methane based on the total amount of degradable organic carbon; and
  - Water/Wastewater: emissions associated with energy used to pump, convey, deliver, and treat water.

a. Emission Inventories

Project-related construction and operation emissions were calculated using SCAQMD's recommended California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered by the SCAQMD to be an accurate and comprehensive tool for quantifying criteria pollutant and GHG impacts from land use projects throughout California.[2]

CalEEMod utilizes widely accepted models for emission estimates combined with appropriate default data that can be used if site-specific information is not available. These models and default estimates use sources such as the USEPA AP-42 emission factors, CARB's on-road emission model (EMission FACtor model (EMFAC)) and off-road equipment emission model (Off-road Emissions Inventory Program model (OFFROAD)).

[2] *See www.caleemod.com.*

(1) Construction

Construction activities would generate emissions from off-road equipment usage, on-road vehicle travel (truck hauling, vendor deliveries, and workers commuting), architectural coating, and paving. Each of these source types is discussed in more detail below. The Project's construction emissions were calculated using the SCAQMD recommended CalEEMod (Version 2016.3.2). Please refer to CalEEMod construction output files for a complete listing of construction details modeled. CalEEMod default values were used for equipment and vehicle emission factors, equipment load factors and vehicle trip lengths. It should be noted that the maximum daily emissions were predicted values for the worst-case day and do not represent the emissions that would occur for every day of Project construction. The maximum daily emissions were compared to the SCAQMD daily regional numeric indicators. Annual emissions were calculated based on the total number of hours each piece of equipment was used and the total number of vehicular trips (i.e., worker, vendor, and haul) over the duration of construction. In accordance with the SCAQMD's guidance, GHG emissions from construction were amortized over the lifetime of the Project. The SCAQMD defines the lifetime of a project as 30 years.[3] Therefore, total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate comparable to operational emissions.

(a) Emissions from Construction Equipment

The emission calculations associated with construction equipment are from off-road equipment engine use based on the equipment list and phase length. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel. Construction equipment emissions vary with engine model years in which newer equipment will emit fewer pollutants. As a conservative assumption, the CalEEMod model uses an emission rate for equipment which represents an average model year for available equipment within the Air Basin. CalEEMod calculates the exhaust emissions based on CARB OFFROAD methodology using the equation presented below.

Construction Off-Road Equipment:

$$\text{Emissions Diesel [lbs]} = \left(\sum_i \left(EF_i \times Pop_i \times AvgHP_i \times Load_i \times Activity_i \right.\right.$$

Where: EF_i = Emission factor from OFFROAD (lbs/hr)

Pop_i = Population (quantity of same equipment)

[3] *SCAQMD, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, 2008.*

$AvgHP_i$ = Maximum rated average horsepower (hp)

$Load_i$ = Load Factor (dimensionless)

$Activity_i$ = Hours of operation (hours)

i = Summation index

Fugitive dust emissions from use of off-road equipment were also calculated using CalEEMod based on the types of equipment used during grading activities and based on the amount of import/export from loading or unloading dirt into haul trucks. These methods have been adapted from USEPA's AP-42 method for Western Coal Mining. As recommended by SCAQMD, the fugitive dust emissions from the grading phase are calculated using the methodology described in USEPA AP-42. PM_{10} and $PM_{2.5}$ emissions from fugitive dust will be controlled by watering the construction site three times a day consistent with SCAQMD Rule 403 and were estimated to be reduced by 61 percent.

(b) Emissions from On-Road Trips

Construction generates on-road vehicle exhaust, evaporative, and dust emissions from personal vehicles for worker commuting, vendor deliveries, and trucks for soil and material hauling. These emissions are based on the number of trips and VMT along with emission factors from EMFAC. The emissions from mobile sources were calculated with the trip rates, trip lengths and emission factors for running from EMFAC as follows:

Construction On-Road Equipment:

Emissions pollutant (lbs) = VMT * EF running, pollutant

Where: VMT = vehicle miles traveled (miles)

EF running,pollutant = emission factor for running emissions (lbs/VMT)

Evaporative emissions, starting and idling emissions in CalEEMod were calculated by multiplying the number of trips times the respective emission factor for each pollutant. Consistent with Mitigation Measure AIR-MM-1, off-road equipment would meet Tier 4 off-road emissions standards, where feasible, and the emission reduction was calculated within CalEEMod.

(c) Emissions from Architectural Coating

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings. CalEEMod calculates the VOC evaporative emissions from application of residential and non-residential surface coatings using the following equation:

Construction Architectural Coating Emissions:

Emissions Architectural Coatings (lbs) $=EF_{AC} \times F * A_{paint}$

Where: EF_{AC} = Emission Factor (lb/sf)

A_{paint} = Building Surface Area (sf)

The CalEEMod tool assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage. All of the land use information provided by a metric other than square footage erewill be converted to square footage using the default conversions or user defined equivalence.

F = fraction of surface area [%].

The default values based on SCAQMD methods used in their coating rules are 75 percent for the interior surfaces and 25 percent for the exterior shell. Parking areas are based on 6-percent coverage.

The emission factor (EF) is based on the VOC content of the surface coatings and is calculated estimated using the equation below:

$EF_{AC} = C_{VOC}/454(g/lb) \times 3.785(L/gal)/180*sf)$

Where: EF = emission factor (lb/sf)

C = VOC content (g/L or gram per liter)

The emission factors for coating categories were calculated using the equation above based on default VOC content from provided by the air districts or CARB's statewide limits in CalEEMod. Architectural coating VOC emission factors are also consistent with SCAQMD Rule 1113 as discussed above.

(d) Emissions from Paving

CalEEMod estimates VOC off-gassing emissions associated with asphalt paving of parking lots using the following equation:

$Emissions_{AP}$ (lbs) $= EF_{AP} \times A_{parking}$

Where: EF = emission factor (lb/acre)

A = area of the parking lot (acre)

Note: The Sacramento Metropolitan Air Quality Management District (SMAQMD) default emission factor is 2.62 lb/acre.

(2) Operation

Similar to construction, the SCAQMD-recommended CalEEMod was used to calculate potential emissions generated by the Project, including area source, energy sources (electricity and natural gas), mobile source, stationary sources (emergency generator), solid waste generation and disposal, and water usage/wastewater generation.

(3) Area Source Emissions

Area source emissions were calculated using the CalEEMod emissions inventory model, which includes consumer products, architectural coatings, and landscape maintenance equipment. Pollutant emissions generated by the Project were calculated using CalEEMod defaults, based upon the land uses that will be included in each project.

Consumer products are chemically formulated products used by household and institutional consumers, including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. SCAQMD did an evaluation of consumer product use compared to the total square footage of buildings using data from CARB consumer product Emission Inventory. To calculate the VOC emissions from consumer product use, the following equation was used in CalEEMod:

Emissions Consumer Products (lbs) = EF_{CP} x Building Area

Where:

EF_{CP} = pounds of VOC per building square foot

The factor is 1.98×10^{-5} lbs/sf for SCAQMD areas.

Building Area = the total square footage of all buildings including residential square footage

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers. The operational emission methodology from architecture coating is the same as the construction methodology discussed above. All land

use buildings are assumed to be repainted at a rate of 10 percent of area per year. This is based on the assumptions used by SCAQMD.

The combustion of fossil fuels to operate landscape equipment such as lawnmowers and trimmers, results in pollutant emissions. The emissions occur on-site and are considered a direct source of pollutant emissions. The emissions for landscaping equipment are based on the size of the land uses, the pollutant emission factors for fuel combustion. Pollutant emissions from landscaping equipment are generally calculated in CalEEMod as follows:

Landscaping Equipment:

Landscaping Equipment Emissions [lbs] = (Σ_i (Units × EF_{LE} × A_{LE})$_i$)

Where: Units = Number of land use units (same land use type) [1,000 sf]

EF_{LE} = Emission factor [grams (g)/1,000 sfday]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

(4) Energy Emissions (Electricity and Natural Gas)

Pollutant emissions are emitted as a result of activities in buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits pollutant emissions directly into the atmosphere; when this occurs in a building, it is a direct emission source associated with that building. Pollutant emissions are also emitted during the generation of electricity from fossil fuels. When electricity is used in a building, the electricity generation typically takes place off-site at the power plant; electricity use in a building generally causes emissions in an indirect manner.

Energy demand emissions were calculated using the CalEEMod emissions inventory model. Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. CalEEMod calculates energy use from systems covered by Title 24 Building Energy Efficiency Standards (e.g., heating, ventilation, and air conditioning [HVAC] system, water heating system, and lighting system); energy use from lighting; and energy use from office equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting.

CalEEMod energy demand is based on the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) study.[4] The data is specific for climate zones and, therefore, Zone 11 was selected for the Project Site based on the ZIP Code tool. The 2016 standards are included in default parameters provided in CalEEMod. Therefore, a conservative 10 percent reduction was applied to the default CalEEMod parameters to account for the more stringent 2019 Title 24 standards.

(a) Electricity

Because power plants are existing stationary sources permitted by air districts and/or the USEPA, criteria pollutant emissions are generally associated with the power plants themselves, and not individual buildings or electricity users. Additionally, criteria pollutant emissions from power plants are subject to local, state, and federal control measures, which can be considered to be the maximum feasible level of mitigation for stack emissions. In contrast, GHG emissions from power plants are not subject to stationary source permitting requirements to the same degree as criteria pollutants. As such, GHGs emitted by power plants may be indirectly attributed to individual buildings and electricity users, who have the greatest ability to decrease usage by applying mitigation measures to individual electricity "end uses." CalEEMod therefore calculates GHG emissions (but not criteria pollutant emissions) from regional power plants associated with building electricity use.

Emissions associated with electricity demand are based on the size of the residential, commercial and retail land uses, the electrical demand factors for the land uses, the emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. Annual electricity GHG emissions in units of $MTCO_2e$ are calculated as follows:

[4] *CEC, Commercial End-Use Survey, March 2006.*

Electricity:

Annual Emissions [$MTCO_2e$] = (Σ_i (Units × D_E × EF_E × GWP)$_i$) ÷ 2,204.62

Where: Units = Number of land use units (same land use type) [1,000 sf]

D_E = Electrical demand factor [megawatt-hour (MWh)/1,000 sf/yr]

EF_E = GHG emission factor [pounds per megawatt-hour (MWh)]

GWP = Global warming potential [CO_2 = 1, CH_4 = 21, N_2O = 310]

2,204.62 = Conversion factor [pounds/MT]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

GHG emissions from electricity use are directly dependent on the electricity utility provider. The Los Angeles Department of Water and Power (LADWP) provides electric service to the Project Site. Thus, GHG intensity factors for LADWP were selected in CalEEMod. Intensity factors for GHGs due to electrical generation to serve the electrical demands of the existing condition were obtained from the LADWP 2017 Power Integrated Resource Plan, which provides a CO_2 intensity of 960 pounds of CO_2 per MWh for 2018. By 2030, at least 50 percent of electricity shall be obtained from renewable sources. The 2016 Power Integrated Resource Plan estimates that the LADWP CO2 intensity would be 500 pounds of CO_2 per MWh by Year 2026.[5] As year-by-year data is currently not available, the CO_2 intensity factor for the Project buildout was determined based on straight line interpolation based on current and Year 2028 data points (615 pounds of CO_2 per MWh for Year 2024).

(b) Natural Gas

The direct source emissions associated with natural gas combustion are based on the size of the land uses and the natural gas combustion factors for the land uses in units of million British thermal units (MMBtu). Natural gas emissions are calculated in CalEEMod as follows:

[5] *2016 Final Power Integrated Resource Plan, Figure 4-7. LADWP. December 2016.*

Natural Gas:

Natural Gas Emissions (lbs) = (Σ_i (Units × D_{NG} × EF_{NG})$_I$)

Where: Units = Number of land use units (same land use type) [1,000 sf]

D_{NG} = Natural Gas combustion factor [MMBtu/1,000 sf]

EF_{NG} = Natural Gas combustion factor [pounds/MMBtu]

I = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

(5) Mobile Source Emissions

Mobile-source emissions were calculated using the CalEEMod emissions inventory model. CalEEMod calculates the emissions associated with on-road mobile sources associated with residents, employees, visitors, and delivery vehicles visiting the Project Site based on the number of daily trips generated and vehicle miles traveled (VMT).

Previously, trip generation for land uses was calculated based on survey data collected by the Institute of Transportation Engineers (ITE). However, these ITE trip generation rates were based on data collected at suburban, single-use, free standing sites, which may not be representative of urban mixed-use environments. Beginning in 2019, the USEPA has sponsored a study to collect travel survey data from mixed-use developments in order provide a more representative trip generation rate for multi-use sites. Results of the USEPA survey indicate that trip generation and VMT are affected by factors such as resident and job density, availability of transit, and accessibility of biking and walking paths. Based on these factors, the USEPA has developed equations known as the EPA Mixed-Use Development (MXD) model to calculate trip reductions for multi-use developments.[6] The LADOT VMT Calculator incorporates the USEPA MXD model and accounts for project features such as increased density and proximity to transit, which would reduce VMT and associated fuel usage in comparison to free-standing sites. The VMT calculated within the LADOT VMT Calculator was input into CalEEMod and the modeling was also conducted using the Los Angeles County vehicle fleet mix for all vehicle types as provided in EMFAC2014.

[6] *Environmental Protection Agency, Mixed-Use Trip Generation Model. www.epa.gov/smartgrowth/mixed-use-trip-generation-model, accessed on December 16, 2019.*

Mobile source emissions were generally calculated in CalEEMod as follows:

Mobile:

Mobile Emissions [lbs] = (Σ_i (Units × ADT x D_{TRIP} × EF_i)

Where: Units = Number of vehicles (same vehicle model year and class)

ADT = Average daily trip rate [trips/day]

D_{TRIP} = Trip distance [miles/trip]

EF = Pollutant emission factor [pounds per mile]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

Compliance with City EV charging requirements would require 30 percent of the total code-required parking spaces be capable of supporting future electric vehicle supply equipment (EVSE) and 10 percent of the total code-required parking spaces with EV charging stations and/or outlets for plugin. Implementation of these measures would reduce the number of trips associated with fossil-fueled vehicles by providing 10 percent of the total code-required parking spaces with EV charging stations and/or outlets for plugin. The estimated emission reduction accounts for each mile driven in an electric vehicle as compared to the default emission factor calculated by CalEEMod® in the mobile emissions inventory. To ensure that the calculated Project benefit is in only the incremental increase in EV usage beyond what is already anticipated, the emission factor and emissions inventory incorporates the existing EV fleet penetration rates included in EMFAC2014. This ensures that the VMT reduction benefits of the Project EVs do not double count the benefit of the existing EVs.

Charging stations/plugins would be available to both residential and commercial uses 24 hours per day. However, the analysis conservatively only calculated the residential charging of vehicles. It was assumed that the charging stations/plugins for residential uses would be fully utilized which is supported by the projected number of electric vehicles in the future.[7] Please refer to Appendix B, Greenhouse Gas Worksheets and Modeling Runs, for calculation of these reductions in GHG emissions.

[7] *Bloomberg New Energy Finance projects that electric vehicles will represent 35 percent of global new car sales by 2040 (https://about.bnef.com/blog/electric-vehicles-to-be-35-of-global-new-car-sales-by-2040/).*

(6) Stationary Source (Emergency Generator Emissions)

Emissions of GHGs associated with use of emergency generators were calculated using CalEEMod, in which emission factors are based on Table 3.4-1 (Gaseous Emission Factors for Large Stationary Diesel Engines) from EPA's AP-42: Compilation of Air Pollutant Emission Factors. The emissions are based on the horsepower rating of the diesel generator and the number of hours operated per year for testing purposes. Annual emergency generator GHG emissions in units of $MTCO_2e$ were calculated as follows:

Emergency Generator:

Emissions [lbs] = (Total HP x LF x HR × EF)

Where: Total HP = Total horsepower of emergency generators (Hp)
LF = Load Factor (CalEEMod default of 0.73)
HR = Hours Operated per Year
EF = AP-42 Emission Factor of 1.16 lb/hp-hr)

(7) Solid Waste Emissions

The generation of municipal solid waste (MSW) from day-to-day operational activities generally consists of product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, plastic, and other items routinely disposed of in trash bins. A portion of the MSW is diverted to waste recycling and reclamation facilities. Waste that is not diverted is usually sent to local landfills for disposal. MSW that is disposed in landfills results in GHG emissions of CO_2 and CH_4 from the decomposition of the waste that occurs over the span of many years.

Emissions of GHGs associated with solid waste disposal were calculated using the CalEEMod emissions inventory model. The emissions are based on the size of the retail and restaurant land uses, the waste disposal rate for the land uses, the waste diversion rate, the GHG emission factors for solid waste decomposition, and the GWP values for the GHGs emitted. Annual waste disposal GHG emissions in units of $MTCO_2e$ were calculated in CalEEMod as follows:

Solid Waste:

Annual Emissions [$MTCO_2e$] = (Σ_i (Units × D_{MSW} × EF_{MSW} × GWP)$_i$) ÷ 1.1023

Where: Units = Number of land use units (same land use type) [1,000 sf]

D_{MSW} = Waste disposal rate [tons/1,000 sf/yr]

EF_{MSW} = GHG emission factor [tons/ton waste]

GWP = Global warming potential [CO_2 = 1, CH_4 = 21, N_2O = 310]

1.1023 = Conversion factor [tons/MT]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

CalEEMod allows the input of several variables to quantify solid waste emissions. The model requires the amount of waste disposed, which is the product of the waste disposal rate times the land use units. CalEEMod default annaual solid waste disposal rates used. The GHG emission factors, particularly for CH_4, depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. The default values, as provided in CalEEMod, for landfill gas capture (e.g., no capture, flaring, energy recovery), which are statewide averages, were used in this assessment. The Project includes a 50 percent diversion rate as required by the City of Los Angeles.

(8) Water Usage and Wastewater Generation Emissions

GHG emissions are related to the energy used to convey, treat, and distribute water and wastewater. Thus, these emissions are generally indirect emissions from the production of electricity to power these systems. Three processes are necessary to supply potable water and include: (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, energy is used as the wastewater is treated and reused as reclaimed water.

Emissions related to water usage and wastewater generation were calculated using the CalEEMod emissions inventory model. The emissions are based on the size of the land uses, the water demand factors, the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. CalEEMod default

annual water demand and wastewater rates were used. GHG emissions due to electricity are calculated in CalEEMod as follows for indoor and outdoor water demand:

Water Supply, Treatment, and Distribution; Wastewater Treatment (electricity):

$$\text{Annual Emissions } [MTCO_2e] = (\Sigma_i \ (\text{Units} \times D_W \times (EI_W \div 1{,}000) \times EF_W \times GWP)_i \ ) \div 2{,}204.62$$

Where: Units = Number of land use units (same land use type) [1,000 sf]

D_W = Water demand factor [million gallons (Mgal)/1,000 sf/yr]

EI_W = Electricity intensity factor [kilowatt-hours (kWh)/Mgal]

1,000 = Conversion factor [kWh/MWh]

EF_W = GHG emission factor [pounds/MWh]

GWP = Global warming potential [CO_2 = 1, CH_4 = 21, N_2O = 310]

2,205 = Conversion factor [pounds/MT]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

CalEEMod provides options to account for the use of water saving features such as the use of low-flow water fixtures (e.g., low-flow faucets, low-flow toilets). The same electricity GHG emissions factors discussed above were used for water and wastewater energy usage. In addition, the calculation of Project GHG emissions from water/wastewater usage accounts for a 20 percent reduction in water/wastewater emissions with implementation of Project Design Features WAT-PDF-1 provided in Section IV.J, Utilities and Service Systems—Water Supply and Infrastructure, of this Draft EIR.

b. Post-230 Analysis

Recent studies show that the State's existing and proposed regulatory framework will put the State on a pathway to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050 if additional appropriate reduction measures are adopted.[8] Even though these studies did not provide an exact

[8] *Energy and Environmental Economics (E3). "Summary of the California State Agencies' PATHWAYS Project: Long-term Greenhouse Gas Reduction Scenarios" (April 2015); Greenblatt, Jeffrey, Energy Policy, "Modeling California Impacts on Greenhouse Gas Emissions" (Vol. 78, pp. 158–172). The California Air Resources Board, California Energy Commission, California Public Utilities Commission,*
(Footnote continued on next page)

regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the Statewide emissions level to remain very low through 2050.

Subsequent to the findings of these studies, SB 32 was passed on September 8, 2016, which would require the State board to ensure that Statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. The new plan outlined in SB 32 involves increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries. An evaluation was provided to determine whether the Project's design features advanced these goals by reducing VMT, increasing the use of electric vehicles, improving energy efficiency and reducing water usage.

Further, an evaluation of the Project's consistency with SCAG's RTP/SCS was provided to demonstrate that the Project will be consistent with post-2020 GHG reduction goals. The 2016–2040 RTP/SCS would result in an estimated 8-percent decrease in per capita GHG emissions by 2020, 18-percent decrease in per capita GHG emissions from passenger vehicles by 2035, and 21-percent decrease in per capita GHG emissions from passenger vehicles by 2040. In March 2018, CARB adopted updated targets requiring a 19-percent decrease in VMT for the SCAG region by 2035. As the CARB targets were adopted after the 2016–2040 RTP/SCS, it is expected that the updated targets will be incorporated into the next RTP/SCS. The 2016–2040 RTP/SCS and/or the next RTP/SCS are expected to fulfill and exceed SB 375 compliance with respect to meeting the State's GHG emission reduction goals.

and the California Independent System Operator engaged E3 to evaluate the feasibility and cost of a range of potential 2030 targets along the way to the state's goal of reducing GHG emissions to 80 percent below 1990 levels by 2050. With input from the agencies, E3 developed scenarios that explore the potential pace at which emission reductions can be achieved, as well as the mix of technologies and practices deployed. E3 conducted the analysis using its California PATHWAYS model. Enhanced specifically for this study, the model encompasses the entire California economy with detailed representations of the buildings, industry, transportation and electricity sectors.

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Appendix C-2-Air Quality Worksheets and Modeling Output Files

- Appendix B-2.1: Summary of Air Pollutant Emissions
- Appendix B-2.2: Localized Significance Threshold (LST) Calculation Worksheet
- Appendix B-2.3: CalEEMod Outputs
    - Existing Operations
    - Future Project – Construction and Operations
    - Future Project – Construction (Onsite)
    - Future Project with TDM

AQ SUMMARY OF EMISSIONS
Construction Emissions (Unmitigated)

Regional (Daily) Unmitigated	ROG	NO_x	CO	SO2	PM_{10}	$PM_{2.5}$
2021	9	90	75	<1	11	6
2022	6	49	53	<1	9	3
2023	49	50	65	<1	11	4
2024	49	48	63	<1	10	4
MAX	49	90	75	<1	11	6
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Difference	**(26)**	**(10)**	**(475)**	**(150)**	**(139)**	**(49)**
Impact	**No**	**No**	**No**	**No**	**No**	**No**

Localized (Daily) Unmitigated	ROG	NO_x	CO	SO2	PM_{10}	$PM_{2.5}$
2021	5	51	45	<1	7	4.7
2022	3	30	32	<1	1	1
2023	47	34	42	<1	1	1
2024	46	32	41	<1	1	1
MAX		51	45	<1	7	5
Threshold		65	1102		9	5.2
Difference		**(15)**	**(1,057)**		**(2)**	**(1)**
Impact		**No**	**No**		**No**	**No**

Operation Emissions (With Project Design Features)

Baseline Regional	ROG	NO_x	CO	SO2	PM_{10}	$PM_{2.5}$
Area	1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	2	7	16	<1	2	<1
Emergency Generator	<1	<1	<1	<1	<1	<1
Total	3	7	17	<1	2	<1
Regional Buildout	ROG	NO_x	CO	SO2	PM_{10}	$PM_{2.5}$
Area	13	6	31	<1	<1	<1
Energy	<1	3	2	<1	<1	<1
Mobile	7	31	85	<1	29	8
Emergency Generator	<1	<1	<1	<1	<1	<1
Total	21	39	118	<1	30	9

Project Regional	ROG	NO_x	CO	SO2	PM_{10}	$PM_{2.5}$
Area	13	6	31	<1	<1	<1
Energy	<1	3	2	<1	<1	<1
Mobile	7	31	85	<1	29.03	7.94
Emergency Generator	<1	<1	<1	<1	<1	<1
Total	21	39	118	<1	30	9
Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Difference	**(34)**	**(16)**	**(432)**	**(150)**	**(120)**	**(46)**
Impact	No	No	No	No	No	No

Project Localized					
Onsite Total	8	33		1	0.8
Threshold	**65**	**1102**		**2.13**	**2.00**
Difference	**(57)**	**(1069)**		**(1)**	**(1)**
Impact	**No**	**No**		**No**	**No**

Step 1. Determine Allowable Increase using 98th percentile NO2 and Max NO2 data

Central LA NO2 Monitoring Data

SRA	City	Design Value 2014-2016	98th percentile, ppb 2013	2014	2015	2016	Threshold (ppb)	Allowable Increase (ppb)
1	Central LA	65		67	62	65	100	35

SRA	City	Design Value 2006-2008	Max Hourly, ppb 2013	2014	2015	2016	Threshold (ppb)	Allowable Increase (ppb)
1	Central LA	120		82	79	65	180	60

Max Hourly vs. 98th Percentile Ratio (Allowable Increase)	59%

Step 2. Use ratio in Step 1 to determine LST lookup value. Extrapolate/Interpolate LST look-up value for project area

LST Threshold (SRA 1, 25 meter receptor)

Project Size (acres)	NO2 (lbs/day)	98th Percentile NO2 (lbs/day)	CO (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM10 Ops (lbs/day)	PM2.5 Ops (lbs/day)
1	74	43	680	5	3	2	1
2	108	63	1048	8	5	2	2
5	161	94	1861	16	8	4	2
2.2	112	65	1102	9	5	2	2

2143 Violet - Existing

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.98	1000sqft	0.16	6,983.00	0
Unrefrigerated Warehouse-No Rail	2.11	1000sqft	0.05	2,109.00	0
Parking Lot	43.00	Space	0.39	15,000.00	0
Apartments Low Rise	10.00	Dwelling Unit	0.63	28,699.00	24
Strip Mall	25.74	1000sqft	0.59	25,739.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2018
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	960	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP CO2 Intensity Factor for Year 2018 (Interpolated)

Land Use - Existing population provied in Section XIII. Population and Housing of the IS.

Vehicle Trips - see assumptions

Woodstoves - No wood fireplaces or stoves

Energy Use - adjustment for parking structure electricity usage

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	0.88	0.88
tblEnergyUse	T24E	170.99	170.99
tblEnergyUse	T24NG	11,673.00	11,673.00
tblFireplaces	NumberGas	8.50	9.00
tblFireplaces	NumberWood	0.50	0.00
tblLandUse	LandUseSquareFeet	6,980.00	6,983.00
tblLandUse	LandUseSquareFeet	2,110.00	2,109.00
tblLandUse	LandUseSquareFeet	17,200.00	15,000.00
tblLandUse	LandUseSquareFeet	10,000.00	28,699.00
tblLandUse	LandUseSquareFeet	25,740.00	25,739.00
tblLandUse	Population	29.00	24.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	960

tblVehicleTrips	ST_TR	7.16	7.95
tblVehicleTrips	ST_TR	2.46	2.17
tblVehicleTrips	ST_TR	42.04	35.81
tblVehicleTrips	ST_TR	1.68	4.96
tblVehicleTrips	SU_TR	6.07	6.74
tblVehicleTrips	SU_TR	1.05	0.93
tblVehicleTrips	SU_TR	20.43	17.40
tblVehicleTrips	SU_TR	1.68	4.96
tblVehicleTrips	WD_TR	6.59	7.32
tblVehicleTrips	WD_TR	11.03	9.74
tblVehicleTrips	WD_TR	44.32	37.75
tblVehicleTrips	WD_TR	1.68	4.96
tblWoodstoves	NumberCatalytic	0.50	0.00
tblWoodstoves	NumberNoncatalytic	0.50	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	lb/day										lb/day					
Area	1.4459	0.1590	0.9024	1.0000e-003		0.0166	0.0166		0.0166	0.0166						193.2613
Energy	8.2300e-003	0.0725	0.0460	4.5000e-004		5.6800e-003	5.6800e-003		5.6800e-003	5.6800e-003						90.2749
Mobile	2.3051	9.7673	25.9250	0.0676	5.0708	0.0853	5.1561	1.3574	0.0803	1.4377						6,867.2133
Total	**3.7592**	**9.9988**	**26.8734**	**0.0690**	**5.0708**	**0.1076**	**5.1784**	**1.3574**	**0.1026**	**1.4600**						**7,150.7495**

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	lb/day										lb/day					
Area	1.4459	0.1590	0.9024	1.0000e-003		0.0166	0.0166		0.0166	0.0166						193.2613
Energy	8.2300e-003	0.0725	0.0460	4.5000e-004		5.6800e-003	5.6800e-003		5.6800e-003	5.6800e-003						90.2749
Mobile	1.8778	6.8028	15.8102	0.0342	2.3762	0.0449	2.4210	0.6361	0.0422	0.6782						3,482.4143
Total	**3.3319**	**7.0343**	**16.7586**	**0.0357**	**2.3762**	**0.0672**	**2.4433**	**0.6361**	**0.0645**	**0.7005**						**3,765.9505**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**11.37**	**29.65**	**37.64**	**48.29**	**53.14**	**37.59**	**52.82**	**53.14**	**37.15**	**52.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**47.33**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	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	lb/day										lb/day					
Mitigated	1.8778	6.8028	15.8102	0.0342	2.3762	0.0449	2.4210	0.6361	0.0422	0.6782						3,482.4143
Unmitigated	2.3051	9.7673	25.9250	0.0676	5.0708	0.0853	5.1561	1.3574	0.0803	1.4377						6,867.2133

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	73.20	79.50	67.40	250,380	117,327
General Office Building	67.99	15.15	6.49	166,395	77,972
Parking Lot	0.00	0.00	0.00		
Strip Mall	971.69	921.75	447.88	1,692,780	793,233
Unrefrigerated Warehouse-No Rail	10.47	10.47	10.47	44,853	21,018
Total	1,123.34	1,026.86	532.23	2,154,407	1,009,550

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
General Office Building	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Parking Lot	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Strip Mall	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Unrefrigerated Warehouse-No Rail	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

5.0 Energy Detail

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	lb/day										lb/day					
NaturalGas Mitigated	8.2300e-003	0.0725	0.0460	4.5000e-004		5.6800e-003	5.6800e-003		5.6800e-003	5.6800e-003						90.2749
NaturalGas Unmitigated	8.2300e-003	0.0725	0.0460	4.5000e-004		5.6800e-003	5.6800e-003		5.6800e-003	5.6800e-003						90.2749

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	lb/day										lb/day					
Apartments Low Rise	390.456	4.2100e-003	0.0360	0.0153	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003						46.2090
General Office Building	237.996	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003						28.1659
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Strip Mall	128.342	1.3800e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004						15.1888
Unrefrigerated Warehouse-No	6.00921	6.0000e-005	5.9000e-004	4.9000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005						0.7112
Total		**8.2200e-003**	**0.0725**	**0.0460**	**4.5000e-004**		**5.6800e-003**	**5.6800e-003**		**5.6800e-003**	**5.6800e-003**						**90.2749**

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	lb/day										lb/day					
Apartments Low Rise	0.390456	4.2100e-003	0.0360	0.0153	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003						46.2090
General Office Building	0.237996	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003						28.1659
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Strip Mall	0.128342	1.3800e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004						15.1888
Unrefrigerated Warehouse-No	0.0060092 1	6.0000e-005	5.9000e-004	4.9000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005						0.7112
Total		**8.2200e-003**	**0.0725**	**0.0460**	**4.5000e-004**		**5.6800e-003**	**5.6800e-003**		**5.6800e-003**	**5.6800e-003**						**90.2749**

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	lb/day										lb/day					
Mitigated	1.4459	0.1590	0.9024	1.0000e-003		0.0166	0.0166		0.0166	0.0166						193.2613
Unmitigated	1.4459	0.1590	0.9024	1.0000e-003		0.0166	0.0166		0.0166	0.0166						193.2613

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	lb/day										lb/day					
Architectural Coating	0.1388					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.2632					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0175	0.1493	0.0635	9.5000e-004		0.0121	0.0121		0.0121	0.0121						191.7208
Landscaping	0.0264	9.7200e-003	0.8389	4.0000e-005		4.5600e-003	4.5600e-003		4.5600e-003	4.5600e-003						1.5405
Total	**1.4459**	**0.1590**	**0.9024**	**9.9000e-004**		**0.0166**	**0.0166**		**0.0166**	**0.0166**						**193.2613**

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	lb/day										lb/day					
Architectural Coating	0.1388					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.2632					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0175	0.1493	0.0635	9.5000e-004		0.0121	0.0121		0.0121	0.0121						191.7208
Landscaping	0.0264	9.7200e-003	0.8389	4.0000e-005		4.5600e-003	4.5600e-003		4.5600e-003	4.5600e-003						1.5405
Total	**1.4459**	**0.1590**	**0.9024**	**9.9000e-004**		**0.0166**	**0.0166**		**0.0166**	**0.0166**						**193.2613**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

2143 Violet-Project (Construction and Operations) - Los Angeles-South Coast County, Winter

2143 Violet-Project (Construction and Operations)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	187.37	1000sqft	4.30	187,374.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking with Elevator	828.00	Space	0.00	331,200.00	0
High Turnover (Sit Down Restaurant)	21.86	1000sqft	0.00	21,858.00	0
Apartments High Rise	347.00	Dwelling Unit	0.00	325,385.00	843

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2024
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	615	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP CO2 Intensity Factor for Year 2024 (Interpolated)

Land Use - site specific. Project population (XIII. Population and Housing from IS)

Commercial uses

Construction Phase - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Trips and VMT - Site Specific

Demolition -

Grading -

Vehicle Trips - see assumptions

Woodstoves - No wood fireplaces or stoves

Area Coating -

Energy Use - adjustment for parking structure electricity usage

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - BACT for EG's

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	92.00
tblConstructionPhase	NumDays	230.00	468.00

tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	257.00
tblConstructionPhase	NumDays	18.00	30.00
tblConstructionPhase	NumDays	5.00	4.00
tblConstructionPhase	NumDays	5.00	186.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	LightingElect	1.75	2.33
tblEnergyUse	T24E	3.92	0.49
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	294.95	312.30
tblFireplaces	NumberNoFireplace	34.70	34.07
tblFireplaces	NumberWood	17.35	0.00
tblGrading	MaterialExported	0.00	239,500.00
tblLandUse	LotAcreage	7.45	0.00
tblLandUse	LotAcreage	0.50	0.00
tblLandUse	LotAcreage	5.60	0.00
tblLandUse	Population	992.00	843.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	615
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	3.1000e-004
tblTripsAndVMT	HaulingTripLength	20.00	18.00
tblTripsAndVMT	HaulingTripLength	20.00	18.00
tblTripsAndVMT	HaulingTripNumber	99.00	440.00
tblTripsAndVMT	HaulingTripNumber	23,681.00	38,550.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	312.00

tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	126.00	272.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	35.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	150.00
tblTripsAndVMT	WorkerTripNumber	15.00	500.00
tblTripsAndVMT	WorkerTripNumber	458.00	500.00
tblTripsAndVMT	WorkerTripNumber	10.00	50.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	7.61
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	72.50	0.00
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	8.50	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	20.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	0.00	8.24
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	37.00	0.00
tblVehicleTrips	PR_TP	0.00	91.76
tblVehicleTrips	ST_TR	4.98	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	0.00	5,316.00
tblVehicleTrips	SU_TR	3.65	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	0.00	5,316.00

tblVehicleTrips	WD_TR	4.20	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	0.00	5,316.00
tblWoodstoves	NumberCatalytic	17.35	0.00
tblWoodstoves	NumberNoncatalytic	17.35	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	8.5924	90.0026	75.2598	0.2528	14.7343	2.3636	17.0979	7.3579	2.1966	9.5545						25,908.6297
2022	5.7093	48.6080	52.5240	0.1671	7.3302	1.2225	8.5527	1.9836	1.2040	3.1876						16,911.5005
2023	49.2637	50.2890	64.7793	0.2014	9.1736	1.3482	10.5218	2.4783	1.3178	3.7961						20,328.8096
2024	48.9154	48.4756	63.1275	0.1991	9.1737	1.1870	10.3607	2.4783	1.1594	3.6377						20,098.5867
Maximum	**49.2637**	**90.0026**	**75.2598**	**0.2528**	**14.7343**	**2.3636**	**17.0979**	**7.3579**	**2.1966**	**9.5545**						**25,908.6297**

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	lb/day										lb/day					
2021	8.5924	90.0026	75.2598	0.2528	9.3938	2.3636	11.4942	3.3194	2.1966	5.5160						25,908.6297
2022	5.7093	48.6080	52.5240	0.1671	7.3302	1.2225	8.5527	1.9836	1.2040	3.1876						16,911.5005
2023	49.2637	50.2890	64.7793	0.2014	9.1736	1.3482	10.5218	2.4783	1.3178	3.7961						20,328.8096
2024	48.9154	48.4756	63.1275	0.1991	9.1737	1.1870	10.3607	2.4783	1.1594	3.6377						20,098.5867
Maximum	**49.2637**	**90.0026**	**75.2598**	**0.2528**	**9.3938**	**2.3636**	**11.4942**	**3.3194**	**2.1966**	**5.5160**						**25,908.6297**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**13.22**	**0.00**	**12.04**	**28.25**	**0.00**	**20.02**	**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	lb/day										lb/day					
Area	13.2936	5.5112	30.9262	0.0346		0.5778	0.5778		0.5778	0.5778						6,705.7382
Energy	0.3012	2.6863	1.9218	0.0164		0.2081	0.2081		0.2081	0.2081						3,304.8716
Mobile	7.1121	31.1683	84.7894	0.3233	28.7727	0.2538	29.0264	7.6992	0.2359	7.9350						33,024.2000

Stationary	0.0198	0.0704	0.3661	6.9000e-004		2.8200e-003	2.8200e-003		2.8200e-003	2.8200e-003						73.7150
Total	**20.7267**	**39.4361**	**118.0035**	**0.3750**	**28.7727**	**1.0425**	**29.8151**	**7.6992**	**1.0246**	**8.7238**						**43,108.5248**

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	lb/day										lb/day					
Area	13.2936	5.5112	30.9262	0.0346		0.5778	0.5778		0.5778	0.5778						6,705.7382
Energy	0.2883	2.5722	1.8419	0.0157		0.1992	0.1992		0.1992	0.1992						3,164.1900
Mobile	7.1121	31.1683	84.7894	0.3233	28.7727	0.2538	29.0264	7.6992	0.2359	7.9350						33,024.2000
Stationary	0.0198	0.0704	0.3661	6.9000e-004		2.8200e-003	2.8200e-003		2.8200e-003	2.8200e-003						73.7150
Total	**20.7139**	**39.3220**	**117.9236**	**0.3743**	**28.7727**	**1.0336**	**29.8063**	**7.6992**	**1.0157**	**8.7149**						**42,967.8431**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.06**	**0.29**	**0.07**	**0.19**	**0.00**	**0.85**	**0.03**	**0.00**	**0.86**	**0.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.33**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/15/2021	2/9/2021	6	22	
2	Grading	Grading	2/10/2021	12/6/2021	6	257	
3	Matt Foundation	Site Preparation	12/7/2021	12/10/2021	6	4	
4	Foundation	Site Preparation	12/11/2021	7/15/2022	6	186	
5	Building Construction	Building Construction	7/16/2022	1/12/2024	6	468	
6	Architectural Coating	Architectural Coating	10/11/2023	1/25/2024	6	92	
7	Paving	Paving	12/26/2023	1/29/2024	6	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 612,773; Residential Outdoor: 204,258; Non-Residential Indoor: 313,848; Non-Residential Outdoor: 104,616; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	1	8.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Excavators	2	8.00	158	0.38
Grading	Forklifts	1	8.00	89	0.20
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Loaders	2	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Welders	3	8.00	46	0.45

Matt Foundation	Pumps	6	8.00	84	0.74
Matt Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Matt Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Foundation	Concrete/Industrial Saws	1	8.00	81	0.73
Foundation	Forklifts	2	8.00	89	0.20
Foundation	Generator Sets	1	8.00	84	0.74
Foundation	Pumps	2	8.00	84	0.74
Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Concrete/Industrial Saws	2	8.00	81	0.73
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Pumps	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Aerial Lifts	1	8.00	63	0.31
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Rollers	0	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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	16.00	20.00	440.00	14.70	6.90	18.00	LD_Mix	HDT_Mix	HHDT
Grading	14	18.00	20.00	38,550.00	14.70	6.90	18.00	LD_Mix	HDT_Mix	HHDT
Matt Foundation	6	150.00	312.00	0.00	14.70	6.90	20.00	LD_Mix	HHDT	HHDT
Foundation	6	500.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HHDT	HHDT
Building Construction	11	500.00	272.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	92.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	50.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

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	lb/day										lb/day					
Fugitive Dust					0.9774	0.0000	0.9774	0.1480	0.0000	0.1480						0.0000
Off-Road	2.4406	23.7004	16.2544	0.0312		1.1834	1.1834		1.1126	1.1126						3,020.2605
Total	**2.4406**	**23.7004**	**16.2544**	**0.0312**	**0.9774**	**1.1834**	**2.1608**	**0.1480**	**1.1126**	**1.2606**						**3,020.2605**

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	lb/day										lb/day					
Hauling	0.1573	5.0668	1.2318	0.0140	0.3148	0.0151	0.3299	0.0863	0.0145	0.1008						1,519.9043
Vendor	0.0638	1.9378	0.5615	5.0000e-003	0.1280	4.1000e-003	0.1321	0.0369	3.9200e-003	0.0408						535.5540
Worker	0.0763	0.0522	0.5892	1.7200e-003	0.1788	1.4500e-003	0.1803	0.0474	1.3300e-003	0.0488						171.6864
Total	**0.2974**	**7.0568**	**2.3825**	**0.0207**	**0.6217**	**0.0207**	**0.6424**	**0.1706**	**0.0197**	**0.1903**						**2,227.1447**

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	lb/day										lb/day					
Fugitive Dust					0.3812	0.0000	0.3812	0.0577	0.0000	0.0577						0.0000
Off-Road	2.4406	23.7004	16.2544	0.0312		1.1834	1.1834		1.1126	1.1126						3,020.2604
Total	**2.4406**	**23.7004**	**16.2544**	**0.0312**	**0.3812**	**1.1834**	**1.5646**	**0.0577**	**1.1126**	**1.1704**						**3,020.2604**

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	lb/day										lb/day					
Hauling	0.1573	5.0668	1.2318	0.0140	0.3148	0.0151	0.3299	0.0863	0.0145	0.1008						1,519.9043
Vendor	0.0638	1.9378	0.5615	5.0000e-003	0.1280	4.1000e-003	0.1321	0.0369	3.9200e-003	0.0408						535.5540
Worker	0.0763	0.0522	0.5892	1.7200e-003	0.1788	1.4500e-003	0.1803	0.0474	1.3300e-003	0.0488						171.6864
Total	**0.2974**	**7.0568**	**2.3825**	**0.0207**	**0.6217**	**0.0207**	**0.6424**	**0.1706**	**0.0197**	**0.1903**						**2,227.1447**

3.3 Grading - 2021

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	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205						0.0000
Off-Road	5.1653	49.5199	32.8093	0.0742		2.2443	2.2443		2.0826	2.0826						7,116.0226
Total	**5.1653**	**49.5199**	**32.8093**	**0.0742**	**12.0442**	**2.2443**	**14.2885**	**6.6205**	**2.0826**	**8.7030**						**7,116.0226**

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	lb/day										lb/day					

Hauling	1.1795	38.0010	9.2381	0.1049	2.3608	0.1136	2.4744	0.6472	0.1086	0.7558						11,399.2821
Vendor	0.0638	1.9378	0.5615	5.0000e-003	0.1280	4.1000e-003	0.1321	0.0369	3.9200e-003	0.0408						535.5540
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549						193.1472
Total	**1.3292**	**39.9975**	**10.4625**	**0.1118**	**2.6901**	**0.1193**	**2.8094**	**0.7374**	**0.1141**	**0.8515**						**12,127.9833**

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	lb/day										lb/day					
Fugitive Dust					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820						0.0000
Off-Road	5.1653	49.5199	32.8093	0.0742		2.2443	2.2443		2.0826	2.0826						7,116.0226
Total	**5.1653**	**49.5199**	**32.8093**	**0.0742**	**4.6972**	**2.2443**	**6.9416**	**2.5820**	**2.0826**	**4.6645**						**7,116.0226**

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	lb/day										lb/day					
Hauling	1.1795	38.0010	9.2381	0.1049	2.3608	0.1136	2.4744	0.6472	0.1086	0.7558						11,399.2821
Vendor	0.0638	1.9378	0.5615	5.0000e-003	0.1280	4.1000e-003	0.1321	0.0369	3.9200e-003	0.0408						535.5540
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549						193.1472
Total	**1.3292**	**39.9975**	**10.4625**	**0.1118**	**2.6901**	**0.1193**	**2.8094**	**0.7374**	**0.1141**	**0.8515**						**12,127.9833**

3.4 Matt Foundation - 2021

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	2.2825	19.2601	22.4438	0.0395		1.0656	1.0656		1.0656	1.0656						3,743.3119
Total	**2.2825**	**19.2601**	**22.4438**	**0.0395**	**0.0000**	**1.0656**	**1.0656**	**0.0000**	**1.0656**	**1.0656**						**3,743.3119**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	1.2842	47.5448	10.3737	0.1014	1.8865	0.0998	1.9863	0.5175	0.0955	0.6130						11,014.8214
Worker	0.7152	0.4892	5.5238	0.0161	1.6767	0.0136	1.6902	0.4447	0.0125	0.4571						1,609.5599

Total	**1.9994**	**48.0340**	**15.8975**	**0.1175**	**3.5631**	**0.1134**	**3.6765**	**0.9622**	**0.1080**	**1.0702**						**12,624.3813**

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	2.2825	19.2601	22.4438	0.0395		1.0656	1.0656		1.0656	1.0656						3,743.3119
Total	**2.2825**	**19.2601**	**22.4438**	**0.0395**	**0.0000**	**1.0656**	**1.0656**	**0.0000**	**1.0656**	**1.0656**						**3,743.3119**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	1.2842	47.5448	10.3737	0.1014	1.8865	0.0998	1.9863	0.5175	0.0955	0.6130						11,014.8214
Worker	0.7152	0.4892	5.5238	0.0161	1.6767	0.0136	1.6902	0.4447	0.0125	0.4571						1,609.5599
Total	**1.9994**	**48.0340**	**15.8975**	**0.1175**	**3.5631**	**0.1134**	**3.6765**	**0.9622**	**0.1080**	**1.0702**						**12,624.3813**

3.5 Foundation - 2021

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	1.7617	14.9823	17.1757	0.0291		0.8635	0.8635		0.8501	0.8501						2,763.5805
Total	**1.7617**	**14.9823**	**17.1757**	**0.0291**	**0.0000**	**0.8635**	**0.8635**	**0.0000**	**0.8501**	**0.8501**						**2,763.5805**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1646	6.0955	1.3300	0.0130	0.2419	0.0128	0.2547	0.0664	0.0123	0.0786						1,412.1566
Worker	2.3841	1.6307	18.4128	0.0538	5.5888	0.0452	5.6340	1.4822	0.0416	1.5238						5,365.1995
Total	**2.5487**	**7.7262**	**19.7428**	**0.0668**	**5.8307**	**0.0580**	**5.8886**	**1.5485**	**0.0539**	**1.6024**						**6,777.3561**

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	1.7617	14.9823	17.1757	0.0291		0.8635	0.8635		0.8501	0.8501						2,763.5805
Total	**1.7617**	**14.9823**	**17.1757**	**0.0291**	**0.0000**	**0.8635**	**0.8635**	**0.0000**	**0.8501**	**0.8501**						**2,763.5805**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1646	6.0955	1.3300	0.0130	0.2419	0.0128	0.2547	0.0664	0.0123	0.0786						1,412.1566
Worker	2.3841	1.6307	18.4128	0.0538	5.5888	0.0452	5.6340	1.4822	0.0416	1.5238						5,365.1995
Total	**2.5487**	**7.7262**	**19.7428**	**0.0668**	**5.8307**	**0.0580**	**5.8886**	**1.5485**	**0.0539**	**1.6024**						**6,777.3561**

3.5 Foundation - 2022

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	1.6187	13.7769	17.1118	0.0291		0.7482	0.7482		0.7370	0.7370						2,763.3617
Total	**1.6187**	**13.7769**	**17.1118**	**0.0291**	**0.0000**	**0.7482**	**0.7482**	**0.0000**	**0.7370**	**0.7370**						**2,763.3617**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1563	5.7541	1.3048	0.0128	0.2419	0.0111	0.2530	0.0664	0.0106	0.0770						1,396.0081
Worker	2.2392	1.4727	16.9588	0.0519	5.5888	0.0438	5.6326	1.4822	0.0403	1.5225						5,176.4081
Total	**2.3955**	**7.2268**	**18.2636**	**0.0647**	**5.8307**	**0.0548**	**5.8855**	**1.5485**	**0.0509**	**1.5994**						**6,572.4162**

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	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	1.6187	13.7769	17.1118	0.0291		0.7482	0.7482		0.7370	0.7370						2,763.3617
Total	**1.6187**	**13.7769**	**17.1118**	**0.0291**	**0.0000**	**0.7482**	**0.7482**	**0.0000**	**0.7370**	**0.7370**						**2,763.3617**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1563	5.7541	1.3048	0.0128	0.2419	0.0111	0.2530	0.0664	0.0106	0.0770						1,396.0081
Worker	2.2392	1.4727	16.9588	0.0519	5.5888	0.0438	5.6326	1.4822	0.0403	1.5225						5,176.4081
Total	**2.3955**	**7.2268**	**18.2636**	**0.0647**	**5.8307**	**0.0548**	**5.8855**	**1.5485**	**0.0509**	**1.5994**						**6,572.4162**

3.6 Building Construction - 2022

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	lb/day										lb/day					
Off-Road	2.6553	22.0897	28.3362	0.0478		1.1300	1.1300		1.1171	1.1171						4,516.5770
Total	**2.6553**	**22.0897**	**28.3362**	**0.0478**		**1.1300**	**1.1300**		**1.1171**	**1.1171**						**4,516.5770**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.8148	25.0456	7.2289	0.0674	1.7414	0.0488	1.7902	0.5014	0.0466	0.5480						7,218.5154
Worker	2.2392	1.4727	16.9588	0.0519	5.5888	0.0438	5.6326	1.4822	0.0403	1.5225						5,176.4081
Total	**3.0540**	**26.5183**	**24.1878**	**0.1193**	**7.3302**	**0.0925**	**7.4228**	**1.9836**	**0.0869**	**2.0705**						**12,394.9235**

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	lb/day										lb/day					
Off-Road	2.6553	22.0897	28.3362	0.0478		1.1300	1.1300		1.1171	1.1171						4,516.5770
Total	**2.6553**	**22.0897**	**28.3362**	**0.0478**		**1.1300**	**1.1300**		**1.1171**	**1.1171**						**4,516.5770**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.8148	25.0456	7.2289	0.0674	1.7414	0.0488	1.7902	0.5014	0.0466	0.5480						7,218.5154
Worker	2.2392	1.4727	16.9588	0.0519	5.5888	0.0438	5.6326	1.4822	0.0403	1.5225						5,176.4081
Total	**3.0540**	**26.5183**	**24.1878**	**0.1193**	**7.3302**	**0.0925**	**7.4228**	**1.9836**	**0.0869**	**2.0705**						**12,394.9235**

3.6 Building Construction - 2023

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	lb/day										lb/day					
Off-Road	2.4636	20.5117	28.2555	0.0478		0.9749	0.9749		0.9640	0.9640						4,516.0938
Total	**2.4636**	**20.5117**	**28.2555**	**0.0478**		**0.9749**	**0.9749**		**0.9640**	**0.9640**						**4,516.0938**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.6054	18.9689	6.4236	0.0652	1.7415	0.0232	1.7646	0.5014	0.0221	0.5235						6,993.3324
Worker	2.1096	1.3320	15.5883	0.0500	5.5888	0.0425	5.6313	1.4822	0.0391	1.5213						4,986.8092
Total	**2.7149**	**20.3009**	**22.0119**	**0.1152**	**7.3303**	**0.0657**	**7.3959**	**1.9836**	**0.0613**	**2.0449**						**11,980.1415**

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	lb/day										lb/day					
Off-Road	2.4636	20.5117	28.2555	0.0478		0.9749	0.9749		0.9640	0.9640						4,516.0938
Total	**2.4636**	**20.5117**	**28.2555**	**0.0478**		**0.9749**	**0.9749**		**0.9640**	**0.9640**						**4,516.0938**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.6054	18.9689	6.4236	0.0652	1.7415	0.0232	1.7646	0.5014	0.0221	0.5235						6,993.3324
Worker	2.1096	1.3320	15.5883	0.0500	5.5888	0.0425	5.6313	1.4822	0.0391	1.5213						4,986.8092
Total	**2.7149**	**20.3009**	**22.0119**	**0.1152**	**7.3303**	**0.0657**	**7.3959**	**1.9836**	**0.0613**	**2.0449**						**11,980.1415**

3.6 Building Construction - 2024

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	lb/day										lb/day					
Off-Road	2.3010	19.2750	28.1954	0.0478		0.8449	0.8449		0.8353	0.8353						4,515.8386
Total	**2.3010**	**19.2750**	**28.1954**	**0.0478**		**0.8449**	**0.8449**		**0.8353**	**0.8353**						**4,515.8386**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.5904	18.9009	6.2288	0.0649	1.7415	0.0228	1.7643	0.5014	0.0217	0.5232						6,966.0972
Worker	2.0018	1.2144	14.5121	0.0484	5.5888	0.0419	5.6307	1.4822	0.0386	1.5208						4,831.9567
Total	**2.5923**	**20.1152**	**20.7410**	**0.1133**	**7.3303**	**0.0646**	**7.3950**	**1.9836**	**0.0603**	**2.0439**						**11,798.0539**

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	lb/day										lb/day					
Off-Road	2.3010	19.2750	28.1954	0.0478		0.8449	0.8449		0.8353	0.8353						4,515.8386
Total	**2.3010**	**19.2750**	**28.1954**	**0.0478**		**0.8449**	**0.8449**		**0.8353**	**0.8353**						**4,515.8386**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000

Vendor	0.5904	18.9009	6.2288	0.0649	1.7415	0.0228	1.7643	0.5014	0.0217	0.5232						6,966.0972
Worker	2.0018	1.2144	14.5121	0.0484	5.5888	0.0419	5.6307	1.4822	0.0386	1.5208						4,831.9567
Total	**2.5923**	**20.1152**	**20.7410**	**0.1133**	**7.3303**	**0.0646**	**7.3950**	**1.9836**	**0.0603**	**2.0439**						**11,798.0539**

3.7 Architectural Coating - 2023

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	lb/day										lb/day					
Archit. Coating	42.6648					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2902	2.2706	3.5068	5.6400e-003		0.1036	0.1036		0.1029	0.1029						539.7601
Total	**42.9549**	**2.2706**	**3.5068**	**5.6400e-003**		**0.1036**	**0.1036**		**0.1029**	**0.1029**						**539.7601**

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	lb/day										lb/day					
Hauling	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
Worker	0.3882	0.2451	2.8683	9.2000e-003	1.0283	7.8200e-003	1.0362	0.2727	7.2000e-003	0.2799						917.5729
Total	**0.3882**	**0.2451**	**2.8683**	**9.2000e-003**	**1.0283**	**7.8200e-003**	**1.0362**	**0.2727**	**7.2000e-003**	**0.2799**						**917.5729**

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	lb/day										lb/day					
Archit. Coating	42.6648					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2902	2.2706	3.5068	5.6400e-003		0.1036	0.1036		0.1029	0.1029						539.7601
Total	**42.9549**	**2.2706**	**3.5068**	**5.6400e-003**		**0.1036**	**0.1036**		**0.1029**	**0.1029**						**539.7601**

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	lb/day										lb/day					
Hauling	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
Worker	0.3882	0.2451	2.8683	9.2000e-003	1.0283	7.8200e-003	1.0362	0.2727	7.2000e-003	0.2799						917.5729
Total	**0.3882**	**0.2451**	**2.8683**	**9.2000e-003**	**1.0283**	**7.8200e-003**	**1.0362**	**0.2727**	**7.2000e-003**	**0.2799**						**917.5729**

3.7 Architectural Coating - 2024

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	lb/day										lb/day					
Archit. Coating	42.6648					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2756	2.1514	3.5063	5.6400e-003		0.0904	0.0904		0.0896	0.0896						539.7270
Total	**42.9404**	**2.1514**	**3.5063**	**5.6400e-003**		**0.0904**	**0.0904**		**0.0896**	**0.0896**						**539.7270**

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	lb/day										lb/day					
Hauling	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
Worker	0.3683	0.2235	2.6702	8.9100e-003	1.0283	7.7100e-003	1.0361	0.2727	7.1000e-003	0.2798						889.0800
Total	**0.3683**	**0.2235**	**2.6702**	**8.9100e-003**	**1.0283**	**7.7100e-003**	**1.0361**	**0.2727**	**7.1000e-003**	**0.2798**						**889.0800**

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	lb/day										lb/day					
Archit. Coating	42.6648					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2756	2.1514	3.5063	5.6400e-003		0.0904	0.0904		0.0896	0.0896						539.7270
Total	**42.9404**	**2.1514**	**3.5063**	**5.6400e-003**		**0.0904**	**0.0904**		**0.0896**	**0.0896**						**539.7270**

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	lb/day										lb/day					
Hauling	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
Worker	0.3683	0.2235	2.6702	8.9100e-003	1.0283	7.7100e-003	1.0361	0.2727	7.1000e-003	0.2798						889.0800
Total	**0.3683**	**0.2235**	**2.6702**	**8.9100e-003**	**1.0283**	**7.7100e-003**	**1.0361**	**0.2727**	**7.1000e-003**	**0.2798**						**889.0800**

3.8 Paving - 2023

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	lb/day										lb/day					
Off-Road	0.4422	4.0380	5.6333	9.0100e-003		0.1885	0.1885		0.1753	0.1753						848.1292
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.4422**	**4.0380**	**5.6333**	**9.0100e-003**		**0.1885**	**0.1885**		**0.1753**	**0.1753**						**848.1292**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0890	2.7896	0.9446	9.5900e-003	0.2561	3.4000e-003	0.2595	0.0737	3.2500e-003	0.0770						1,028.4312
Worker	0.2110	0.1332	1.5588	5.0000e-003	0.5589	4.2500e-003	0.5631	0.1482	3.9100e-003	0.1521						498.6809
Total	**0.3000**	**2.9228**	**2.5035**	**0.0146**	**0.8150**	**7.6500e-003**	**0.8226**	**0.2220**	**7.1600e-003**	**0.2291**						**1,527.1122**

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	lb/day										lb/day					
Off-Road	0.4422	4.0380	5.6333	9.0100e-003		0.1885	0.1885		0.1753	0.1753						848.1292
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.4422**	**4.0380**	**5.6333**	**9.0100e-003**		**0.1885**	**0.1885**		**0.1753**	**0.1753**						**848.1292**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0890	2.7896	0.9446	9.5900e-003	0.2561	3.4000e-003	0.2595	0.0737	3.2500e-003	0.0770						1,028.4312
Worker	0.2110	0.1332	1.5588	5.0000e-003	0.5589	4.2500e-003	0.5631	0.1482	3.9100e-003	0.1521						498.6809
Total	**0.3000**	**2.9228**	**2.5035**	**0.0146**	**0.8150**	**7.6500e-003**	**0.8226**	**0.2220**	**7.1600e-003**	**0.2291**						**1,527.1122**

3.8 Paving - 2024

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	lb/day										lb/day					
Off-Road	0.4264	3.8096	5.6474	9.0200e-003		0.1719	0.1719		0.1601	0.1601						848.2654

Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.4264**	**3.8096**	**5.6474**	**9.0200e-003**		**0.1719**	**0.1719**		**0.1601**	**0.1601**						**848.2654**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0868	2.7795	0.9160	9.5500e-003	0.2561	3.3500e-003	0.2595	0.0737	3.2000e-003	0.0769						1,024.4261
Worker	0.2002	0.1214	1.4512	4.8400e-003	0.5589	4.1900e-003	0.5631	0.1482	3.8600e-003	0.1521						483.1957
Total	**0.2870**	**2.9010**	**2.3672**	**0.0144**	**0.8150**	**7.5400e-003**	**0.8225**	**0.2220**	**7.0600e-003**	**0.2290**						**1,507.6217**

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	lb/day										lb/day					
Off-Road	0.4264	3.8096	5.6474	9.0200e-003		0.1719	0.1719		0.1601	0.1601						848.2654
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.4264**	**3.8096**	**5.6474**	**9.0200e-003**		**0.1719**	**0.1719**		**0.1601**	**0.1601**						**848.2654**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0868	2.7795	0.9160	9.5500e-003	0.2561	3.3500e-003	0.2595	0.0737	3.2000e-003	0.0769						1,024.4261
Worker	0.2002	0.1214	1.4512	4.8400e-003	0.5589	4.1900e-003	0.5631	0.1482	3.8600e-003	0.1521						483.1957
Total	**0.2870**	**2.9010**	**2.3672**	**0.0144**	**0.8150**	**7.5400e-003**	**0.8225**	**0.2220**	**7.0600e-003**	**0.2290**						**1,507.6217**

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	lb/day										lb/day					
Mitigated	7.1121	31.1683	84.7894	0.3233	28.7727	0.2538	29.0264	7.6992	0.2359	7.9350						33,024.2000

Unmitigated	7.1121	31.1683	84.7894	0.3233	28.7727	0.2538	29.0264	7.6992	0.2359	7.9350						33,024.2000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
User Defined Commercial	5,316.00	5,316.00	5316.00	13,532,064	13,532,064
Total	5,316.00	5,316.00	5,316.00	13,532,064	13,532,064

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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 High Rise	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
User Defined Commercial	0.00	7.61	0.00	0.00	100.00	0.00	91.76072235	0	8.239277652

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Enclosed Parking with Elevator	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
General Office Building	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
High Turnover (Sit Down Restaurant)	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
User Defined Commercial	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	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	lb/day										lb/day					
NaturalGas Mitigated	0.2883	2.5722	1.8419	0.0157		0.1992	0.1992		0.1992	0.1992						3,164.1900
NaturalGas Unmitigated	0.3012	2.6863	1.9218	0.0164		0.2081	0.2081		0.2081	0.2081						3,304.8716

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	lb/day										lb/day					
Apartments High Rise	8762.41	0.0945	0.8075	0.3436	5.1500e-003		0.0653	0.0653		0.0653	0.0653						1,036.9972
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000

General Office Building	5344.01	0.0576	0.5239	0.4401	3.1400e-003		0.0398	0.0398		0.0398	0.0398							632.4431
High Turnover (Sit Down Restaurant)	13819	0.1490	1.3548	1.1380	8.1300e-003		0.1030	0.1030		0.1030	0.1030							1,635.4314
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							0.0000
Total		**0.3012**	**2.6863**	**1.9218**	**0.0164**		**0.2081**	**0.2081**		**0.2081**	**0.2081**							**3,304.8716**

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	lb/day										lb/day					
Apartments High Rise	8.34544	0.0900	0.7691	0.3273	4.9100e-003		0.0622	0.0622		0.0622	0.0622						987.6511
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
General Office Building	4.82963	0.0521	0.4735	0.3977	2.8400e-003		0.0360	0.0360		0.0360	0.0360						571.5681
High Turnover (Sit Down Restaurant)	13.5617	0.1463	1.3296	1.1168	7.9800e-003		0.1011	0.1011		0.1011	0.1011						1,604.9708
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.2883**	**2.5722**	**1.8418**	**0.0157**		**0.1992**	**0.1992**		**0.1992**	**0.1992**						**3,164.1900**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	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	lb/day										lb/day					
Mitigated	13.2936	5.5112	30.9262	0.0346		0.5778	0.5778		0.5778	0.5778						6,705.7382
Unmitigated	13.2936	5.5112	30.9262	0.0346		0.5778	0.5778		0.5778	0.5778						6,705.7382

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	lb/day										lb/day					
Architectural Coating	1.1144					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	10.7027					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.6062	5.1805	2.2045	0.0331		0.4189	0.4189		0.4189	0.4189						6,652.7120
Landscaping	0.8702	0.3307	28.7217	1.5200e-003		0.1590	0.1590		0.1590	0.1590						53.0262
Total	**13.2936**	**5.5112**	**30.9262**	**0.0346**		**0.5778**	**0.5778**		**0.5778**	**0.5778**						**6,705.7382**

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	lb/day										lb/day					
Architectural Coating	1.1144					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	10.7027					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.6062	5.1805	2.2045	0.0331		0.4189	0.4189		0.4189	0.4189						6,652.7120
Landscaping	0.8702	0.3307	28.7217	1.5200e-003		0.1590	0.1590		0.1590	0.1590						53.0262
Total	**13.2936**	**5.5112**	**30.9262**	**0.0346**		**0.5778**	**0.5778**		**0.5778**	**0.5778**						**6,705.7382**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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
Emergency Generator	1	0.25	12	350	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (300 - 600 HP)	0.0198	0.0704	0.3661	6.9000e-004		2.8200e-003	2.8200e-003		2.8200e-003	2.8200e-003						73.7150
Total	**0.0198**	**0.0704**	**0.3661**	**6.9000e-004**		**2.8200e-003**	**2.8200e-003**		**2.8200e-003**	**2.8200e-003**						**73.7150**

11.0 Vegetation

2143 Violet-Project (Construction Onsite)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	187.37	1000sqft	4.30	187,374.00	0
Enclosed Parking with Elevator	828.00	Space	0.00	331,200.00	0
High Turnover (Sit Down Restaurant)	21.86	1000sqft	0.00	21,858.00	0
Apartments High Rise	347.00	Dwelling Unit	0.00	325,385.00	843

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2024
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	615	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP CO2 Intensity Factor for Year 2024 (Interpolated)

Land Use - site specific. Project population (XIII. Population and Housing from IS)

Construction Phase - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Trips and VMT - Site Specific 0.25 miles per haul/delivery.

On-road Fugitive Dust - Site Specific

Demolition -

Grading -

Vehicle Trips - see assumptions

Woodstoves - No wood fireplaces or stoves

Area Coating -

Energy Use - adjustment for parking structure electricity usage

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - BACT for EG's

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	219,635.00	204,258.00
tblArchitecturalCoating	ConstArea_Residential_Interior	658,905.00	612,773.00
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	92.00
tblConstructionPhase	NumDays	230.00	468.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	257.00
tblConstructionPhase	NumDays	18.00	30.00
tblConstructionPhase	NumDays	5.00	4.00
tblConstructionPhase	NumDays	5.00	186.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	LightingElect	1.75	2.33
tblEnergyUse	T24E	3.92	0.49
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	294.95	312.30
tblFireplaces	NumberNoFireplace	34.70	34.07
tblFireplaces	NumberWood	17.35	0.00
tblGrading	MaterialExported	0.00	239,500.00
tblLandUse	LandUseSquareFeet	187,370.00	187,374.00
tblLandUse	LandUseSquareFeet	21,860.00	21,858.00
tblLandUse	LandUseSquareFeet	347,000.00	325,385.00
tblLandUse	LotAcreage	7.45	0.00
tblLandUse	LotAcreage	0.50	0.00
tblLandUse	LotAcreage	5.60	0.00
tblLandUse	Population	992.00	843.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	615
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	3.1000e-004
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	350.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.25
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	55.00
tblTripsAndVMT	HaulingTripLength	20.00	4,818.75
tblTripsAndVMT	HaulingTripNumber	99.00	1.00
tblTripsAndVMT	HaulingTripNumber	23,681.00	1.00
tblTripsAndVMT	VendorTripLength	6.90	0.25
tblTripsAndVMT	VendorTripLength	6.90	0.25
tblTripsAndVMT	VendorTripLength	6.90	0.25
tblTripsAndVMT	VendorTripLength	6.90	0.25
tblTripsAndVMT	VendorTripLength	6.90	0.25
tblTripsAndVMT	VendorTripLength	6.90	0.25
tblTripsAndVMT	VendorTripLength	6.90	0.25
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	156.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	126.00	136.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	35.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	150.00
tblTripsAndVMT	WorkerTripNumber	15.00	500.00
tblTripsAndVMT	WorkerTripNumber	458.00	500.00

tblTripsAndVMT	WorkerTripNumber	10.00	50.00
tblVehicleTrips	ST_TR	4.98	5.28
tblVehicleTrips	ST_TR	2.46	2.32
tblVehicleTrips	ST_TR	158.37	139.72
tblVehicleTrips	SU_TR	3.65	3.87
tblVehicleTrips	SU_TR	1.05	0.99
tblVehicleTrips	SU_TR	131.84	116.32
tblVehicleTrips	WD_TR	4.20	4.45
tblVehicleTrips	WD_TR	11.03	10.41
tblVehicleTrips	WD_TR	127.15	112.18
tblWoodstoves	NumberCatalytic	17.35	0.00
tblWoodstoves	NumberNoncatalytic	17.35	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	5.2039	50.5984	45.2608	0.0877	12.0633	2.2455	14.3088	6.6258	2.0837	8.7095						8,573.4932
2022	3.2806	29.8832	32.3624	0.0565	0.0399	1.1369	1.1768	0.0124	1.1236	1.1360						5,447.9230
2023	46.5333	34.1166	41.6111	0.0716	0.0439	1.2736	1.3175	0.0137	1.2483	1.2620						6,882.8569
2024	46.2940	32.4872	41.2725	0.0715	0.0439	1.1134	1.1573	0.0137	1.0908	1.1046						6,870.3739
Maximum	**46.5333**	**50.5984**	**45.2608**	**0.0877**	**12.0633**	**2.2455**	**14.3088**	**6.6258**	**2.0837**	**8.7095**						**8,573.4932**

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	lb/day										lb/day					
2021	5.2039	50.5984	45.2608	0.0877	4.7164	2.2455	6.9619	2.5873	2.0837	4.6710						8,573.4932
2022	3.2806	29.8832	32.3624	0.0565	0.0399	1.1369	1.1768	0.0124	1.1236	1.1360						5,447.9230
2023	46.5333	34.1166	41.6111	0.0716	0.0439	1.2736	1.3175	0.0137	1.2483	1.2620						6,882.8569
2024	46.2940	32.4872	41.2725	0.0715	0.0439	1.1134	1.1573	0.0137	1.0908	1.1046						6,870.3739
Maximum	**46.5333**	**50.5984**	**45.2608**	**0.0877**	**4.7164**	**2.2455**	**6.9619**	**2.5873**	**2.0837**	**4.6710**						**8,573.4932**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**60.27**	**0.00**	**40.91**	**60.59**	**0.00**	**33.07**	**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	1/15/2021	2/9/2021	6	22	
2	Grading	Grading	2/10/2021	12/6/2021	6	257	
3	Matt Foundation	Site Preparation	12/7/2021	12/10/2021	6	4	
4	Foundation	Site Preparation	12/11/2021	7/15/2022	6	186	
5	Building Construction	Building Construction	7/16/2022	1/12/2024	6	468	
6	Architectural Coating	Architectural Coating	10/11/2023	1/25/2024	6	92	
7	Paving	Paving	12/26/2023	1/29/2024	6	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 612,773; Residential Outdoor: 204,258; Non-Residential Indoor: 313,848; Non-Residential Outdoor: 104,616; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	1	8.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Excavators	2	8.00	158	0.38
Grading	Forklifts	1	8.00	89	0.20
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Loaders	2	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Welders	3	8.00	46	0.45
Matt Foundation	Pumps	6	8.00	84	0.74
Matt Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Matt Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Foundation	Concrete/Industrial Saws	1	8.00	81	0.73
Foundation	Forklifts	2	8.00	89	0.20
Foundation	Generator Sets	1	8.00	84	0.74
Foundation	Pumps	2	8.00	84	0.74
Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Concrete/Industrial Saws	2	8.00	81	0.73
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Pumps	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37

Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Aerial Lifts	1	8.00	63	0.31
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Rollers	0	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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	16.00	10.00	1.00	0.00	0.25	55.00	LD_Mix	HDT_Mix	HHDT
Grading	14	18.00	10.00	1.00	0.00	0.25	4,818.75	LD_Mix	HDT_Mix	HHDT
Matt Foundation	6	150.00	156.00	0.00	0.00	0.25	20.00	LD_Mix	HHDT	HHDT
Foundation	6	500.00	20.00	0.00	0.00	0.25	20.00	LD_Mix	HHDT	HHDT
Building Construction	11	500.00	136.00	0.00	0.00	0.25	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	92.00	0.00	0.00	0.00	0.25	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	50.00	10.00	0.00	0.00	0.25	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

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	lb/day										lb/day					
Fugitive Dust					0.9774	0.0000	0.9774	0.1480	0.0000	0.1480						0.0000
Off-Road	2.4406	23.7004	16.2544	0.0312		1.1834	1.1834		1.1126	1.1126						3,020.2605
Total	**2.4406**	**23.7004**	**16.2544**	**0.0312**	**0.9774**	**1.1834**	**2.1608**	**0.1480**	**1.1126**	**1.2606**						**3,020.2605**

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	lb/day										lb/day					
Hauling	9.3000e-004	0.0268	7.0900e-003	9.0000e-005	2.1800e-003	1.0000e-004	2.2800e-003	6.0000e-004	1.0000e-004	6.9000e-004						9.6197
Vendor	0.0153	0.5780	0.1650	5.7000e-004	2.5700e-003	3.3000e-004	2.9000e-003	7.7000e-004	3.1000e-004	1.0800e-003						61.1520
Worker	0.0151	4.4400e-003	0.0684	4.0000e-005	1.6000e-004	1.0000e-004	2.6000e-004	6.0000e-005	9.0000e-005	1.6000e-004						3.5363
Total	**0.0313**	**0.6093**	**0.2405**	**7.0000e-004**	**4.9100e-003**	**5.3000e-004**	**5.4400e-003**	**1.4300e-003**	**5.0000e-004**	**1.9300e-003**						**74.3080**

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	lb/day										lb/day					
Fugitive Dust					0.3812	0.0000	0.3812	0.0577	0.0000	0.0577						0.0000
Off-Road	2.4406	23.7004	16.2544	0.0312		1.1834	1.1834		1.1126	1.1126						3,020.2604
Total	**2.4406**	**23.7004**	**16.2544**	**0.0312**	**0.3812**	**1.1834**	**1.5646**	**0.0577**	**1.1126**	**1.1704**						**3,020.2604**

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	lb/day										lb/day					
Hauling	9.3000e-004	0.0268	7.0900e-003	9.0000e-005	2.1800e-003	1.0000e-004	2.2800e-003	6.0000e-004	1.0000e-004	6.9000e-004						9.6197
Vendor	0.0153	0.5780	0.1650	5.7000e-004	2.5700e-003	3.3000e-004	2.9000e-003	7.7000e-004	3.1000e-004	1.0800e-003						61.1520
Worker	0.0151	4.4400e-003	0.0684	4.0000e-005	1.6000e-004	1.0000e-004	2.6000e-004	6.0000e-005	9.0000e-005	1.6000e-004						3.5363
Total	**0.0313**	**0.6093**	**0.2405**	**7.0000e-004**	**4.9100e-003**	**5.3000e-004**	**5.4400e-003**	**1.4300e-003**	**5.0000e-004**	**1.9300e-003**						**74.3080**

3.3 Grading - 2021

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	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205						0.0000
Off-Road	5.1653	49.5199	32.8093	0.0742		2.2443	2.2443		2.0826	2.0826						7,116.0226
Total	**5.1653**	**49.5199**	**32.8093**	**0.0742**	**12.0442**	**2.2443**	**14.2885**	**6.6205**	**2.0826**	**8.7030**						**7,116.0226**

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	lb/day										lb/day					
Hauling	6.3400e-003	0.1709	0.0479	6.3000e-004	0.0164	7.4000e-004	0.0171	4.4900e-003	7.1000e-004	5.1900e-003						68.7743
Vendor	0.0153	0.5780	0.1650	5.7000e-004	2.5700e-003	3.3000e-004	2.9000e-003	7.7000e-004	3.1000e-004	1.0800e-003						61.1520
Worker	0.0170	5.0000e-003	0.0769	4.0000e-005	1.8000e-004	1.1000e-004	2.9000e-004	7.0000e-005	1.1000e-004	1.8000e-004						3.9783
Total	**0.0386**	**0.7539**	**0.2899**	**1.2400e-003**	**0.0191**	**1.1800e-003**	**0.0203**	**5.3300e-003**	**1.1300e-003**	**6.4500e-003**						**133.9046**

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	lb/day										lb/day					
Fugitive Dust					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820						0.0000
Off-Road	5.1653	49.5199	32.8093	0.0742		2.2443	2.2443		2.0826	2.0826						7,116.0226
Total	**5.1653**	**49.5199**	**32.8093**	**0.0742**	**4.6972**	**2.2443**	**6.9416**	**2.5820**	**2.0826**	**4.6645**						**7,116.0226**

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	lb/day										lb/day					
Hauling	6.3400e-003	0.1709	0.0479	6.3000e-004	0.0164	7.4000e-004	0.0171	4.4900e-003	7.1000e-004	5.1900e-003						68.7743
Vendor	0.0153	0.5780	0.1650	5.7000e-004	2.5700e-003	3.3000e-004	2.9000e-003	7.7000e-004	3.1000e-004	1.0800e-003						61.1520
Worker	0.0170	5.0000e-003	0.0769	4.0000e-005	1.8000e-004	1.1000e-004	2.9000e-004	7.0000e-005	1.1000e-004	1.8000e-004						3.9783
Total	**0.0386**	**0.7539**	**0.2899**	**1.2400e-003**	**0.0191**	**1.1800e-003**	**0.0203**	**5.3300e-003**	**1.1300e-003**	**6.4500e-003**						**133.9046**

3.4 Matt Foundation - 2021

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	2.2825	19.2601	22.4438	0.0395		1.0656	1.0656		1.0656	1.0656						3,743.3119
Total	**2.2825**	**19.2601**	**22.4438**	**0.0395**	**0.0000**	**1.0656**	**1.0656**	**0.0000**	**1.0656**	**1.0656**						**3,743.3119**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.2919	14.3374	2.5384	0.0157	0.0374	9.0700e-003	0.0464	0.0105	8.6800e-003	0.0192						1,704.4239
Worker	0.1416	0.0417	0.6410	3.4000e-004	1.4800e-003	9.6000e-004	2.4400e-003	5.9000e-004	8.8000e-004	1.4700e-003						33.1526
Total	**0.4334**	**14.3791**	**3.1793**	**0.0160**	**0.0388**	**0.0100**	**0.0489**	**0.0111**	**9.5600e-003**	**0.0207**						**1,737.5764**

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	2.2825	19.2601	22.4438	0.0395		1.0656	1.0656		1.0656	1.0656						3,743.3119
Total	**2.2825**	**19.2601**	**22.4438**	**0.0395**	**0.0000**	**1.0656**	**1.0656**	**0.0000**	**1.0656**	**1.0656**						**3,743.3119**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.2919	14.3374	2.5384	0.0157	0.0374	9.0700e-003	0.0464	0.0105	8.6800e-003	0.0192						1,704.4239
Worker	0.1416	0.0417	0.6410	3.4000e-004	1.4800e-003	9.6000e-004	2.4400e-003	5.9000e-004	8.8000e-004	1.4700e-003						33.1526
Total	**0.4334**	**14.3791**	**3.1793**	**0.0160**	**0.0388**	**0.0100**	**0.0489**	**0.0111**	**9.5600e-003**	**0.0207**						**1,737.5764**

3.5 Foundation - 2021

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	1.7617	14.9823	17.1757	0.0291		0.8635	0.8635		0.8501	0.8501						2,763.5805
Total	**1.7617**	**14.9823**	**17.1757**	**0.0291**	**0.0000**	**0.8635**	**0.8635**	**0.0000**	**0.8501**	**0.8501**						**2,763.5805**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0374	1.8381	0.3254	2.0100e-003	4.7900e-003	1.1600e-003	5.9500e-003	1.3500e-003	1.1100e-003	2.4600e-003						218.5159
Worker	0.4719	0.1389	2.1365	1.1400e-003	4.9300e-003	3.1900e-003	8.1300e-003	1.9600e-003	2.9400e-003	4.8900e-003						110.5085
Total	**0.5094**	**1.9770**	**2.4620**	**3.1500e-003**	**9.7200e-003**	**4.3500e-003**	**0.0141**	**3.3100e-003**	**4.0500e-003**	**7.3500e-003**						**329.0244**

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	1.7617	14.9823	17.1757	0.0291		0.8635	0.8635		0.8501	0.8501						2,763.5805
Total	**1.7617**	**14.9823**	**17.1757**	**0.0291**	**0.0000**	**0.8635**	**0.8635**	**0.0000**	**0.8501**	**0.8501**						**2,763.5805**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0374	1.8381	0.3254	2.0100e-003	4.7900e-003	1.1600e-003	5.9500e-003	1.3500e-003	1.1100e-003	2.4600e-003						218.5159
Worker	0.4719	0.1389	2.1365	1.1400e-003	4.9300e-003	3.1900e-003	8.1300e-003	1.9600e-003	2.9400e-003	4.8900e-003						110.5085
Total	**0.5094**	**1.9770**	**2.4620**	**3.1500e-003**	**9.7200e-003**	**4.3500e-003**	**0.0141**	**3.3100e-003**	**4.0500e-003**	**7.3500e-003**						**329.0244**

3.5 Foundation - 2022

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	1.6187	13.7769	17.1118	0.0291		0.7482	0.7482		0.7370	0.7370						2,763.3617
Total	**1.6187**	**13.7769**	**17.1118**	**0.0291**	**0.0000**	**0.7482**	**0.7482**	**0.0000**	**0.7370**	**0.7370**						**2,763.3617**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0353	1.7787	0.3147	1.9900e-003	4.7900e-003	9.8000e-004	5.7700e-003	1.3500e-003	9.4000e-004	2.2900e-003						216.4857
Worker	0.4329	0.1225	1.9295	1.1000e-003	4.9300e-003	3.1200e-003	8.0500e-003	1.9600e-003	2.8700e-003	4.8300e-003						106.8175
Total	**0.4682**	**1.9013**	**2.2442**	**3.0900e-003**	**9.7200e-003**	**4.1000e-003**	**0.0138**	**3.3100e-003**	**3.8100e-003**	**7.1200e-003**						**323.3032**

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	1.6187	13.7769	17.1118	0.0291		0.7482	0.7482		0.7370	0.7370						2,763.3617
Total	**1.6187**	**13.7769**	**17.1118**	**0.0291**	**0.0000**	**0.7482**	**0.7482**	**0.0000**	**0.7370**	**0.7370**						**2,763.3617**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0353	1.7787	0.3147	1.9900e-003	4.7900e-003	9.8000e-004	5.7700e-003	1.3500e-003	9.4000e-004	2.2900e-003						216.4857
Worker	0.4329	0.1225	1.9295	1.1000e-003	4.9300e-003	3.1200e-003	8.0500e-003	1.9600e-003	2.8700e-003	4.8300e-003						106.8175
Total	**0.4682**	**1.9013**	**2.2442**	**3.0900e-003**	**9.7200e-003**	**4.1000e-003**	**0.0138**	**3.3100e-003**	**3.8100e-003**	**7.1200e-003**						**323.3032**

3.6 Building Construction - 2022

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	lb/day										lb/day					
Off-Road	2.6553	22.0897	28.3362	0.0478		1.1300	1.1300		1.1171	1.1171						4,516.5770
Total	**2.6553**	**22.0897**	**28.3362**	**0.0478**		**1.1300**	**1.1300**		**1.1171**	**1.1171**						**4,516.5770**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1924	7.6710	2.0967	7.6400e-003	0.0350	3.7700e-003	0.0388	0.0104	3.6000e-003	0.0140						824.5285
Worker	0.4329	0.1225	1.9295	1.1000e-003	4.9300e-003	3.1200e-003	8.0500e-003	1.9600e-003	2.8700e-003	4.8300e-003						106.8175
Total	**0.6253**	**7.7935**	**4.0262**	**8.7400e-003**	**0.0399**	**6.8900e-003**	**0.0468**	**0.0124**	**6.4700e-003**	**0.0189**						**931.3461**

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	lb/day										lb/day					
Off-Road	2.6553	22.0897	28.3362	0.0478		1.1300	1.1300		1.1171	1.1171						4,516.5770
Total	**2.6553**	**22.0897**	**28.3362**	**0.0478**		**1.1300**	**1.1300**		**1.1171**	**1.1171**						**4,516.5770**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1924	7.6710	2.0967	7.6400e-003	0.0350	3.7700e-003	0.0388	0.0104	3.6000e-003	0.0140						824.5285
Worker	0.4329	0.1225	1.9295	1.1000e-003	4.9300e-003	3.1200e-003	8.0500e-003	1.9600e-003	2.8700e-003	4.8300e-003						106.8175
Total	**0.6253**	**7.7935**	**4.0262**	**8.7400e-003**	**0.0399**	**6.8900e-003**	**0.0468**	**0.0124**	**6.4700e-003**	**0.0189**						**931.3461**

3.6 Building Construction - 2023

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	lb/day										lb/day					
Off-Road	2.4636	20.5117	28.2555	0.0478		0.9749	0.9749		0.9640	0.9640						4,516.0938
Total	**2.4636**	**20.5117**	**28.2555**	**0.0478**		**0.9749**	**0.9749**		**0.9640**	**0.9640**						**4,516.0938**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1506	6.6667	1.8395	7.2900e-003	0.0350	2.4600e-003	0.0375	0.0104	2.3500e-003	0.0128						788.5390
Worker	0.3981	0.1087	1.7451	1.0600e-003	4.9300e-003	3.0600e-003	7.9900e-003	1.9600e-003	2.8200e-003	4.7700e-003						103.0795
Total	**0.5486**	**6.7753**	**3.5846**	**8.3500e-003**	**0.0399**	**5.5200e-003**	**0.0455**	**0.0124**	**5.1700e-003**	**0.0176**						**891.6185**

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	lb/day										lb/day					
Off-Road	2.4636	20.5117	28.2555	0.0478		0.9749	0.9749		0.9640	0.9640						4,516.0938
Total	**2.4636**	**20.5117**	**28.2555**	**0.0478**		**0.9749**	**0.9749**		**0.9640**	**0.9640**						**4,516.0938**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1506	6.6667	1.8395	7.2900e-003	0.0350	2.4600e-003	0.0375	0.0104	2.3500e-003	0.0128						788.5390
Worker	0.3981	0.1087	1.7451	1.0600e-003	4.9300e-003	3.0600e-003	7.9900e-003	1.9600e-003	2.8200e-003	4.7700e-003						103.0795
Total	**0.5486**	**6.7753**	**3.5846**	**8.3500e-003**	**0.0399**	**5.5200e-003**	**0.0455**	**0.0124**	**5.1700e-003**	**0.0176**						**891.6185**

3.6 Building Construction - 2024

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	lb/day										lb/day					
Off-Road	2.3010	19.2750	28.1954	0.0478		0.8449	0.8449		0.8353	0.8353						4,515.8386
Total	**2.3010**	**19.2750**	**28.1954**	**0.0478**		**0.8449**	**0.8449**		**0.8353**	**0.8353**						**4,515.8386**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1436	6.6385	1.7500	7.2200e-003	0.0350	2.2600e-003	0.0373	0.0104	2.1600e-003	0.0126						781.2603
Worker	0.3677	0.0970	1.5925	1.0200e-003	4.9300e-003	3.0200e-003	7.9500e-003	1.9600e-003	2.7700e-003	4.7300e-003						99.5616
Total	**0.5113**	**6.7356**	**3.3425**	**8.2400e-003**	**0.0399**	**5.2800e-003**	**0.0452**	**0.0124**	**4.9300e-003**	**0.0173**						**880.8218**

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	lb/day										lb/day					
Off-Road	2.3010	19.2750	28.1954	0.0478		0.8449	0.8449		0.8353	0.8353						4,515.8386
Total	**2.3010**	**19.2750**	**28.1954**	**0.0478**		**0.8449**	**0.8449**		**0.8353**	**0.8353**						**4,515.8386**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1436	6.6385	1.7500	7.2200e-003	0.0350	2.2600e-003	0.0373	0.0104	2.1600e-003	0.0126						781.2603
Worker	0.3677	0.0970	1.5925	1.0200e-003	4.9300e-003	3.0200e-003	7.9500e-003	1.9600e-003	2.7700e-003	4.7300e-003						99.5616
Total	**0.5113**	**6.7356**	**3.3425**	**8.2400e-003**	**0.0399**	**5.2800e-003**	**0.0452**	**0.0124**	**4.9300e-003**	**0.0173**						**880.8218**

3.7 Architectural Coating - 2023

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	lb/day										lb/day					
Archit. Coating	42.6648					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2902	2.2706	3.5068	5.6400e-003		0.1036	0.1036		0.1029	0.1029						539.7601
Total	**42.9549**	**2.2706**	**3.5068**	**5.6400e-003**		**0.1036**	**0.1036**		**0.1029**	**0.1029**						**539.7601**

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	lb/day										lb/day					
Hauling	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
Worker	0.0732	0.0200	0.3211	1.9000e-004	9.1000e-004	5.6000e-004	1.4700e-003	3.6000e-004	5.2000e-004	8.8000e-004						18.9666
Total	**0.0732**	**0.0200**	**0.3211**	**1.9000e-004**	**9.1000e-004**	**5.6000e-004**	**1.4700e-003**	**3.6000e-004**	**5.2000e-004**	**8.8000e-004**						**18.9666**

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	lb/day										lb/day					
Archit. Coating	42.6648					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2902	2.2706	3.5068	5.6400e-003		0.1036	0.1036		0.1029	0.1029						539.7601
Total	**42.9549**	**2.2706**	**3.5068**	**5.6400e-003**		**0.1036**	**0.1036**		**0.1029**	**0.1029**						**539.7601**

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	lb/day										lb/day					
Hauling	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
Worker	0.0732	0.0200	0.3211	1.9000e-004	9.1000e-004	5.6000e-004	1.4700e-003	3.6000e-004	5.2000e-004	8.8000e-004						18.9666
Total	**0.0732**	**0.0200**	**0.3211**	**1.9000e-004**	**9.1000e-004**	**5.6000e-004**	**1.4700e-003**	**3.6000e-004**	**5.2000e-004**	**8.8000e-004**						**18.9666**

3.7 Architectural Coating - 2024

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	lb/day										lb/day					
Archit. Coating	42.6648					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2756	2.1514	3.5063	5.6400e-003		0.0904	0.0904		0.0896	0.0896						539.7270
Total	**42.9404**	**2.1514**	**3.5063**	**5.6400e-003**		**0.0904**	**0.0904**		**0.0896**	**0.0896**						**539.7270**

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	lb/day										lb/day					
Hauling	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
Worker	0.0677	0.0179	0.2930	1.9000e-004	9.1000e-004	5.5000e-004	1.4600e-003	3.6000e-004	5.1000e-004	8.7000e-004						18.3193
Total	**0.0677**	**0.0179**	**0.2930**	**1.9000e-004**	**9.1000e-004**	**5.5000e-004**	**1.4600e-003**	**3.6000e-004**	**5.1000e-004**	**8.7000e-004**						**18.3193**

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	lb/day										lb/day					
Archit. Coating	42.6648					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2756	2.1514	3.5063	5.6400e-003		0.0904	0.0904		0.0896	0.0896						539.7270
Total	**42.9404**	**2.1514**	**3.5063**	**5.6400e-003**		**0.0904**	**0.0904**		**0.0896**	**0.0896**						**539.7270**

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	lb/day										lb/day					
Hauling	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
Worker	0.0677	0.0179	0.2930	1.9000e-004	9.1000e-004	5.5000e-004	1.4600e-003	3.6000e-004	5.1000e-004	8.7000e-004						18.3193
Total	**0.0677**	**0.0179**	**0.2930**	**1.9000e-004**	**9.1000e-004**	**5.5000e-004**	**1.4600e-003**	**3.6000e-004**	**5.1000e-004**	**8.7000e-004**						**18.3193**

3.8 Paving - 2023

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	lb/day										lb/day					
Off-Road	0.4422	4.0380	5.6333	9.0100e-003		0.1885	0.1885		0.1753	0.1753						848.1292
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.4422**	**4.0380**	**5.6333**	**9.0100e-003**		**0.1885**	**0.1885**		**0.1753**	**0.1753**						**848.1292**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0111	0.4902	0.1353	5.4000e-004	2.5700e-003	1.8000e-004	2.7500e-003	7.7000e-004	1.7000e-004	9.4000e-004						57.9808
Worker	0.0398	0.0109	0.1745	1.1000e-004	4.9000e-004	3.1000e-004	8.0000e-004	2.0000e-004	2.8000e-004	4.8000e-004						10.3080
Total	**0.0509**	**0.5011**	**0.3098**	**6.5000e-004**	**3.0600e-003**	**4.9000e-004**	**3.5500e-003**	**9.7000e-004**	**4.5000e-004**	**1.4200e-003**						**68.2888**

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	lb/day										lb/day					
Off-Road	0.4422	4.0380	5.6333	9.0100e-003		0.1885	0.1885		0.1753	0.1753						848.1292
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.4422**	**4.0380**	**5.6333**	**9.0100e-003**		**0.1885**	**0.1885**		**0.1753**	**0.1753**						**848.1292**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0111	0.4902	0.1353	5.4000e-004	2.5700e-003	1.8000e-004	2.7500e-003	7.7000e-004	1.7000e-004	9.4000e-004						57.9808
Worker	0.0398	0.0109	0.1745	1.1000e-004	4.9000e-004	3.1000e-004	8.0000e-004	2.0000e-004	2.8000e-004	4.8000e-004						10.3080
Total	**0.0509**	**0.5011**	**0.3098**	**6.5000e-004**	**3.0600e-003**	**4.9000e-004**	**3.5500e-003**	**9.7000e-004**	**4.5000e-004**	**1.4200e-003**						**68.2888**

3.8 Paving - 2024

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	lb/day										lb/day					
Off-Road	0.4264	3.8096	5.6474	9.0200e-003		0.1719	0.1719		0.1601	0.1601						848.2654
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.4264**	**3.8096**	**5.6474**	**9.0200e-003**		**0.1719**	**0.1719**		**0.1601**	**0.1601**						**848.2654**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0106	0.4881	0.1287	5.3000e-004	2.5700e-003	1.7000e-004	2.7400e-003	7.7000e-004	1.6000e-004	9.3000e-004						57.4456
Worker	0.0368	9.7000e-003	0.1593	1.0000e-004	4.9000e-004	3.0000e-004	7.9000e-004	2.0000e-004	2.8000e-004	4.7000e-004						9.9562
Total	**0.0473**	**0.4978**	**0.2879**	**6.3000e-004**	**3.0600e-003**	**4.7000e-004**	**3.5300e-003**	**9.7000e-004**	**4.4000e-004**	**1.4000e-003**						**67.4018**

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	lb/day										lb/day					
Off-Road	0.4264	3.8096	5.6474	9.0200e-003		0.1719	0.1719		0.1601	0.1601						848.2654
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.4264**	**3.8096**	**5.6474**	**9.0200e-003**		**0.1719**	**0.1719**		**0.1601**	**0.1601**						**848.2654**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0106	0.4881	0.1287	5.3000e-004	2.5700e-003	1.7000e-004	2.7400e-003	7.7000e-004	1.6000e-004	9.3000e-004						57.4456
Worker	0.0368	9.7000e-003	0.1593	1.0000e-004	4.9000e-004	3.0000e-004	7.9000e-004	2.0000e-004	2.8000e-004	4.7000e-004						9.9562
Total	**0.0473**	**0.4978**	**0.2879**	**6.3000e-004**	**3.0600e-003**	**4.7000e-004**	**3.5300e-003**	**9.7000e-004**	**4.4000e-004**	**1.4000e-003**						**67.4018**

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Draft EIR

Appendix B-3-Greenhouse Gas Emissions Worksheets and Modeling Output Files

- Appendix B-3.1: GHG Modeling Parameters and Summary of Emissions
    - GHG Emissions Summary
    - GHG Parameters and Summary
        - Existing Trip Generation Rates
        - VMT based on LADOT VMT Calculator
        - Parking Structure Electricity Calculations
        - Summary of Emissions
    - Electric Vehicle Charging Station GHG Emission Reduction Calculations

- Appendix B-3.2: CalEEMod Outputs
    - Existing Operations
    - Future Project—Construction and Operations
    - Future Project—Operations with TDM

GHG SOURCE CALCULATIONS:

	LADWP Data	
	Year	**lbs./MWh**
	2015	1132
	2026	500
Project Buildout Year	2024	2018
LADWP CO2 Intensity Factor (lbs./MWh)	615	960

ENERGY

Consistent with Section 120.6(c), Mandatory Requirements for Enclosed Parking Garages, the ventilation rate shall be at least 0.15 cfm/sq. f when the garage is scheduled to be occupied.

Buildout Parking Garage Ventilation

Square Footage =	331,200	ft2
Minimum Ventilation =	0.15	cfm/ft2
Flowrate =	49680	cfm
Number of Fans (11,000 cfm)	5.0	fans
Number of Fans	5	fans
Horsepower per Fan	9	hp
Horsepower to kW Conv.	0.746	kW per hp
Total kW =	33.57	
Annual kW =	147,037	Operational approx. 50% of the time. Only operational when CO sensors read in excess of 25 ppm CO concentrations (2013 Building Energy Efficiency Standards)
Usage Rate:	**0.44**	kWh/sq. ft annual
Adjustment:	0.49	(CalEEMod applies mitigation to all land uses. So, this adjustment accounts for the 10% reduction in Title 24 standards associated with Project Design Feature)

Buildout Parking Garage Lighting

Square Footage =	331,200	ft2
Allowed Lighting Power =	0.2	watts per ft2 (Table 140.6 (Complete Building Method Lighting Power Density Value) of the 2013 Building Energy Efficiency Standards)
Annual kW =	578,812	conservatively assumes maximum lighting power 24 hours per day)
Annual kW/sq. ft =	**1.75**	kWh/sq. ft annual
Adjustment:	2.33	(CalEEMod applies mitigation to all land uses. So, this adjustment accounts for the 25% reduction in lighting associated with LEED Silver)

Elevator (no change CalEEMod Default) **0.19** kWh/sq. ft annual

Summary of GHG Emissions

	Baseline (2016)	**Baseline (Buildout)**	**Buildout-No MXD PDFs**	**Buildout-PDFs**	**Project**	**% Reduction**	**% Project**
Area	2	0	81	81	81	0%	1.0%
Energy	266	0	2,105	1,971	1,971	-6%	24.5%
Mobile	529	0	7,169	5,533	5,350	-23%	66.5%
			(183)	(183)			
Emergency Generators	-	0	2	2	2	0%	0.0%
Waste	5	0	72	72	72	0%	0.9%
Water	42	0	422	338	338	-20%	4.2%
Construction	-		227	227	227	0%	2.8%
Total	**844**	**-**	**9,895**	**8,040**	**8,040**	-19%	100.0%

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VMT Calculations for CalEEMod Inputs

Project without TDM (MXD Data)

	Unadjusted Trips Pre MXD	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted Pre MXD VMT	MXD VMT	Percent Reduction for MXD
Home Based Work Production	470	-25.7%	349	7.3	3,431	2548	
Home Based Other Production	1258	-25.1%	942	5.3	6,667	4,993	
Non-Home Based Other Production	863	-10.9%	769	8.1	6990	6229	
Home-Based Work Attraction	1214	-22.0%	947	8.3	10076	7860	
Home-Based Other Attraction	2135	-24.9%	1604	6.5	13,878	10426	
Non-Home Based Other Attraction	989	-10.7%	883	7.2	7121	6358	
Total	**6,929**		**5,494**		**48,163**	**38,414**	**20%**
Passby	438						
Primary %	93.7%						
Primary Daily VMT	7.41						
Pass-by %	6.3%						
Pass-by Daily VMT (passby 0.1 miles)	43.8						

Project with TDM (MXD Data)

	Proposed Project			*Project with Mitigation Measures*			
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT	
Home Based Work Production	-3.2%	338	2466	-20.0%	279	2038	
Home Based Other Production	-3.2%	912	4,832	-20.0%	754	3,994	
Non-Home Based Other Production	-3.2%	744	6028	-3.2%	744	6028	
Home-Based Work Attraction	-3.2%	917	7607	-20.0%	758	6288	
Home-Based Other Attraction	-3.2%	1552	10090	-3.2%	1552	10090	
Non-Home Based Other Attraction	-3.2%	855	6153	-3.2%	855	6153	**28%**
Total		**5,316**	**37,176**		**4,926**	**34,480**	
Passby		438			438		
Primary %		91.8%			91.1%		
Primary Daily VMT		7.61			7.67		
Pass-by %		8.2%			8.9%		
Pass-by Daily VMT (passby 0.1 miles)		43.8			43.8		

Source: Fehr and Peers.

CalEEMod Inputs - **PASTE THIS INTO CALEEMOD INPUT FILE**

VehicleTripsLandUseSubType	VehicleTripsLandUseSizeMetric	WD_TR	ST_TR	SU_TR	HW_TL	HS_TL	HO_TL	CC_TL	CW_TL	CNW_TL	PR_TP	DV_TP	PB_TP	HW_TTP	HS_TTP	HO_TTP	CC_TTP	CW_TTP	CNW_TTP
Project No MXD User Defined Res. (VMT)	User Defined Unit	6,929	6,929	6,929	0	0	0	7.41	0	0	93.7%	0	0	0	0	0	100	0	0
Project User Defined Res. (VMT)	User Defined Unit	5,316	5,316	5,316	0	0	0	7.61	0	0	91.8	0	0	0	0	0	100	0	0
Project TDM/MM User Defined Res. (VMT)	User Defined Unit	4,926	4,926	4,926	0	0	0	7.67	0	0	91.1	0	0	0	0	0	100	0	0

	Project VMT per Capita		Project VMT per Employee	
	Project	Mitigated	Project	Mitigated
VMT per Capita (Mitigated)	9.3	7.7	9.1	7.5
SCAG Average	22.8	22.8	22.8	22.8
Reduction (%)	-59%	-66%	-60%	-67%

(Total Population: 782) (Total Employee: 837)

[a] Provided by Gibson Transportation

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Existing

Land Use	Amount	Units	Square Footage	Trips	Trip Rate	Notes
Live/work units	10	DU	28699	73	7.32	
Office	6.983	KSF	6983	68	9.74	
Retail	25.739	KSF	25739	972	37.75	
Warehouse	2.109	KSF	2109	10	4.96	

CalEEMod Inputs (Trip Rates)

		CalEEMod Defaults			Trip Rates		
Land Use (Existing)	**Units**	**Weekday**	**Saturday**	**Sunday**	**Weekday**	**Saturday**	**Sunday**
Existing (To Remain-Not Included in Trip Gen	Dwelling Unit	6.59	7.16	6.07	7.32	7.95	6.74
Land Use	Space	11.03	2.46	1.05	9.74	2.17	0.93
Live/work units	1000sqft	44.32	42.04	20.43	37.75	35.81	17.40
Office	1000sqft	1.68	1.68	1.68	4.96	4.96	4.96

Los Angeles Unified School District, 2016 Developer Fee Justification Study, March 2017, Table 14. Based on the employee generation rate for "Neighborhood Shopping Center"

Applicable VMT Reduction Measures selected in CalEEMod based on CAPCOA's Quantifying Greenhouse Gas Mitigation Measures, August, 2010.

LUT-1: Increase Density LUT-1 CAPCOA measures dwellings per acre and jobs per acre .

Data Needed: number of housing units per acre or jobs per acre	DU/Acre	Jobs/Acre
Existing: 2.2 acres, 10 residential units, 0 employees	5	48

LUT-3 Increase Diversity of Urban and Suburban Developments (Mixed Use) (Internally calculated in CalEEMod based on mix of land uses)

Land Use	Existing (sq ft)
Single Family	0
Multi Family	0
Commerical (Office, Hotel, Retail)	17,219
Industrial	0
Institutional	0
Park	0
Total	17,219
% VMT Reduction	0.0%

LUT-4 Increase Destination Accessibility

Distance to downtown/job center (Los Angeles)	1.5	miles

LUT-5 Increase Transit Accessibility (0.5-24.6% reduction)

Distance to Metro Station	1.5	miles

LUT-8/SDT-1 Provide pedestrian Network Improvements — Project Site Only

LUT-9 Improve Walkability Design

Intersections within one square mile of the Project site	63	intersections

SDT-2 Provide Traffic Calming Measures

% of streets with sidewalks on both sides	75	%
number of intersections with crosswalks and/or timers	18	intersections
% of intersections with traffic calming measures	75	%

GHG Emissions Reductions for Residential Uses Associated with Electric Vehicle Charging Stations/Plugins

Step 1: Estimating GHG Emissions Reduction to Replace Gasoline/Diesel Vehicle with Electric Vehicle

LADWP Electricity Emission Factor[1]	0.28	MTCO2E/MWh
Fuel Economy of Electric Vehicle[2]	0.25	kWh/mile
Electric Vehicle GHG Emissions	69.7	grams/mile
GHG Emissions from Residential Miles Traveled (CalEEMod)[3]	1,000.4	grams/mile
GHG Emissions Reduction from Additional Electric Vehicles, per mile	930.7	grams/mile

Step 2: Estimating Project Residential-Related VMT GHG Emissions

Residential Average Yearly VMT with TDM and PDFs[4]	1,966,309	miles/year
Percent of Residential Miles Driven in Electric Vehicles due to this Measure	10.0%	
Residential VMT that is Displaced by Evs due to this Measure	196,631	miles/year
GHG Emissions Reduction from Residential Electric Vehicles	**183**	MTCO2E/MWh

Notes:
1) CO2 intensity factor reflects a 2024 RPS for LADWP (615 lbs of CO2E/MWh).
2) US Department of Energy, 2013. Benefits and Considerations of Electricity as a Vehicle Fuel. Available at: http://afdc.energy.gov/fuels/electricity_benefits.html.
3) CalEEMod Output file provided in Appendix C-2.2 of this Draft EIR.
4) Residential charging of vehicles would primarily occur over night, while commercial use charging of vehicles would primarily occur during the day. In addition, it is assumed that the charging stations/plugins for residential uses would be fully utilized which is supported by the projected number of electric vehicles in the future. Bloomberg New Energy Finance projects that electric vehicles will represent 35 percent of global new car sales by 2040 (https://about.bnef.com/blog/electric-vehicles-to-be-35-of-global-new-car-sales-by-2040/).

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Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.98	1000sqft	0.16	6,983.00	0
Unrefrigerated Warehouse-No Rail	2.11	1000sqft	0.05	2,109.00	0
Parking Lot	43.00	Space	0.39	15,000.00	0
Apartments Low Rise	10.00	Dwelling Unit	0.63	28,699.00	24
Strip Mall	25.74	1000sqft	0.59	25,739.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2018
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	960	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP CO2 Intensity Factor for Year 2018 (Interpolated)

Land Use - Existing population provied in Section XIII. Population and Housing of the IS.

Vehicle Trips - see assumptions

Woodstoves - No wood fireplaces or stoves

Energy Use - adjustment for parking structure electricity usage

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	0.88	0.88
tblEnergyUse	T24E	170.99	170.99
tblEnergyUse	T24NG	11,673.00	11,673.00
tblFireplaces	NumberGas	8.50	9.00
tblFireplaces	NumberWood	0.50	0.00
tblLandUse	LandUseSquareFeet	6,980.00	6,983.00
tblLandUse	LandUseSquareFeet	2,110.00	2,109.00
tblLandUse	LandUseSquareFeet	17,200.00	15,000.00
tblLandUse	LandUseSquareFeet	10,000.00	28,699.00
tblLandUse	LandUseSquareFeet	25,740.00	25,739.00
tblLandUse	Population	29.00	24.00

tblProjectCharacteristics	CO2IntensityFactor	1227.89	960
tblVehicleTrips	ST_TR	7.16	7.95
tblVehicleTrips	ST_TR	2.46	2.17
tblVehicleTrips	ST_TR	42.04	35.81
tblVehicleTrips	ST_TR	1.68	4.96
tblVehicleTrips	SU_TR	6.07	6.74
tblVehicleTrips	SU_TR	1.05	0.93
tblVehicleTrips	SU_TR	20.43	17.40
tblVehicleTrips	SU_TR	1.68	4.96
tblVehicleTrips	WD_TR	6.59	7.32
tblVehicleTrips	WD_TR	11.03	9.74
tblVehicleTrips	WD_TR	44.32	37.75
tblVehicleTrips	WD_TR	1.68	4.96
tblWoodstoves	NumberCatalytic	0.50	0.00
tblWoodstoves	NumberNoncatalytic	0.50	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	0.2594	3.0800e-003	0.1057	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004						2.3488
Energy	1.5000e-003	0.0132	8.3900e-003	8.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003						266.4716
Mobile	0.3684	1.6394	4.3050	0.0113	0.8178	0.0139	0.8318	0.2193	0.0131	0.2324						1,040.2641
Waste						0.0000	0.0000		0.0000	0.0000						20.1664
Water						0.0000	0.0000		0.0000	0.0000						41.5526
Total	**0.6292**	**1.6558**	**4.4191**	**0.0114**	**0.8178**	**0.0157**	**0.8335**	**0.2193**	**0.0149**	**0.2342**						**1,370.8034**

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	0.2594	3.0800e-003	0.1057	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004						2.3488
Energy	1.5000e-003	0.0132	8.3900e-003	8.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003						266.4716
Mobile	0.2975	1.1418	2.5980	5.7300e-003	0.3832	7.2900e-003	0.3905	0.1028	6.8600e-003	0.1096						529.1927
Waste						0.0000	0.0000		0.0000	0.0000						4.8399
Water						0.0000	0.0000		0.0000	0.0000						41.5526
Total	**0.5584**	**1.1581**	**2.7120**	**5.8300e-003**	**0.3832**	**9.0500e-003**	**0.3923**	**0.1028**	**8.6200e-003**	**0.1114**						**844.4055**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	11.26	30.06	38.63	48.77	53.14	42.36	52.94	53.14	42.03	52.44	0.00	0.00	0.00	0.00	0.00	38.40

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	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	0.2975	1.1418	2.5980	5.7300e-003	0.3832	7.2900e-003	0.3905	0.1028	6.8600e-003	0.1096						529.1927
Unmitigated	0.3684	1.6394	4.3050	0.0113	0.8178	0.0139	0.8318	0.2193	0.0131	0.2324						1,040.2641

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	73.20	79.50	67.40	250,380	117,327
General Office Building	67.99	15.15	6.49	166,395	77,972
Parking Lot	0.00	0.00	0.00		
Strip Mall	971.69	921.75	447.88	1,692,780	793,233
Unrefrigerated Warehouse-No Rail	10.47	10.47	10.47	44,853	21,018
Total	1,123.34	1,026.86	532.23	2,154,407	1,009,550

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
General Office Building	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Parking Lot	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Strip Mall	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Unrefrigerated Warehouse-No Rail	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

5.0 Energy Detail

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						251.5256
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						251.5256
NaturalGas Mitigated	1.5000e-003	0.0132	8.3900e-003	8.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003						14.9460
NaturalGas Unmitigated	1.5000e-003	0.0132	8.3900e-003	8.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003						14.9460

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	142516	7.7000e-004	6.5700e-003	2.7900e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004						7.6504
General Office Building	86868.5	4.7000e-004	4.2600e-003	3.5800e-003	3.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004						4.6632
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Strip Mall	46845	2.5000e-004	2.3000e-003	1.9300e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						2.5147
Unrefrigerated Warehouse-No Rail	2193.36	1.0000e-005	1.1000e-004	9.0000e-005	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						0.1177
Total		**1.5000e-003**	**0.0132**	**8.3900e-003**	**8.0000e-005**		**1.0300e-003**	**1.0300e-003**		**1.0300e-003**	**1.0300e-003**						**14.9460**

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					
Apartments Low Rise	142516	7.7000e-004	6.5700e-003	2.7900e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004						7.6504
General Office Building	86868.5	4.7000e-004	4.2600e-003	3.5800e-003	3.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004						4.6632
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Strip Mall	46845	2.5000e-004	2.3000e-003	1.9300e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						2.5147
Unrefrigerated Warehouse-No Rail	2193.36	1.0000e-005	1.1000e-004	9.0000e-005	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						0.1177
Total		**1.5000e-003**	**0.0132**	**8.3900e-003**	**8.0000e-005**		**1.0300e-003**	**1.0300e-003**		**1.0300e-003**	**1.0300e-003**						**14.9460**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	36122.3				15.7706
General Office Building	106421				46.4622
Parking Lot	13140				5.7368
Strip Mall	410794				179.3482
Unrefrigerated Warehouse-No Rail	9638.13				4.2079
Total					**251.5256**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	36122.3				15.7706
General Office Building	106421				46.4622
Parking Lot	13140				5.7368
Strip Mall	410794				179.3482
Unrefrigerated Warehouse-No Rail	9638.13				4.2079
Total					**251.5256**

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	0.2594	3.0800e-003	0.1057	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004						2.3488
Unmitigated	0.2594	3.0800e-003	0.1057	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004						2.3488

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	0.0253					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2305					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	2.2000e-004	1.8700e-003	7.9000e-004	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004						2.1741
Landscaping	3.3000e-003	1.2100e-003	0.1049	1.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004						0.1747
Total	**0.2594**	**3.0800e-003**	**0.1057**	**2.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**						**2.3488**

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	0.0253					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2305					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	2.2000e-004	1.8700e-003	7.9000e-004	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004						2.1741
Landscaping	3.3000e-003	1.2100e-003	0.1049	1.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004						0.1747
Total	**0.2594**	**3.0800e-003**	**0.1057**	**2.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**						**2.3488**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				41.5526
Unmitigated				41.5526

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.65154 / 0.410754				6.5831
General Office Building	1.24058 / 0.760356				12.4292

Parking Lot	0 / 0			0.0000
Strip Mall	1.90663 / 1.16858			19.1022
Unrefrigerated Warehouse-No Rail	0.487938 / 0			3.4380
Total				**41.5526**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.65154 / 0.410754				6.5831
General Office Building	1.24058 / 0.760356				12.4292
Parking Lot	0 / 0				0.0000
Strip Mall	1.90663 / 1.16858				19.1022
Unrefrigerated Warehouse-No Rail	0.487938 / 0				3.4380
Total					**41.5526**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				4.8399
Unmitigated				20.1664

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4.6				2.3134
General Office Building	6.49				3.2638
Parking Lot	0				0.0000
Strip Mall	27.03				13.5934

Unrefrigerated Warehouse-No Rail	1.98			0.9958
Total				**20.1664**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.104				0.5552
General Office Building	1.5576				0.7833
Parking Lot	0				0.0000
Strip Mall	6.4872				3.2624
Unrefrigerated Warehouse-No Rail	0.4752				0.2390
Total					**4.8399**

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

2143 Violet-Project (Construction and Operations)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	187.37	1000sqft	4.30	187,374.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking with Elevator	828.00	Space	0.00	331,200.00	0
High Turnover (Sit Down Restaurant)	21.86	1000sqft	0.00	21,858.00	0
Apartments High Rise	347.00	Dwelling Unit	0.00	325,385.00	843

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2024
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	615	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP CO2 Intensity Factor for Year 2024 (Interpolated)

Land Use - site specific. Project population (XIII. Population and Housing from IS)

Commercial uses

Construction Phase - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Trips and VMT - Site Specific

Demolition -

Grading -

Vehicle Trips - see assumptions

Woodstoves - No wood fireplaces or stoves

Area Coating -

Energy Use - adjustment for parking structure electricity usage

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - BACT for EG's

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	92.00
tblConstructionPhase	NumDays	230.00	468.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	257.00
tblConstructionPhase	NumDays	18.00	30.00
tblConstructionPhase	NumDays	5.00	4.00
tblConstructionPhase	NumDays	5.00	186.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	LightingElect	1.75	2.33
tblEnergyUse	T24E	3.92	0.49
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	294.95	312.30
tblFireplaces	NumberNoFireplace	34.70	34.07
tblFireplaces	NumberWood	17.35	0.00
tblGrading	MaterialExported	0.00	239,500.00
tblLandUse	LandUseSquareFeet	187,370.00	187,374.00
tblLandUse	LandUseSquareFeet	21,860.00	21,858.00
tblLandUse	LandUseSquareFeet	347,000.00	325,385.00
tblLandUse	LotAcreage	7.45	0.00
tblLandUse	LotAcreage	0.50	0.00
tblLandUse	LotAcreage	5.60	0.00
tblLandUse	Population	992.00	843.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00

tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	615
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	3.1000e-004
tblTripsAndVMT	HaulingTripLength	20.00	18.00
tblTripsAndVMT	HaulingTripLength	20.00	18.00
tblTripsAndVMT	HaulingTripNumber	99.00	440.00
tblTripsAndVMT	HaulingTripNumber	23,681.00	38,550.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	312.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	126.00	272.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	35.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	150.00
tblTripsAndVMT	WorkerTripNumber	15.00	500.00
tblTripsAndVMT	WorkerTripNumber	458.00	500.00
tblTripsAndVMT	WorkerTripNumber	10.00	50.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	7.61
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	72.50	0.00
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	8.50	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	20.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00

tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	0.00	8.24
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	37.00	0.00
tblVehicleTrips	PR_TP	0.00	91.76
tblVehicleTrips	ST_TR	4.98	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	0.00	5,316.00
tblVehicleTrips	SU_TR	3.65	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	0.00	5,316.00
tblVehicleTrips	WD_TR	4.20	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	0.00	5,316.00
tblWoodstoves	NumberCatalytic	17.35	0.00
tblWoodstoves	NumberNoncatalytic	17.35	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

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					
2021	0.9060	12.2862	6.1337	0.0258	1.9633	0.3275	2.2908	0.9631	0.3051	1.2681						2,421.3258
2022	0.7144	5.3379	6.8200	0.0202	1.0017	0.1560	1.1577	0.2691	0.1534	0.4225						1,846.2754
2023	2.2895	6.5250	8.1171	0.0263	1.1593	0.1666	1.3259	0.3141	0.1642	0.4782						2,414.4486
2024	0.5103	0.3291	0.4391	1.3500e-003	0.0607	8.3200e-003	0.0690	0.0164	8.0700e-003	0.0245						123.7544
Maximum	**2.2895**	**12.2862**	**8.1171**	**0.0263**	**1.9633**	**0.3275**	**2.2908**	**0.9631**	**0.3051**	**1.2681**						**2,421.3258**

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					

2021	0.9060	12.2861	6.1337	0.0258	1.0127	0.3275	1.3401	0.4431	0.3051	0.7482						2,421.3248
2022	0.7144	5.3379	6.8200	0.0202	1.0017	0.1560	1.1577	0.2691	0.1534	0.4225						1,846.2748
2023	2.2895	6.5250	8.1171	0.0263	1.1593	0.1666	1.3259	0.3141	0.1642	0.4782						2,414.4479
2024	0.5103	0.3291	0.4391	1.3500e-003	0.0607	8.3200e-003	0.0690	0.0164	8.0700e-003	0.0245						123.7544
Maximum	**2.2895**	**12.2861**	**8.1171**	**0.0263**	**1.1593**	**0.3275**	**1.3401**	**0.4431**	**0.3051**	**0.7482**						**2,421.3248**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**22.72**	**0.00**	**19.63**	**33.27**	**0.00**	**23.71**	**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	1-14-2021	4-13-2021	2.9631	2.9631
2	4-14-2021	7-13-2021	3.7275	3.7275
3	7-14-2021	10-13-2021	3.7709	3.7709
4	10-14-2021	1-13-2022	3.3714	3.3714
5	1-14-2022	4-13-2022	0.9631	0.9631
6	4-14-2022	7-13-2022	0.9627	0.9627
7	7-14-2022	10-13-2022	2.1049	2.1049
8	10-14-2022	1-13-2023	2.0953	2.0953
9	1-14-2023	4-13-2023	1.7723	1.7723
10	4-14-2023	7-13-2023	1.7821	1.7821
11	7-14-2023	10-13-2023	1.8623	1.8623
12	10-14-2023	1-13-2024	3.6532	3.6532
13	1-14-2024	4-13-2024	0.2859	0.2859
		Highest	3.7709	3.7709

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	2.2730	0.1061	3.6178	6.0000e-004		0.0251	0.0251		0.0251	0.0251						81.4536
Energy	0.0550	0.4902	0.3507	3.0000e-003		0.0380	0.0380		0.0380	0.0380						2,163.2917
Mobile	1.2603	5.7664	15.6245	0.0597	5.1355	0.0460	5.1815	1.3764	0.0428	1.4192						5,532.5866
Stationary	4.8000e-004	1.6900e-003	8.7900e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005						1.6050
Waste						0.0000	0.0000		0.0000	0.0000						298.7235
Water						0.0000	0.0000		0.0000	0.0000						422.4386
Total	**3.5887**	**6.3644**	**19.6017**	**0.0633**	**5.1355**	**0.1091**	**5.2447**	**1.3764**	**0.1059**	**1.4823**						**8,500.0989**

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	2.2730	0.1061	3.6178	6.0000e-004		0.0251	0.0251		0.0251	0.0251						81.4536
Energy	0.0526	0.4694	0.3361	2.8700e-003		0.0364	0.0364		0.0364	0.0364						1,971.1826
Mobile	1.2603	5.7664	15.6245	0.0597	5.1355	0.0460	5.1815	1.3764	0.0428	1.4192						5,532.5866
Stationary	4.8000e-004	1.6900e-003	8.7900e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005						1.6050
Waste						0.0000	0.0000		0.0000	0.0000						71.6936
Water						0.0000	0.0000		0.0000	0.0000						337.9509
Total	**3.5863**	**6.3436**	**19.5872**	**0.0632**	**5.1355**	**0.1075**	**5.2431**	**1.3764**	**0.1043**	**1.4807**						**7,996.4722**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.07**	**0.33**	**0.07**	**0.21**	**0.00**	**1.48**	**0.03**	**0.00**	**1.52**	**0.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.92**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/15/2021	2/9/2021	6	22	
2	Grading	Grading	2/10/2021	12/6/2021	6	257	
3	Matt Foundation	Site Preparation	12/7/2021	12/10/2021	6	4	
4	Foundation	Site Preparation	12/11/2021	7/15/2022	6	186	
5	Building Construction	Building Construction	7/16/2022	1/12/2024	6	468	
6	Architectural Coating	Architectural Coating	10/11/2023	1/25/2024	6	92	
7	Paving	Paving	12/26/2023	1/29/2024	6	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 612,773; Residential Outdoor: 204,258; Non-Residential Indoor: 313,848; Non-Residential Outdoor: 104,616; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	1	8.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Excavators	2	8.00	158	0.38
Grading	Forklifts	1	8.00	89	0.20
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Loaders	2	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Welders	3	8.00	46	0.45
Matt Foundation	Pumps	6	8.00	84	0.74

Matt Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Matt Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Foundation	Concrete/Industrial Saws	1	8.00	81	0.73
Foundation	Forklifts	2	8.00	89	0.20
Foundation	Generator Sets	1	8.00	84	0.74
Foundation	Pumps	2	8.00	84	0.74
Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Concrete/Industrial Saws	2	8.00	81	0.73
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Pumps	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Aerial Lifts	1	8.00	63	0.31
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Rollers	0	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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	16.00	20.00	440.00	14.70	6.90	18.00	LD_Mix	HDT_Mix	HHDT
Grading	14	18.00	20.00	38,550.00	14.70	6.90	18.00	LD_Mix	HDT_Mix	HHDT
Matt Foundation	6	150.00	312.00	0.00	14.70	6.90	20.00	LD_Mix	HHDT	HHDT
Foundation	6	500.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HHDT	HHDT
Building Construction	11	500.00	272.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	92.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	50.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

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					0.0108	0.0000	0.0108	1.6300e-003	0.0000	1.6300e-003						0.0000
Off-Road	0.0269	0.2607	0.1788	3.4000e-004		0.0130	0.0130		0.0122	0.0122						30.1393

Total	**0.0269**	**0.2607**	**0.1788**	**3.4000e-004**	**0.0108**	**0.0130**	**0.0238**	**1.6300e-003**	**0.0122**	**0.0139**						**30.1393**

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	1.7000e-003	0.0568	0.0131	1.6000e-004	3.4000e-003	1.6000e-004	3.5700e-003	9.3000e-004	1.6000e-004	1.0900e-003						15.3363
Vendor	6.8000e-004	0.0217	5.8900e-003	6.0000e-005	1.3900e-003	4.0000e-005	1.4300e-003	4.0000e-004	4.0000e-005	4.4000e-004						5.4312
Worker	7.6000e-004	5.9000e-004	6.6600e-003	2.0000e-005	1.9300e-003	2.0000e-005	1.9400e-003	5.1000e-004	1.0000e-005	5.3000e-004						1.7418
Total	**3.1400e-003**	**0.0791**	**0.0256**	**2.4000e-004**	**6.7200e-003**	**2.2000e-004**	**6.9400e-003**	**1.8400e-003**	**2.1000e-004**	**2.0600e-003**						**22.5094**

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					4.1900e-003	0.0000	4.1900e-003	6.3000e-004	0.0000	6.3000e-004						0.0000
Off-Road	0.0269	0.2607	0.1788	3.4000e-004		0.0130	0.0130		0.0122	0.0122						30.1392
Total	**0.0269**	**0.2607**	**0.1788**	**3.4000e-004**	**4.1900e-003**	**0.0130**	**0.0172**	**6.3000e-004**	**0.0122**	**0.0129**						**30.1392**

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	1.7000e-003	0.0568	0.0131	1.6000e-004	3.4000e-003	1.6000e-004	3.5700e-003	9.3000e-004	1.6000e-004	1.0900e-003						15.3363
Vendor	6.8000e-004	0.0217	5.8900e-003	6.0000e-005	1.3900e-003	4.0000e-005	1.4300e-003	4.0000e-004	4.0000e-005	4.4000e-004						5.4312
Worker	7.6000e-004	5.9000e-004	6.6600e-003	2.0000e-005	1.9300e-003	2.0000e-005	1.9400e-003	5.1000e-004	1.0000e-005	5.3000e-004						1.7418
Total	**3.1400e-003**	**0.0791**	**0.0256**	**2.4000e-004**	**6.7200e-003**	**2.2000e-004**	**6.9400e-003**	**1.8400e-003**	**2.1000e-004**	**2.0600e-003**						**22.5094**

3.3 Grading - 2021

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					1.5477	0.0000	1.5477	0.8507	0.0000	0.8507						0.0000
Off-Road	0.6637	6.3633	4.2160	9.5300e-003		0.2884	0.2884		0.2676	0.2676						829.5378

Total	**0.6637**	**6.3633**	**4.2160**	**9.5300e-003**	**1.5477**	**0.2884**	**1.8361**	**0.8507**	**0.2676**	**1.1183**						**829.5378**

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	0.1493	4.9791	1.1456	0.0136	0.2982	0.0145	0.3126	0.0819	0.0138	0.0957						1,343.6724
Vendor	7.9800e-003	0.2536	0.0688	6.5000e-004	0.0162	5.2000e-004	0.0167	4.6700e-003	4.9000e-004	5.1700e-003						63.4468
Worker	9.9500e-003	7.7500e-003	0.0875	2.5000e-004	0.0254	2.1000e-004	0.0256	6.7300e-003	1.9000e-004	6.9200e-003						22.8905
Total	**0.1673**	**5.2405**	**1.3018**	**0.0145**	**0.3397**	**0.0152**	**0.3549**	**0.0933**	**0.0145**	**0.1078**						**1,430.0096**

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					0.6036	0.0000	0.6036	0.3318	0.0000	0.3318						0.0000
Off-Road	0.6637	6.3633	4.2160	9.5300e-003		0.2884	0.2884		0.2676	0.2676						829.5368
Total	**0.6637**	**6.3633**	**4.2160**	**9.5300e-003**	**0.6036**	**0.2884**	**0.8920**	**0.3318**	**0.2676**	**0.5994**						**829.5368**

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	0.1493	4.9791	1.1456	0.0136	0.2982	0.0145	0.3126	0.0819	0.0138	0.0957						1,343.6724
Vendor	7.9800e-003	0.2536	0.0688	6.5000e-004	0.0162	5.2000e-004	0.0167	4.6700e-003	4.9000e-004	5.1700e-003						63.4468
Worker	9.9500e-003	7.7500e-003	0.0875	2.5000e-004	0.0254	2.1000e-004	0.0256	6.7300e-003	1.9000e-004	6.9200e-003						22.8905
Total	**0.1673**	**5.2405**	**1.3018**	**0.0145**	**0.3397**	**0.0152**	**0.3549**	**0.0933**	**0.0145**	**0.1078**						**1,430.0096**

3.4 Matt Foundation - 2021

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	4.5700e-003	0.0385	0.0449	8.0000e-005		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003						6.7918

Total	**4.5700e-003**	**0.0385**	**0.0449**	**8.0000e-005**	**0.0000**	**2.1300e-003**	**2.1300e-003**	**0.0000**	**2.1300e-003**	**2.1300e-003**						**6.7918**

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
Vendor	2.5000e-003	0.0971	0.0194	2.1000e-004	3.7100e-003	2.0000e-004	3.9000e-003	1.0200e-003	1.9000e-004	1.2100e-003						20.4648
Worker	1.2900e-003	1.0000e-003	0.0113	3.0000e-005	3.2900e-003	3.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004						2.9689
Total	**3.7900e-003**	**0.0981**	**0.0307**	**2.4000e-004**	**7.0000e-003**	**2.3000e-004**	**7.2100e-003**	**1.8900e-003**	**2.1000e-004**	**2.1100e-003**						**23.4337**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	4.5700e-003	0.0385	0.0449	8.0000e-005		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003						6.7917
Total	**4.5700e-003**	**0.0385**	**0.0449**	**8.0000e-005**	**0.0000**	**2.1300e-003**	**2.1300e-003**	**0.0000**	**2.1300e-003**	**2.1300e-003**						**6.7917**

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
Vendor	2.5000e-003	0.0971	0.0194	2.1000e-004	3.7100e-003	2.0000e-004	3.9000e-003	1.0200e-003	1.9000e-004	1.2100e-003						20.4648
Worker	1.2900e-003	1.0000e-003	0.0113	3.0000e-005	3.2900e-003	3.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004						2.9689
Total	**3.7900e-003**	**0.0981**	**0.0307**	**2.4000e-004**	**7.0000e-003**	**2.3000e-004**	**7.2100e-003**	**1.8900e-003**	**2.1000e-004**	**2.1100e-003**						**23.4337**

3.5 Foundation - 2021

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	0.0159	0.1348	0.1546	2.6000e-004		7.7700e-003	7.7700e-003		7.6500e-003	7.6500e-003						22.5637

Total	**0.0159**	**0.1348**	**0.1546**	**2.6000e-004**	**0.0000**	**7.7700e-003**	**7.7700e-003**	**0.0000**	**7.6500e-003**	**7.6500e-003**						**22.5637**

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
Vendor	1.4400e-003	0.0560	0.0112	1.2000e-004	2.1400e-003	1.1000e-004	2.2500e-003	5.9000e-004	1.1000e-004	7.0000e-004						11.8066
Worker	0.0194	0.0151	0.1702	4.9000e-004	0.0493	4.1000e-004	0.0497	0.0131	3.7000e-004	0.0135						44.5340
Total	**0.0208**	**0.0711**	**0.1814**	**6.1000e-004**	**0.0515**	**5.2000e-004**	**0.0520**	**0.0137**	**4.8000e-004**	**0.0142**						**56.3406**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	0.0159	0.1348	0.1546	2.6000e-004		7.7700e-003	7.7700e-003		7.6500e-003	7.6500e-003						22.5637
Total	**0.0159**	**0.1348**	**0.1546**	**2.6000e-004**	**0.0000**	**7.7700e-003**	**7.7700e-003**	**0.0000**	**7.6500e-003**	**7.6500e-003**						**22.5637**

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
Vendor	1.4400e-003	0.0560	0.0112	1.2000e-004	2.1400e-003	1.1000e-004	2.2500e-003	5.9000e-004	1.1000e-004	7.0000e-004						11.8066
Worker	0.0194	0.0151	0.1702	4.9000e-004	0.0493	4.1000e-004	0.0497	0.0131	3.7000e-004	0.0135						44.5340
Total	**0.0208**	**0.0711**	**0.1814**	**6.1000e-004**	**0.0515**	**5.2000e-004**	**0.0520**	**0.0137**	**4.8000e-004**	**0.0142**						**56.3406**

3.5 Foundation - 2022

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	0.1360	1.1573	1.4374	2.4400e-003		0.0629	0.0629		0.0619	0.0619						210.5779

Total	**0.1360**	**1.1573**	**1.4374**	**2.4400e-003**	**0.0000**	**0.0629**	**0.0629**	**0.0000**	**0.0619**	**0.0619**						**210.5779**

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
Vendor	0.0128	0.4934	0.1026	1.1000e-003	0.0200	9.1000e-004	0.0209	5.4900e-003	8.7000e-004	6.3600e-003						108.9568
Worker	0.1695	0.1271	1.4634	4.4300e-003	0.4602	3.6700e-003	0.4639	0.1222	3.3800e-003	0.1256						401.0209
Total	**0.1822**	**0.6205**	**1.5660**	**5.5300e-003**	**0.4802**	**4.5800e-003**	**0.4848**	**0.1277**	**4.2500e-003**	**0.1320**						**509.9777**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	0.1360	1.1573	1.4374	2.4400e-003		0.0629	0.0629		0.0619	0.0619						210.5776
Total	**0.1360**	**1.1573**	**1.4374**	**2.4400e-003**	**0.0000**	**0.0629**	**0.0629**	**0.0000**	**0.0619**	**0.0619**						**210.5776**

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
Vendor	0.0128	0.4934	0.1026	1.1000e-003	0.0200	9.1000e-004	0.0209	5.4900e-003	8.7000e-004	6.3600e-003						108.9568
Worker	0.1695	0.1271	1.4634	4.4300e-003	0.4602	3.6700e-003	0.4639	0.1222	3.3800e-003	0.1256						401.0209
Total	**0.1822**	**0.6205**	**1.5660**	**5.5300e-003**	**0.4802**	**4.5800e-003**	**0.4848**	**0.1277**	**4.2500e-003**	**0.1320**						**509.9777**

3.6 Building Construction - 2022

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	0.1925	1.6015	2.0544	3.4700e-003		0.0819	0.0819		0.0810	0.0810						297.0593

Total	**0.1925**	**1.6015**	**2.0544**	**3.4700e-003**		**0.0819**	**0.0819**		**0.0810**	**0.0810**						**297.0593**

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
Vendor	0.0575	1.8490	0.4992	4.9700e-003	0.1242	3.4700e-003	0.1277	0.0359	3.3200e-003	0.0392						482.5412
Worker	0.1463	0.1097	1.2631	3.8300e-003	0.3972	3.1700e-003	0.4004	0.1055	2.9200e-003	0.1084						346.1193
Total	**0.2037**	**1.9587**	**1.7623**	**8.8000e-003**	**0.5215**	**6.6400e-003**	**0.5281**	**0.1414**	**6.2400e-003**	**0.1476**						**828.6605**

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	0.1925	1.6015	2.0544	3.4700e-003		0.0819	0.0819		0.0810	0.0810						297.0590
Total	**0.1925**	**1.6015**	**2.0544**	**3.4700e-003**		**0.0819**	**0.0819**		**0.0810**	**0.0810**						**297.0590**

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
Vendor	0.0575	1.8490	0.4992	4.9700e-003	0.1242	3.4700e-003	0.1277	0.0359	3.3200e-003	0.0392						482.5412
Worker	0.1463	0.1097	1.2631	3.8300e-003	0.3972	3.1700e-003	0.4004	0.1055	2.9200e-003	0.1084						346.1193
Total	**0.2037**	**1.9587**	**1.7623**	**8.8000e-003**	**0.5215**	**6.6400e-003**	**0.5281**	**0.1414**	**6.2400e-003**	**0.1476**						**828.6605**

3.6 Building Construction - 2023

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	0.3843	3.1998	4.4079	7.4600e-003		0.1521	0.1521		0.1504	0.1504						639.1213

Total	**0.3843**	**3.1998**	**4.4079**	**7.4600e-003**		**0.1521**	**0.1521**		**0.1504**	**0.1504**						**639.1213**

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
Vendor	0.0918	3.0058	0.9638	0.0103	0.2673	3.5100e-003	0.2708	0.0772	3.3500e-003	0.0805						1,005.6590
Worker	0.2959	0.2135	2.4992	7.9300e-003	0.8547	6.6300e-003	0.8614	0.2270	6.1100e-003	0.2331						717.4683
Total	**0.3877**	**3.2193**	**3.4629**	**0.0183**	**1.1220**	**0.0101**	**1.1322**	**0.3042**	**9.4600e-003**	**0.3136**						**1,723.1273**

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	0.3843	3.1998	4.4079	7.4600e-003		0.1521	0.1521		0.1504	0.1504						639.1205
Total	**0.3843**	**3.1998**	**4.4079**	**7.4600e-003**		**0.1521**	**0.1521**		**0.1504**	**0.1504**						**639.1205**

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
Vendor	0.0918	3.0058	0.9638	0.0103	0.2673	3.5100e-003	0.2708	0.0772	3.3500e-003	0.0805						1,005.6590
Worker	0.2959	0.2135	2.4992	7.9300e-003	0.8547	6.6300e-003	0.8614	0.2270	6.1100e-003	0.2331						717.4683
Total	**0.3877**	**3.2193**	**3.4629**	**0.0183**	**1.1220**	**0.0101**	**1.1322**	**0.3042**	**9.4600e-003**	**0.3136**						**1,723.1273**

3.6 Building Construction - 2024

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	0.0127	0.1060	0.1551	2.6000e-004		4.6500e-003	4.6500e-003		4.5900e-003	4.5900e-003						22.5319

Total	**0.0127**	**0.1060**	**0.1551**	**2.6000e-004**		**4.6500e-003**	**4.6500e-003**		**4.5900e-003**	**4.5900e-003**						**22.5319**

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
Vendor	3.1600e-003	0.1056	0.0329	3.6000e-004	9.4200e-003	1.2000e-004	9.5500e-003	2.7200e-003	1.2000e-004	2.8400e-003						35.3142
Worker	9.8800e-003	6.8600e-003	0.0821	2.7000e-004	0.0301	2.3000e-004	0.0304	8.0000e-003	2.1000e-004	8.2200e-003						24.5102
Total	**0.0130**	**0.1124**	**0.1150**	**6.3000e-004**	**0.0396**	**3.5000e-004**	**0.0399**	**0.0107**	**3.3000e-004**	**0.0111**						**59.8243**

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	0.0127	0.1060	0.1551	2.6000e-004		4.6500e-003	4.6500e-003		4.5900e-003	4.5900e-003						22.5318
Total	**0.0127**	**0.1060**	**0.1551**	**2.6000e-004**		**4.6500e-003**	**4.6500e-003**		**4.5900e-003**	**4.5900e-003**						**22.5318**

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
Vendor	3.1600e-003	0.1056	0.0329	3.6000e-004	9.4200e-003	1.2000e-004	9.5500e-003	2.7200e-003	1.2000e-004	2.8400e-003						35.3142
Worker	9.8800e-003	6.8600e-003	0.0821	2.7000e-004	0.0301	2.3000e-004	0.0304	8.0000e-003	2.1000e-004	8.2200e-003						24.5102
Total	**0.0130**	**0.1124**	**0.1150**	**6.3000e-004**	**0.0396**	**3.5000e-004**	**0.0399**	**0.0107**	**3.3000e-004**	**0.0111**						**59.8243**

3.7 Architectural Coating - 2023

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	1.4933					0.0000	0.0000		0.0000	0.0000						0.0000

Off-Road	0.0102	0.0795	0.1227	2.0000e-004		3.6300e-003	3.6300e-003		3.6000e-003	3.6000e-003						17.1382
Total	**1.5034**	**0.0795**	**0.1227**	**2.0000e-004**		**3.6300e-003**	**3.6300e-003**		**3.6000e-003**	**3.6000e-003**						**17.1382**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0122	8.8100e-003	0.1032	3.3000e-004	0.0353	2.7000e-004	0.0356	9.3700e-003	2.5000e-004	9.6200e-003						29.6186
Total	**0.0122**	**8.8100e-003**	**0.1032**	**3.3000e-004**	**0.0353**	**2.7000e-004**	**0.0356**	**9.3700e-003**	**2.5000e-004**	**9.6200e-003**						**29.6186**

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	1.4933					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0102	0.0795	0.1227	2.0000e-004		3.6300e-003	3.6300e-003		3.6000e-003	3.6000e-003						17.1382
Total	**1.5034**	**0.0795**	**0.1227**	**2.0000e-004**		**3.6300e-003**	**3.6300e-003**		**3.6000e-003**	**3.6000e-003**						**17.1382**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0122	8.8100e-003	0.1032	3.3000e-004	0.0353	2.7000e-004	0.0356	9.3700e-003	2.5000e-004	9.6200e-003						29.6186
Total	**0.0122**	**8.8100e-003**	**0.1032**	**3.3000e-004**	**0.0353**	**2.7000e-004**	**0.0356**	**9.3700e-003**	**2.5000e-004**	**9.6200e-003**						**29.6186**

3.7 Architectural Coating - 2024

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	0.4693					0.0000	0.0000		0.0000	0.0000						0.0000

Off-Road	3.0300e-003	0.0237	0.0386	6.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004						5.3860
Total	**0.4723**	**0.0237**	**0.0386**	**6.0000e-005**		**9.9000e-004**	**9.9000e-004**		**9.9000e-004**	**9.9000e-004**						**5.3860**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.6400e-003	2.5300e-003	0.0302	1.0000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	8.0000e-005	3.0200e-003						9.0198
Total	**3.6400e-003**	**2.5300e-003**	**0.0302**	**1.0000e-004**	**0.0111**	**8.0000e-005**	**0.0112**	**2.9500e-003**	**8.0000e-005**	**3.0200e-003**						**9.0198**

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	0.4693					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	3.0300e-003	0.0237	0.0386	6.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004						5.3860
Total	**0.4723**	**0.0237**	**0.0386**	**6.0000e-005**		**9.9000e-004**	**9.9000e-004**		**9.9000e-004**	**9.9000e-004**						**5.3860**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.6400e-003	2.5300e-003	0.0302	1.0000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	8.0000e-005	3.0200e-003						9.0198
Total	**3.6400e-003**	**2.5300e-003**	**0.0302**	**1.0000e-004**	**0.0111**	**8.0000e-005**	**0.0112**	**2.9500e-003**	**8.0000e-005**	**3.0200e-003**						**9.0198**

3.8 Paving - 2023

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	1.1100e-003	0.0101	0.0141	2.0000e-005		4.7000e-004	4.7000e-004		4.4000e-004	4.4000e-004						1.9235

Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**1.1100e-003**	**0.0101**	**0.0141**	**2.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.4000e-004**	**4.4000e-004**						**1.9235**

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
Vendor	2.2000e-004	7.0800e-003	2.2700e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004						2.3701
Worker	4.7000e-004	3.4000e-004	4.0100e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004						1.1498
Total	**6.9000e-004**	**7.4200e-003**	**6.2800e-003**	**3.0000e-005**	**2.0000e-003**	**2.0000e-005**	**2.0200e-003**	**5.4000e-004**	**2.0000e-005**	**5.6000e-004**						**3.5198**

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	1.1100e-003	0.0101	0.0141	2.0000e-005		4.7000e-004	4.7000e-004		4.4000e-004	4.4000e-004						1.9235
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**1.1100e-003**	**0.0101**	**0.0141**	**2.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.4000e-004**	**4.4000e-004**						**1.9235**

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
Vendor	2.2000e-004	7.0800e-003	2.2700e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004						2.3701
Worker	4.7000e-004	3.4000e-004	4.0100e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004						1.1498
Total	**6.9000e-004**	**7.4200e-003**	**6.2800e-003**	**3.0000e-005**	**2.0000e-003**	**2.0000e-005**	**2.0200e-003**	**5.4000e-004**	**2.0000e-005**	**5.6000e-004**						**3.5198**

3.8 Paving - 2024

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	5.3300e-003	0.0476	0.0706	1.1000e-004		2.1500e-003	2.1500e-003		2.0000e-003	2.0000e-003						9.6192

Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**5.3300e-003**	**0.0476**	**0.0706**	**1.1000e-004**		**2.1500e-003**	**2.1500e-003**		**2.0000e-003**	**2.0000e-003**						**9.6192**

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
Vendor	1.0600e-003	0.0353	0.0110	1.2000e-004	3.1500e-003	4.0000e-005	3.1900e-003	9.1000e-004	4.0000e-005	9.5000e-004						11.8029
Worker	2.2500e-003	1.5600e-003	0.0187	6.0000e-005	6.8500e-003	5.0000e-005	6.9000e-003	1.8200e-003	5.0000e-005	1.8700e-003						5.5705
Total	**3.3100e-003**	**0.0369**	**0.0297**	**1.8000e-004**	**0.0100**	**9.0000e-005**	**0.0101**	**2.7300e-003**	**9.0000e-005**	**2.8200e-003**						**17.3734**

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	5.3300e-003	0.0476	0.0706	1.1000e-004		2.1500e-003	2.1500e-003		2.0000e-003	2.0000e-003						9.6192
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**5.3300e-003**	**0.0476**	**0.0706**	**1.1000e-004**		**2.1500e-003**	**2.1500e-003**		**2.0000e-003**	**2.0000e-003**						**9.6192**

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
Vendor	1.0600e-003	0.0353	0.0110	1.2000e-004	3.1500e-003	4.0000e-005	3.1900e-003	9.1000e-004	4.0000e-005	9.5000e-004						11.8029
Worker	2.2500e-003	1.5600e-003	0.0187	6.0000e-005	6.8500e-003	5.0000e-005	6.9000e-003	1.8200e-003	5.0000e-005	1.8700e-003						5.5705
Total	**3.3100e-003**	**0.0369**	**0.0297**	**1.8000e-004**	**0.0100**	**9.0000e-005**	**0.0101**	**2.7300e-003**	**9.0000e-005**	**2.8200e-003**						**17.3734**

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	1.2603	5.7664	15.6245	0.0597	5.1355	0.0460	5.1815	1.3764	0.0428	1.4192						5,532.5866
Unmitigated	1.2603	5.7664	15.6245	0.0597	5.1355	0.0460	5.1815	1.3764	0.0428	1.4192						5,532.5866

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
User Defined Commercial	5,316.00	5,316.00	5316.00	13,532,064	13,532,064
Total	5,316.00	5,316.00	5,316.00	13,532,064	13,532,064

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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 High Rise	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
User Defined Commercial	0.00	7.61	0.00	0.00	100.00	0.00	91.76072235	0	8.239277652

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Enclosed Parking with Elevator	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
General Office Building	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
High Turnover (Sit Down Restaurant)	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
User Defined Commercial	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	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						1,447.3155
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						1,616.1331
NaturalGas Mitigated	0.0526	0.4694	0.3361	2.8700e-003		0.0364	0.0364		0.0364	0.0364						523.8671

NaturalGas Unmitigated	0.0550	0.4902	0.3507	3.0000e-003		0.0380	0.0380		0.0380	0.0380						547.1586

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 High Rise	3.19828e+006	0.0173	0.1474	0.0627	9.4000e-004		0.0119	0.0119		0.0119	0.0119						171.6865
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
General Office Building	1.95056e+006	0.0105	0.0956	0.0803	5.7000e-004		7.2700e-003	7.2700e-003		7.2700e-003	7.2700e-003						104.7080
High Turnover (Sit Down Restaurant)	5.04395e+006	0.0272	0.2473	0.2077	1.4800e-003		0.0188	0.0188		0.0188	0.0188						270.7640
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0550**	**0.4902**	**0.3507**	**2.9900e-003**		**0.0380**	**0.0380**		**0.0380**	**0.0380**						**547.1586**

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					
Apartments High Rise	3.04609e+006	0.0164	0.1404	0.0597	9.0000e-004		0.0114	0.0114		0.0114	0.0114						163.5167
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
General Office Building	1.76281e+006	9.5100e-003	0.0864	0.0726	5.2000e-004		6.5700e-003	6.5700e-003		6.5700e-003	6.5700e-003						94.6295
High Turnover (Sit Down Restaurant)	4.95001e+006	0.0267	0.2427	0.2038	1.4600e-003		0.0184	0.0184		0.0184	0.0184						265.7209
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0526**	**0.4694**	**0.3361**	**2.8800e-003**		**0.0364**	**0.0364**		**0.0364**	**0.0364**						**523.8671**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.37415e+006				384.8977
Enclosed Parking with Elevator	996912				279.2342
General Office Building	2.43399e+006				681.7581
High Turnover (Sit Down Restaurant)	964812				270.2431
User Defined Commercial	0				0.0000
Total					**1,616.1331**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.30412e+006				365.2825
Enclosed Parking with Elevator	787759				220.6507
General Office Building	2.1712e+006				608.1503
High Turnover (Sit Down Restaurant)	904080				253.2320
User Defined Commercial	0				0.0000
Total					**1,447.3155**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	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	2.2730	0.1061	3.6178	6.0000e-004		0.0251	0.0251		0.0251	0.0251						81.4536
Unmitigated	2.2730	0.1061	3.6178	6.0000e-004		0.0251	0.0251		0.0251	0.0251						81.4536

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	0.2034					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.9533					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	7.5800e-003	0.0648	0.0276	4.1000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003						75.4405
Landscaping	0.1088	0.0413	3.5902	1.9000e-004		0.0199	0.0199		0.0199	0.0199						6.0131
Total	**2.2730**	**0.1061**	**3.6178**	**6.0000e-004**		**0.0251**	**0.0251**		**0.0251**	**0.0251**						**81.4536**

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	0.2034					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.9533					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	7.5800e-003	0.0648	0.0276	4.1000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003						75.4405
Landscaping	0.1088	0.0413	3.5902	1.9000e-004		0.0199	0.0199		0.0199	0.0199						6.0131
Total	**2.2730**	**0.1061**	**3.6178**	**6.0000e-004**		**0.0251**	**0.0251**		**0.0251**	**0.0251**						**81.4536**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				337.9509
Unmitigated				422.4386

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	22.6084 / 14.2532				157.5850
Enclosed Parking with Elevator	0 / 0				0.0000
General Office Building	33.302 / 20.4109				230.3040
High Turnover (Sit Down Restaurant)	6.63525 / 0.423526				34.5495
User Defined Commercial	0 / 0				0.0000
Total					**422.4386**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	18.0868 / 11.4025				126.0680

Enclosed Parking with Elevator	0 / 0			0.0000
General Office Building	26.6416 / 16.3287			184.2432
High Turnover (Sit Down Restaurant)	5.3082 / 0.338821			27.6396
User Defined Commercial	0 / 0			0.0000
Total				**337.9509**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				71.6936
Unmitigated				298.7235

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	159.62				80.2731
Enclosed Parking with Elevator	0				0.0000
General Office Building	174.25				87.6306
High Turnover (Sit Down Restaurant)	260.13				130.8198
User Defined Commercial	0				0.0000
Total					**298.7235**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	38.3088				19.2656
Enclosed Parking with Elevator	0				0.0000
General Office Building	41.82				21.0313

High Turnover (Sit Down Restaurant)	62.4312			31.3968
User Defined Commercial	0			0.0000
Total				**71.6936**

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
Emergency Generator	1	0.25	12	350	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)	4.8000e-004	1.6900e-003	8.7900e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005						1.6050
Total	**4.8000e-004**	**1.6900e-003**	**8.7900e-003**	**2.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**						**1.6050**

11.0 Vegetation

2143 Violet-Project (Operations No MXD)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	187.37	1000sqft	4.30	187,374.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking with Elevator	828.00	Space	0.00	331,200.00	0
High Turnover (Sit Down Restaurant)	21.86	1000sqft	0.00	21,858.00	0
Apartments High Rise	347.00	Dwelling Unit	0.00	325,385.00	843

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2024
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	615	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP CO2 Intensity Factor for Year 2024 (Interpolated)

Land Use - site specific. Project population (XIII. Population and Housing from IS)

Commercial uses

Vehicle Trips - see assumptions

Woodstoves - No wood fireplaces or stoves

Area Coating -

Energy Use - adjustment for parking structure electricity usage

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - BACT for EG's

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	1.75	2.33
tblEnergyUse	T24E	3.92	0.49
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	294.95	312.30
tblFireplaces	NumberNoFireplace	34.70	34.07
tblFireplaces	NumberWood	17.35	0.00
tblGrading	MaterialExported	0.00	239,500.00
tblLandUse	LandUseSquareFeet	187,370.00	187,374.00

tblLandUse	LandUseSquareFeet	21,860.00	21,858.00
tblLandUse	LandUseSquareFeet	347,000.00	325,385.00
tblLandUse	LotAcreage	7.45	0.00
tblLandUse	LotAcreage	0.50	0.00
tblLandUse	LotAcreage	5.60	0.00
tblLandUse	Population	992.00	843.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	615
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	3.1000e-004
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	7.41
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	72.50	0.00
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	8.50	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	20.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	0.00	6.30
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	37.00	0.00
tblVehicleTrips	PR_TP	0.00	93.70
tblVehicleTrips	ST_TR	4.98	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	158.37	0.00

tblVehicleTrips	ST_TR	0.00	6,929.00
tblVehicleTrips	SU_TR	3.65	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	0.00	6,929.00
tblVehicleTrips	WD_TR	4.20	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	0.00	6,929.00
tblWoodstoves	NumberCatalytic	17.35	0.00
tblWoodstoves	NumberNoncatalytic	17.35	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	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	2.2730	0.1061	3.6178	6.0000e-004		0.0251	0.0251		0.0251	0.0251						81.4536
Energy	0.0550	0.4902	0.3507	3.0000e-003		0.0380	0.0380		0.0380	0.0380						2,163.2917
Mobile	1.6385	7.4938	20.2639	0.0774	6.6519	0.0596	6.7115	1.7829	0.0554	1.8383						7,169.4281
Stationary	4.8000e-004	1.6900e-003	8.7900e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005						1.6050
Waste						0.0000	0.0000		0.0000	0.0000						298.7235
Water						0.0000	0.0000		0.0000	0.0000						422.4386
Total	**3.9669**	**8.0918**	**24.2412**	**0.0810**	**6.6519**	**0.1228**	**6.7747**	**1.7829**	**0.1186**	**1.9014**						**10,136.9403**

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	2.2730	0.1061	3.6178	6.0000e-004		0.0251	0.0251		0.0251	0.0251						81.4536
Energy	0.0526	0.4694	0.3361	2.8700e-003		0.0364	0.0364		0.0364	0.0364						2,104.7478
Mobile	1.6385	7.4938	20.2639	0.0774	6.6519	0.0596	6.7115	1.7829	0.0554	1.8383						7,169.4281
Stationary	4.8000e-004	1.6900e-003	8.7900e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005						1.6050
Waste						0.0000	0.0000		0.0000	0.0000						71.6936
Water						0.0000	0.0000		0.0000	0.0000						422.4386
Total	**3.9646**	**8.0710**	**24.2266**	**0.0809**	**6.6519**	**0.1212**	**6.7730**	**1.7829**	**0.1170**	**1.8998**						**9,851.3665**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.06	0.26	0.06	0.16	0.00	1.31	0.02	0.00	1.36	0.08	0.00	0.00	0.00	0.00	0.00	2.82

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	1.6385	7.4938	20.2639	0.0774	6.6519	0.0596	6.7115	1.7829	0.0554	1.8383						7,169.4281
Unmitigated	1.6385	7.4938	20.2639	0.0774	6.6519	0.0596	6.7115	1.7829	0.0554	1.8383						7,169.4281

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
User Defined Commercial	6,929.00	6,929.00	6929.00	17,527,647	17,527,647
Total	6,929.00	6,929.00	6,929.00	17,527,647	17,527,647

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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 High Rise	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
User Defined Commercial	0.00	7.41	0.00	0.00	100.00	0.00	93.7	0	6.3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Enclosed Parking with Elevator	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
General Office Building	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
High Turnover (Sit Down Restaurant)	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
User Defined Commercial	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						1,580.8806
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						1,616.1331
NaturalGas Mitigated	0.0526	0.4694	0.3361	2.8700e-003		0.0364	0.0364		0.0364	0.0364						523.8671
NaturalGas Unmitigated	0.0550	0.4902	0.3507	3.0000e-003		0.0380	0.0380		0.0380	0.0380						547.1586

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 High Rise	3.19828e+006	0.0173	0.1474	0.0627	9.4000e-004		0.0119	0.0119		0.0119	0.0119						171.6865
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
General Office Building	1.95056e+006	0.0105	0.0956	0.0803	5.7000e-004		7.2700e-003	7.2700e-003		7.2700e-003	7.2700e-003						104.7080
High Turnover (Sit Down Restaurant)	5.04395e+006	0.0272	0.2473	0.2077	1.4800e-003		0.0188	0.0188		0.0188	0.0188						270.7640
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0550**	**0.4902**	**0.3507**	**2.9900e-003**		**0.0380**	**0.0380**		**0.0380**	**0.0380**						**547.1586**

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					
Apartments High Rise	3.04609e+006	0.0164	0.1404	0.0597	9.0000e-004		0.0114	0.0114		0.0114	0.0114						163.5167
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
General Office Building	1.76281e+006	9.5100e-003	0.0864	0.0726	5.2000e-004		6.5700e-003	6.5700e-003		6.5700e-003	6.5700e-003						94.6295
High Turnover (Sit Down Restaurant)	4.95001e+006	0.0267	0.2427	0.2038	1.4600e-003		0.0184	0.0184		0.0184	0.0184						265.7209
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0526**	**0.4694**	**0.3361**	**2.8800e-003**		**0.0364**	**0.0364**		**0.0364**	**0.0364**						**523.8671**

5.3 Energy by Land Use - Electricity

Unmitigated

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

Apartments High Rise	1.37415e+006				384.8977
Enclosed Parking with Elevator	996912				279.2342
General Office Building	2.43399e+006				681.7581
High Turnover (Sit Down Restaurant)	964812				270.2431
User Defined Commercial	0				0.0000
Total					**1,616.1331**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.36844e+006				383.2984
Enclosed Parking with Elevator	980683				274.6886
General Office Building	2.3478e+006				657.6158
High Turnover (Sit Down Restaurant)	947085				265.2778
User Defined Commercial	0				0.0000
Total					**1,580.8806**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	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	2.2730	0.1061	3.6178	6.0000e-004		0.0251	0.0251		0.0251	0.0251						81.4536
Unmitigated	2.2730	0.1061	3.6178	6.0000e-004		0.0251	0.0251		0.0251	0.0251						81.4536

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	0.2034					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.9533					0.0000	0.0000		0.0000	0.0000						0.0000

Hearth	7.5800e-003	0.0648	0.0276	4.1000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003						75.4405
Landscaping	0.1088	0.0413	3.5902	1.9000e-004		0.0199	0.0199		0.0199	0.0199						6.0131
Total	**2.2730**	**0.1061**	**3.6178**	**6.0000e-004**		**0.0251**	**0.0251**		**0.0251**	**0.0251**						**81.4536**

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	0.2034					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.9533					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	7.5800e-003	0.0648	0.0276	4.1000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003						75.4405
Landscaping	0.1088	0.0413	3.5902	1.9000e-004		0.0199	0.0199		0.0199	0.0199						6.0131
Total	**2.2730**	**0.1061**	**3.6178**	**6.0000e-004**		**0.0251**	**0.0251**		**0.0251**	**0.0251**						**81.4536**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				422.4386
Unmitigated				422.4386

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	22.6084 / 14.2532				157.5850
Enclosed Parking with Elevator	0 / 0				0.0000
General Office Building	33.302 / 20.4109				230.3040
High Turnover (Sit Down Restaurant)	6.63525 / 0.423526				34.5495
User Defined Commercial	0 / 0				0.0000
Total					**422.4386**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	22.6084 / 14.2532				157.5850
Enclosed Parking with Elevator	0 / 0				0.0000
General Office Building	33.302 / 20.4109				230.3040
High Turnover (Sit Down Restaurant)	6.63525 / 0.423526				34.5495
User Defined Commercial	0 / 0				0.0000
Total					**422.4386**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				71.6936
Unmitigated				298.7235

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	159.62				80.2731
Enclosed Parking with Elevator	0				0.0000
General Office Building	174.25				87.6306
High Turnover (Sit Down Restaurant)	260.13				130.8198
User Defined Commercial	0				0.0000
Total					**298.7235**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	38.3088				19.2656
Enclosed Parking with Elevator	0				0.0000
General Office Building	41.82				21.0313
High Turnover (Sit Down Restaurant)	62.4312				31.3968
User Defined Commercial	0				0.0000
Total					**71.6936**

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
Emergency Generator	1	0.25	12	350	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)	4.8000e-004	1.6900e-003	8.7900e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005						1.6050
Total	**4.8000e-004**	**1.6900e-003**	**8.7900e-003**	**2.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**						**1.6050**

11.0 Vegetation