Appendix C

Air Quality and Greenhouse Gas Emissions

Bellwood Senior Residential Community

Draft EIR

Technical Appendix for Air Quality and Greenhouse Gas Emissions

- Appendix C-1: Air Quality and Greenhouse Gas Emissions Methodology
- Appendix C-2: Air Quality Worksheets and Modeling Output Files
  - Appendix C-2.1: Summary of Air Pollutant Emissions
  - Appendix C-2.2: Localized Significance Threshold (LST) Calculation Worksheet
  - Appendix C-2.3: Summary of Construction Assumptions
  - Appendix C-2.4: CalEEMod Outputs
    - Baseline Operations (Existing Year)
    - Baseline Operations (Buildout Year)
    - Project Construction and Operations (Buildout Year)
    - Project Construction Onsite
  - Appendix C-2.5: CO Hotspot Analysis

- Appendix C-3: Greenhouse Gas Worksheets and Modeling Output Files
  - Appendix C-3.1: GHG Modeling Parameters and Summary of Emissions
    - GHG Emissions Summary
    - GHG Parameters and Summary
    - Electric Vehicle Charging Calculations
  - Appendix C-3.2: CalEEMod Outputs
    - Baseline Operations (Existing Year)
    - Baseline Operations (Buildout Year)
    - Project Construction and Operations (Buildout Year)

Bellwood Senior Residential Community

Draft EIR

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

AIR QUALITY AND GREENHOUSE GAS EMISSIONS METHODLOGY

Bellwood Senior Residential Community

Prepared by:

Eyestone Environmental, LLC

May 2021

Bellwood Senior Residential Community 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 Bellwood Senior Residential Community Project (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.

(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) $=EF_{AC}$ x 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:

$EF_{AC} = C_{VOC}/454(g/lb)$ x 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} x $A_{parking}$

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. CalEEMod currently assumes 2016 Title 24 Energy Efficiency Standards when calculating project energy usage. In order to account for 2019 Title 24 Energy Efficiency Standards, energy consumption was assumed to be 10 percent more efficient than the 2016 Building Energy Efficiency Standards requirements.

(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 801 pounds of CO_2 per MWh for 2019. 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 extrapolation based on current and Year 2026 data points (801 pounds of CO_2 per MWh for Year 2019 and 500 pounds of CO_2 per MWh for Year 2026).

(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). The Traffic Study prepared by Gibson Transportation Consulting had calculated Project VMT which was entered into CalEEMod in calculating Project mobile source emissions.

Modeling was also conducted using the Los Angeles County vehicle fleet mix for all vehicle types as provided in EMFAC2014.

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.

Mobile source operational emissions were calculated based on the Project VMT estimates provided by Gibson Transportation Consulting. [6] As discussed in Section IV.G, Transportation, of this Draft EIR, to calculate peak daily trip estimates, the Los Angeles Department of Transportation (LADOT) VMT Calculator was used.

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.[7] 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 Project design includes characteristics that would reduce trips and VMT as compared to a standard project within the air basin as measured by the air quality model (CalEEMod). While these Project characteristics primarily reduce greenhouse gas emissions, they would also reduce criteria air pollutants discussed herein. These relative reductions in vehicle trips and VMT from a standard project within the air basin help quantify the criteria air pollutant emissions reductions achieved by locating the Project in any infill, HQTA area that promotes alternative modes of transportation. A ratio of ITE trip generation rates for weekend and weekday scenarios was used to estimate Project VMT during weekend conditions.

(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

---

[6] *Transportation Impact Study for the Senior Residential Community at the Bellwood Project, Gibson Transportation Consulting. February 2021, revised April 2021.*

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

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 76.4-percent recycling/diversion rate currently achieved within the City.[8]

(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

[8] *City of Los Angeles, Sustainable City pLAn, Waste & Landfills, http://plan.lamayor.org/portfolio/waste-landfills-3rd, accessed February 21, 2019.*

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 in compliance with the California Green Building Code.

b. Post-2030 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.[9] Even though these studies did not provide an exact 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, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.

Subsequent to the findings of these studies, SB 32 was passed on September 8, 2016, which requires that Statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. As discussed above, 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.

The emissions modeling in the 2017 Update has projected 2030 statewide emissions which take into account known commitments (reduction measures) such as SB 375, SB 350 and other measures. The emissions inventory identified an emissions gap, meaning that emissions reductions due to known commitments do not decline fast enough to achieve the 2030 target. In order to fill this gap, the 2017 Update assumed a scenario in which cap-and-trade would deliver the reductions necessary to achieve the 2030 emissions target. Although the Project is consistent with the 2017 Update, additional measures to achieve the 2030 targets and beyond are outside of the Project's control. Therefore, any evaluation of post-2030 Project emission would be speculative.

Executive Order S-3-05 establishes a goal to reduce GHG emissions to 80 percent below 1990 levels by 2050. This goal, however, has not been codified. That being said, studies have shown that, in order to meet the 2050 target, aggressive technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel,

---

[9] *Energy and Environmental Economics (E3). "Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board" (October 2020) Mahone, Amber. The California Air Resources Board, California Energy Commission, California Public Utilities Commission, 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 long-term 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. The model encompasses the entire California economy with detailed representations of the buildings, industry, transportation and electricity sectors.*

will be required. In its 2008 Climate Change Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail."[10]

Although the Project's emissions level in 2050 cannot be reliably quantified, statewide efforts are underway to facilitate the State's achievement of that goal and it is reasonable to expect the Project's net emissions level to decline as the regulatory initiatives identified by CARB in the First Update are implemented, and other technological innovations occur. As such, given the reasonably anticipated decline in Project emissions once fully constructed and operational, the Project is consistent with the Executive Order's horizon-year (2050) goal. Further, the Project's consistency with SCAG's 2016–2040 and 2020–2045 RTP/SCS demonstrates that the Project will be consistent with the post-2030 GHG reduction goals of 19-percent by 2035.

The Project is the type of land use development that is encouraged by the 2016–2040 and 2020–2045 RTP/SCS to reduce VMT and expand multi-modal transportation options in order for the region to achieve the GHG reductions from the land use and transportation sectors required by SB 375, which, in turn, advances the State's long-term climate policies. On October 30, 2020, CARB certified the 2020–2045 RTP/SCS to meet the region's GHG emissions reduction targets consistent with SB 375.[11]

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-2030 SB 375 GHG reduction goals. By furthering implementation of SB 375, the Project supports regional land use and transportation GHG reductions consistent with State climate targets for 2030 and beyond. An additional study by the State's leading modeler shows that the Project's VMT reductions are consistent with decarbonization and technology deployment scenarios assessed as sufficient to achieve at least an 80-percent reduction in GHG emissions by 2045.[12] Across all the scenarios, the study assumes "a 17% reduction in per capita LDV [light-duty vehicle] VMT relative to 2020 by 2045."[13]

For the reasons described above, the Project's post-2030 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets and Executive Orders S-3-05 and B-30-15.

---

[10] *CARB, Climate Change Scoping Plan: A Framework for Change, December 2008, p. 117.*

[11] *California Air Resources Board. Executive Order G-20-239. October 30, 2020.*

[12] *Energy and Environmental Economics (E3), "Achieving Carbon Neutrality in California—PATHWAYS Scenarios Developed for the California Air Resources Board" (Amber Mahone, October 2020), at p. 3.*

[13] *Id. at 39.*

Bellwood Senior Residential Community

Draft EIR

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

- Appendix C-2: Air Quality Worksheets and Modeling Output Files
  - Appendix C-2.1: Summary of Air Pollutant Emissions
  - Appendix C-2.2: Localized Significance Threshold (LST) Calculation Worksheet
  - Appendix C-2.3: Summary of Construction Assumptions
  - Appendix C-2.4: CalEEMod Outputs
    - Baseline Operations (Existing Year)
    - Baseline Operations (Buildout Year)
    - Project Construction and Operations (Buildout Year)
    - Project Construction Onsite
  - Appendix C-2.5: CO Hotspot Analysis

AQ SUMMARY OF EMISSIONS

Construction Emissions (Unmitigated)

Regional (Daily) Unmitigated	ROG	NOx	CO	SO2	PM10	PM2.5
2021	5	96	39	0	9	4
2022	3	23	27	0	3	2
2023	11	20	26	0	3	1
MAX	11	96	39	<1	9	4
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Difference	**(64)**	**(4)**	**(511)**	**(150)**	**(141)**	**(51)**
Impact	**No**	**No**	**No**	**No**	**No**	**No**

Localized (Daily) Unmitigated	ROG	NOx	CO	SO2	PM10	PM2.5
2021	4	43	27	<1	4	2
2022	2	18	19	<1	<1	<1
2023	10	16	19	<1	<1	<1
MAX		43	27	<1	4	2
Threshold		127	861		7	4
Difference		**(84)**	**(835)**		**(3)**	**(2)**
Impact		**No**	**No**		**No**	**No**

Construction Emissions (With Project Design Features)

Regional (Daily) w/PDFs	ROG	NOx	CO	SO2	PM10	PM2.5
2021	5	96	39	<1	9	4
2022	3	23	27	<1	3	2
2023	11	20	26	<1	3	1
MAX	11	96	39	<1	9	4
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Difference	**(64)**	**(4)**	**(511)**	**(150)**	**(141)**	**(51)**
Impact	**No**	**No**	**No**	**No**	**No**	**No**
Percent Reduction:	0%	0%	0%	0%	0%	0%

Localized (Daily) w/PDFs	ROG	NOx	CO	SO2	PM10	PM2.5
2021	4	43	27	<1	4	2
2022	2	18	19	<1	<1	<1
2023	10	16	19	<1	<1	<1
MAX		43	27		4	2
Threshold		127	861		7	4
Difference		**(84)**	**(835)**		**(3)**	**(2)**
Impact		**No**	**No**		**No**	**No**
Percent Reduction:		0%	0%		0%	0%

Operation Emissions (Without Project Design Features)

Regional Baseline (Existing Year)	ROG	NOx	CO	SO2	PM10	PM2.5
Area	2	2	10	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	4	11	<1	2	<1
Emergency Generator	<1	<1	<1	<1	<1	<1
Total	3	6	21	<1	3	<1
Regional Baseline (Buidout Year)	ROG	NOx	CO	SO2	PM10	PM2.5
Area	2	2	10	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	3	8	<1	2	<1
Emergency Generator	<1	<1	<1	<1	<1	<1
Total	2	5	18	<1	3	<1
Regional Buildout (Buildout Year)	ROG	NOx	CO	SO2	PM10	PM2.5
Area	6	<1	16	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	3	8	<1	2	<1
Emergency Generator	<1	1	1	<1	<1	<1
Total	7	5	25	<1	3	<1

Project Regional (Buildout Less Baseline (Buildout Year))	ROG	NOx	CO	SO2	PM10	PM2.5
Area	4	(1)	6	(0)	(0)	(0)
Energy	<1	<1	<1	<1	<1	<1
Mobile	(0)	(0)	(0)	<1	<1	<1
Emergency Generator	<1	1	1	<1	<1	<1
Total	5	0	7	(0)	0	0
Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Difference	**(50)**	**(55)**	**(543)**	**(150)**	**(150)**	**(55)**
Impact	No	No	No	No	No	No

Project Localized (Buildout Less Baseline (Buildout Year))					
Onsite Total	0	7		0	0.0
Threshold	**127**	**861**		**2**	**1**
Difference	**(126)**	**(854)**		**(2)**	**(1)**
Impact	**No**	**No**		**No**	**No**

Operation Emissions (With Project Design Features)

Regional Baseline (Existing Year)	ROG	NOx	CO	SO2	PM10	PM2.5
Area	2	2	10	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	4	11	<1	2	<1
Emergency Generator	<1	<1	<1	<1	<1	<1
Total	3	6	21	<1	3	<1
Regional Baseline (Buidout Year)	ROG	NOx	CO	SO2	PM10	PM2.5
Area	2	2	10	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	3	8	<1	2	<1
Emergency Generator	<1	<1	<1	<1	<1	<1
Total	2	5	18	<1	3	<1
Regional Buildout (Buildout Year)	ROG	NOx	CO	SO2	PM10	PM2.5
Area	6	<1	16	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	3	8	<1	2	<1
Emergency Generator	<1	1	1	<1	<1	<1
Total	7	5	25	<1	3	<1

Project Regional (Buildout Less Baseline (Buildout Year))	ROG	NOx	CO	SO2	PM10	PM2.5
Area	4	(1)	6	(0)	(0)	(0)
Energy	<1	<1	<1	<1	<1	<1
Mobile	(0)	(0)	(0)	0	0	0
Emergency Generator	<1	1	1	<1	<1	<1
Total	5	0	7	(0)	0	0
Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Difference	**(50)**	**(55)**	**(543)**	**(150)**	**(150)**	**(55)**
Impact	No	No	No	No	No	No
Percent Reduction:	0%	0%	0%	0%	0%	0%

Project Localized (Buildout Less Baseline (Buildout Year))					
Onsite Total	0	7		0	0.0
Threshold	**127**	**861**		**2**	**1**
Difference	**(126)**	**(854)**		**(2)**	**(1)**
Impact	**No**	**No**		**No**	**No**

Bellwood Senior Residential Community

Construction Emissions by Year

Regional								
Year	**Phase No.**	**Phase**	**ROG**	**NOx**	**CO**	**SO2**	**PM10**	**PM2.5**
2021	2	Demolition	4.8	52.0	30.1	0.1	3.7	2.3
	3	Grading	5.2	95.6	39.0	0.3	9.3	4.2
	4	Mat Foundation	4.0	77.6	33.4	0.2	3.8	1.8
	5	Foundation	3.6	33.9	30.8	0.1	3.0	1.7
2022	6	Building Construction	3.0	22.9	26.9	0.1	3.3	1.5
2023	6	Building Construction	2.8	20.4	26.1	0.1	3.1	1.4
	7	Architectural Coating	11.3	16.0	24.9	0.1	3.2	1.3
	8	Paving	1.1	10.2	12.4	0.0	1.0	0.6
Maximum Daily Emissions								
2021			5.2	95.6	39.0	0.3	9.3	4.2
2022			3.0	22.9	26.9	0.1	3.3	1.5
2023			11.3	20.4	26.1	0.1	3.2	1.4

Localized								
Year	**Phase No.**	**Phase**	**ROG**	**NOx**	**CO**	**SO2**	**PM10**	**PM2.5**
2021	**2**	Demolition	4.3	42.7	26.6	0.1	2.6	2.0
	3	Grading	2.8	27.8	20.4	0.0	3.7	2.5
	4	Mat Foundation	2.2	16.6	19.0	0.0	0.9	0.9
	5	Foundation	2.8	23.9	24.3	0.0	1.2	1.2
2022	**6**	Building Construction	2.1	17.7	19.4	0.0	0.9	0.9
2023	**6**	Building Construction	1.9	16.4	19.3	0.0	0.8	0.8
	7	Architectural Coating	10.3	12.0	17.5	0.0	0.6	0.6
	8	Paving	0.9	8.7	10.7	0.0	0.5	0.4
Maximum Daily Emissions								
2021			4.3	42.7	26.6	0.1	3.7	2.5
2022			2.1	17.7	19.4	0.0	0.9	0.9
2023			10.3	16.4	19.3	0.0	0.8	0.8

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

Central LA NO2 Monitoring Data

SRA	City	Design Value 2016-2018	98th percentile, ppb 2016	2017	2018	Threshold (ppb)	Allowable Increase (ppb)
2	Northwest LA	47	49	46	46	100	53

SRA	City	Design Value 2006-2008	Max Hourly, ppb 2016	2017	2018	Threshold (ppb)	Allowable Increase (ppb)
2	Northwest LA	120	55	56	65	180	60

Max Hourly vs. 98th Percentile Ratio (Allowable Increase)	88%

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

LST Threshold (SRA 2, 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	103	91	562	4	3	1	1	
2	147	129	827	6	4	2	1	
5	221	194	1531	13	6	3	2	
2.2	**144**	**127**	**861**	**7**	**4**	**2**	**1**	**<----Interpolated Value**

Bellwood

Air Quality Analysis Assumptions

Notes: **All Quantities are Approximate**

Construction Details	Start Date	End Date	Duration (months)	Days (5 days per week)	Max Daily Employee Trips	Max Daily Trips (2 trips per load)	Total Trips (2 trips per load)	Max Daily Delivery Trips (2 trips per delivery)
Project	**1/1/21**	**10/31/23**	**34**	765				
Site Preparation/Demolition	1/1/21	2/28/2021	1.9	41	30	20	820	10
Grading/Excavation	3/1/21	5/31/21	3.0	66	30	162	10,686	10
Mat Foundation	6/1/21	6/2/21	0.0	1		400		0
Foundation / Concrete	6/3/21	12/31/21	6.9	153	100			100
Building Construction (Rough)	1/1/22	2/28/23	13.9	302	180			50
Finishes/Architectural Coatings	3/1/23	9/30/23	7.0	153	200			50
Paving/Landscaping	10/1/23	10/31/23	1.0	22	40			20

Construction					
Senior Housing DUs	192	d.u.	-----		
Common Open Space	50,463	s.f.	-----		
Parking-subterranean	56,000	s.f.	140	spaces	

Demolition Quantities					
Building Square Footage (SF)	43,939	s.f.	-----		
Parking/asphalt/concrete (SF)	16,400	s.f.			

Import/Export Quantities during Grading						Total:
Import	-	-				-
Export	74,800	-				74,800

Type of Construction Equipment (number of units for each phase. Assumed 8 hours per day)

Equipment	Construction Phase						
	Site Prep / Demo	Grading	Mat Foundation	Foundation	Building Construction	Architectural Coatings	Paving / Landscaping
Air Compressor	1	-	-	-	2	4	-
Aerial Lift	-	-	-	-	2	4	-
Bore/Drill Rig	-	1	-	-	-	-	-
Cement and Mortar Mixers	-	-	2	-	-	-	1
Concrete/Industrial Saws	2	-	-	1	1	-	-
Cranes (Tower)	-	-	-	1	1		-
Cranes (Mobile)	-		-	1	1	-	-
Crawler Tractors	-	-	-	-	-	-	-
Crushing/Proc. Equipment	-	-	-	-	-	-	-
Excavators	-	2	-	-	-	-	-
Forklifts	-	1	-	2	3	3	-
Generator Sets	-	-	-	-	-	-	-
Graders	-	-	-	-	-	-	-
Off-Highway Tractors	-	-	-	-	-	-	-
Water Truck	1	1	-	-	-	-	-
Pavers	-	-	-	-	-	-	-
Paving Equipment	-	-	-	-	-	-	1
Pumps	-	-	4	2	-	-	-
Plate Compactors	-	-	-	4	-	-	1
Rollers	-	-	-	-	-	-	-
Rough Terrain Forklifts	-	-	-	2	-	-	-
Rubber Tired Dozers	2	1	-	-	-	-	-
Rubber Tired Loaders	2	1	-	-	-	-	-
Scrapers	-	-	-	-	-	-	-
Signal Boards	-	-	-	-	-	-	-
Skid Steer Loaders	-	-	-	-	-	-	2
Surfacing Equipment	-	-	-	-	-	-	-
Tractors/Loaders/Backhoes	2	1	-	-	1	-	1
Trenchers	-	-	-	-	-	-	1
Welders	-	1	2	2	1	-	-
Total Pieces	10	9	8	15	12	11	7

Bellwood - Existing Baseline Operations (2019) - Los Angeles-South Coast County, Winter

Bellwood - Existing Baseline Operations (2019)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Condo/Townhouse	112.00	Dwelling Unit	2.20	43,939.00	320

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	801	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP SB100 RPS - 801 lbs CO2/MWh (2019)

Land Use - see project description

Vehicle Trips - see assumptions

Woodstoves - No Wood Stoves

Energy Use - Existing Baseline

Mobile Land Use Mitigation -

Energy Mitigation -

Waste Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	29,659.00	75,600.00
tblArchitecturalCoating	ConstArea_Residential_Interior	88,976.00	226,800.00
tblAreaCoating	Area_Residential_Exterior	29659	75600
tblAreaCoating	Area_Residential_Interior	88976	226800
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	220.00	230.00
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	10.00
tblEnergyUse	NT24E	3,125.85	3,795.01
tblEnergyUse	NT24NG	3,046.55	4,831.00
tblEnergyUse	T24E	286.69	186.63
tblEnergyUse	T24NG	15,240.45	13,424.50
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	5.60	0.00

tblLandUse	LandUseSquareFeet	112,000.00	43,939.00
tblLandUse	LotAcreage	7.00	2.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	801
tblVehicleTrips	CC_TL	8.40	6.61
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	11.00	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	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	5.67	0.00
tblVehicleTrips	ST_TR	0.00	477.00
tblVehicleTrips	SU_TR	4.84	0.00
tblVehicleTrips	SU_TR	0.00	477.00
tblVehicleTrips	WD_TR	5.81	0.00
tblVehicleTrips	WD_TR	0.00	477.00
tblWoodstoves	NumberCatalytic	5.60	0.00
tblWoodstoves	NumberNoncatalytic	5.60	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)

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	1.5311	1.6868	9.9580	0.0106		0.1786	0.1786		0.1786	0.1786						
Energy	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						
Mobile	0.9221	4.2075	10.8722	0.0314	2.4407	0.0378	2.4785	0.6533	0.0355	0.6888						
Total	**2.5136**	**6.4105**	**21.0499**	**0.0453**	**2.4407**	**0.2581**	**2.6988**	**0.6533**	**0.2558**	**0.9091**						

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	1.5311	1.6868	9.9580	0.0106		0.1786	0.1786		0.1786	0.1786						
Energy	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						
Mobile	0.9221	4.2075	10.8722	0.0314	2.4407	0.0378	2.4785	0.6533	0.0355	0.6888						
Total	**2.5136**	**6.4105**	**21.0499**	**0.0453**	**2.4407**	**0.2581**	**2.6988**	**0.6533**	**0.2558**	**0.9091**						

	ROG	NOx	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 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	0.9221	4.2075	10.8722	0.0314	2.4407	0.0378	2.4785	0.6533	0.0355	0.6888						
Unmitigated	0.9221	4.2075	10.8722	0.0314	2.4407	0.0378	2.4785	0.6533	0.0355	0.6888						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

Condo/Townhouse	0.00	0.00	0.00		
User Defined Commercial	477.00	477.00	477.00	1,147,681	1,147,681
Total	477.00	477.00	477.00	1,147,681	1,147,681

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
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
User Defined Commercial	0.00	6.61	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
User Defined Commercial	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

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	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						
NaturalGas Unmitigated	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						

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					
Condo/Townhouse	5601.69	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0604**	**0.5162**	**0.2197**	**3.3000e-003**		**0.0417**	**0.0417**		**0.0417**	**0.0417**						

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					
Condo/Townhouse	5.60169	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0604**	**0.5162**	**0.2197**	**3.3000e-003**		**0.0417**	**0.0417**		**0.0417**	**0.0417**						

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	1.5311	1.6868	9.9580	0.0106		0.1786	0.1786		0.1786	0.1786						
Unmitigated	1.5311	1.6868	9.9580	0.0106		0.1786	0.1786		0.1786	0.1786						

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	0.1920					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.8700					0.0000	0.0000		0.0000	0.0000						
Hearth	0.1848	1.5792	0.6720	0.0101		0.1277	0.1277		0.1277	0.1277						
Landscaping	0.2843	0.1076	9.2860	4.9000e-004		0.0509	0.0509		0.0509	0.0509						
Total	**1.5311**	**1.6868**	**9.9580**	**0.0106**		**0.1786**	**0.1786**		**0.1786**	**0.1786**						

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	0.1920					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.8700					0.0000	0.0000		0.0000	0.0000						
Hearth	0.1848	1.5792	0.6720	0.0101		0.1277	0.1277		0.1277	0.1277						

Landscaping	0.2843	0.1076	9.2860	4.9000e-004		0.0509	0.0509		0.0509	0.0509						
Total	**1.5311**	**1.6868**	**9.9580**	**0.0106**		**0.1786**	**0.1786**		**0.1786**	**0.1786**						

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

Bellwood - Existing Operations (2023) - Los Angeles-South Coast County, Winter

Bellwood - Existing Operations (2023)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Condo/Townhouse	112.00	Dwelling Unit	2.22	43,939.00	320

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2023
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	678	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP SB100 RPS - 678 lbs CO2/MWh (2023)

Land Use - see project description

Vehicle Trips - see assumptions

Woodstoves - No Wood Stoves

Mobile Land Use Mitigation -

Energy Mitigation -

Waste Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	29,659.00	75,600.00
tblArchitecturalCoating	ConstArea_Residential_Interior	88,976.00	226,800.00
tblAreaCoating	Area_Residential_Exterior	29659	75600
tblAreaCoating	Area_Residential_Interior	88976	226800
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	220.00	230.00
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	10.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	5.60	0.00
tblLandUse	LandUseSquareFeet	112,000.00	43,939.00
tblLandUse	LotAcreage	7.00	2.22
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	678
tblVehicleTrips	CC_TL	8.40	6.61
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	11.00	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	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	5.67	0.00
tblVehicleTrips	ST_TR	0.00	477.00
tblVehicleTrips	SU_TR	4.84	0.00
tblVehicleTrips	SU_TR	0.00	477.00
tblVehicleTrips	WD_TR	5.81	0.00
tblVehicleTrips	WD_TR	0.00	477.00
tblWoodstoves	NumberCatalytic	5.60	0.00
tblWoodstoves	NumberNoncatalytic	5.60	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	lb/day										lb/day					
Area	1.5252	1.6857	9.9143	0.0106		0.1788	0.1788		0.1788	0.1788						

Energy	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						
Mobile	0.6596	2.7919	7.7612	0.0282	2.4405	0.0221	2.4625	0.6531	0.0205	0.6736						
Total	**2.2452**	**4.9939**	**17.8951**	**0.0421**	**2.4405**	**0.2427**	**2.6831**	**0.6531**	**0.2411**	**0.8942**						

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	1.5252	1.6857	9.9143	0.0106		0.1788	0.1788		0.1788	0.1788						
Energy	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						
Mobile	0.6596	2.7919	7.7612	0.0282	2.4405	0.0221	2.4625	0.6531	0.0205	0.6736						
Total	**2.2452**	**4.9939**	**17.8951**	**0.0421**	**2.4405**	**0.2427**	**2.6831**	**0.6531**	**0.2411**	**0.8942**						

	ROG	NOx	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 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	0.6596	2.7919	7.7612	0.0282	2.4405	0.0221	2.4625	0.6531	0.0205	0.6736						
Unmitigated	0.6596	2.7919	7.7612	0.0282	2.4405	0.0221	2.4625	0.6531	0.0205	0.6736						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	0.00	0.00	0.00		
User Defined Commercial	477.00	477.00	477.00	1,147,681	1,147,681
Total	477.00	477.00	477.00	1,147,681	1,147,681

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
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

User Defined Commercial	0.00	6.61	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
User Defined Commercial	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						
NaturalGas Unmitigated	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						

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					
Condo/Townhouse	5601.69	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0604**	**0.5162**	**0.2197**	**3.3000e-003**		**0.0417**	**0.0417**		**0.0417**	**0.0417**						

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					
Condo/Townhouse	5.60169	0.0604	0.5162	0.2197	3.3000e-003		0.0417	0.0417		0.0417	0.0417						
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0604**	**0.5162**	**0.2197**	**3.3000e-003**		**0.0417**	**0.0417**		**0.0417**	**0.0417**						

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	1.5252	1.6857	9.9143	0.0106		0.1788	0.1788		0.1788	0.1788						
Unmitigated	1.5252	1.6857	9.9143	0.0106		0.1788	0.1788		0.1788	0.1788						

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	0.1920					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.8700					0.0000	0.0000		0.0000	0.0000						
Hearth	0.1848	1.5792	0.6720	0.0101		0.1277	0.1277		0.1277	0.1277						
Landscaping	0.2784	0.1065	9.2423	4.9000e-004		0.0512	0.0512		0.0512	0.0512						
Total	**1.5252**	**1.6857**	**9.9143**	**0.0106**		**0.1788**	**0.1788**		**0.1788**	**0.1788**						

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	0.1920					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.8700					0.0000	0.0000		0.0000	0.0000						
Hearth	0.1848	1.5792	0.6720	0.0101		0.1277	0.1277		0.1277	0.1277						
Landscaping	0.2784	0.1065	9.2423	4.9000e-004		0.0512	0.0512		0.0512	0.0512						
Total	**1.5252**	**1.6857**	**9.9143**	**0.0106**		**0.1788**	**0.1788**		**0.1788**	**0.1788**						

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

Bellwood - 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
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking with Elevator	140.00	Space	0.00	56,000.00	0
Health Club	50.46	1000sqft	1.16	50,463.00	0
Congregate Care (Assisted Living)	192.00	Dwelling Unit	2.22	191,291.00	549

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2023
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	678	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP SB100 RPS - 2023 Buildout Year - 678 lbs CO2/MWh

Land Use - site specific. Includes 50,560 sf of indoor common areas.
241,754 SF of floor area

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 - see assumptions

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Trips and VMT - Site Specific

Demolition - Existing uses = 43,939 SF
Parking/Pavement = 16,400 SF

Grading - 2.22 acres

Woodstoves - No Wood Stoves
Assumes limited fire places throughout Project site

Energy Use - see parking garage ventilation calculations

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation - City of LA 2012 Waste Diversion Rate

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	25,232.00	7,315.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	75,695.00	21,945.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	129,121.00	129,600.00
tblArchitecturalCoating	ConstArea_Residential_Interior	387,364.00	388,800.00
tblAreaCoating	Area_Nonresidential_Exterior	25232	7315
tblAreaCoating	Area_Nonresidential_Interior	75695	21945
tblAreaCoating	Area_Residential_Exterior	129121	129600
tblAreaCoating	Area_Residential_Interior	387364	388800
tblConstructionPhase	NumDays	18.00	153.00
tblConstructionPhase	NumDays	230.00	2.00
tblConstructionPhase	NumDays	230.00	152.00
tblConstructionPhase	NumDays	230.00	302.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	8.00	66.00
tblConstructionPhase	NumDays	18.00	22.00
tblEnergyUse	LightingElect	1.75	2.33
tblEnergyUse	T24E	3.92	0.41
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	163.20	20.00
tblFireplaces	NumberWood	9.60	0.00
tblGrading	AcresOfGrading	0.00	2.22
tblGrading	MaterialExported	0.00	74,800.00
tblLandUse	LandUseSquareFeet	50,460.00	50,463.00
tblLandUse	LandUseSquareFeet	192,000.00	191,291.00
tblLandUse	LotAcreage	1.26	0.00
tblLandUse	LotAcreage	12.00	2.22
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	678
tblSolidWaste	SolidWasteGenerationRate	287.62	83.39
tblTripsAndVMT	HaulingTripLength	20.00	35.40
tblTripsAndVMT	HaulingTripLength	20.00	35.40
tblTripsAndVMT	HaulingTripNumber	274.00	820.00
tblTripsAndVMT	HaulingTripNumber	9,350.00	10,686.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	38.00	400.00
tblTripsAndVMT	VendorTripNumber	38.00	100.00
tblTripsAndVMT	VendorTripNumber	38.00	50.00
tblTripsAndVMT	VendorTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	25.00	30.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00
tblTripsAndVMT	WorkerTripNumber	183.00	30.00
tblTripsAndVMT	WorkerTripNumber	183.00	100.00
tblTripsAndVMT	WorkerTripNumber	183.00	180.00
tblTripsAndVMT	WorkerTripNumber	37.00	200.00
tblTripsAndVMT	WorkerTripNumber	18.00	40.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	7.93
tblVehicleTrips	CC_TTP	64.10	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_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_TTP	16.90	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	39.00	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	9.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	52.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	2.20	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	0.00	400.00
tblVehicleTrips	SU_TR	2.44	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	0.00	400.00
tblVehicleTrips	WD_TR	2.74	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	0.00	400.00
tblWater	IndoorWaterUseRate	2,984,363.05	865,264.20
tblWater	OutdoorWaterUseRate	1,829,125.74	530,323.22
tblWoodstoves	NumberCatalytic	9.60	0.00
tblWoodstoves	NumberNoncatalytic	9.60	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	7.6592	111.5749	64.2532	0.2572	11.5936	2.1087	13.1205	4.8135	1.9789	6.2328						
2022	3.0452	22.8804	26.8508	0.0639	2.3321	0.9284	3.2605	0.6258	0.8891	1.5148						
2023	11.2638	20.3587	26.0839	0.0628	2.5557	0.8043	3.1694	0.6850	0.7699	1.3957						
Maximum	**11.2638**	**111.5749**	**64.2532**	**0.2572**	**11.5936**	**2.1087**	**13.1205**	**4.8135**	**1.9789**	**6.2328**						

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	7.6592	111.5749	64.2532	0.2572	7.8202	2.1087	9.3471	2.7801	1.9789	4.1994						
2022	3.0452	22.8804	26.8508	0.0639	2.3321	0.9284	3.2605	0.6258	0.8891	1.5148						
2023	11.2638	20.3587	26.0839	0.0628	2.5557	0.8043	3.1694	0.6850	0.7699	1.3957						

Maximum	**11.2638**	**111.5749**	**64.2532**	**0.2572**	**7.8202**	**2.1087**	**9.3471**	**2.7801**	**1.9789**	**4.1994**						

	ROG	NOx	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**	**22.90**	**0.00**	**19.30**	**33.20**	**0.00**	**22.24**	**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	5.6951	0.5146	16.0045	2.9600e-003		0.1146	0.1146		0.1146	0.1146						
Energy	0.0793	0.6921	0.3962	4.3200e-003		0.0548	0.0548		0.0548	0.0548						
Mobile	0.5938	2.5603	7.5086	0.0280	2.4544	0.0217	2.4762	0.6568	0.0202	0.6770						
Stationary	0.4923	1.3760	1.2553	2.3700e-003		0.0724	0.0724		0.0724	0.0724						
Total	**6.8605**	**5.1431**	**25.1646**	**0.0377**	**2.4544**	**0.2635**	**2.7179**	**0.6568**	**0.2620**	**0.9188**						

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	5.6951	0.5146	16.0045	2.9600e-003		0.1146	0.1146		0.1146	0.1146						
Energy	0.0748	0.6524	0.3716	4.0800e-003		0.0517	0.0517		0.0517	0.0517						
Mobile	0.5938	2.5603	7.5086	0.0280	2.4544	0.0217	2.4762	0.6568	0.0202	0.6770						
Stationary	0.4923	1.3760	1.2553	2.3700e-003		0.0724	0.0724		0.0724	0.0724						
Total	**6.8560**	**5.1033**	**25.1400**	**0.0374**	**2.4544**	**0.2604**	**2.7148**	**0.6568**	**0.2589**	**0.9157**						

	ROG	NOx	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**	**0.77**	**0.10**	**0.64**	**0.00**	**1.18**	**0.11**	**0.00**	**1.19**	**0.34**	**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	1/1/2021	2/26/2021	5	41	
2	Grading	Grading	3/1/2021	5/31/2021	5	66	
3	Mat Foundation	Building Construction	6/1/2021	6/2/2021	5	2	
4	Foundation	Building Construction	6/3/2021	12/31/2021	5	152	
5	Building Construction	Building Construction	1/1/2022	2/28/2023	5	302	

6	Architectural Coating	Architectural Coating	3/1/2023	9/30/2023	5	153	
7	Paving	Paving	10/1/2023	10/31/2023	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.22

Acres of Paving: 0

Residential Indoor: 388,800; Residential Outdoor: 129,600; Non-Residential Indoor: 21,945; Non-Residential Outdoor: 7,315; 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	2	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Other Construction Equipment	1	2.00	172	0.42
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Rubber Tired Loaders	2	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Bore/Drill Rigs	1	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	Other Construction Equipment	1	2.00	172	0.42
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Welders	1	8.00	46	0.45
Mat Foundation	Cement and Mortar Mixers	2	8.00	9	0.56
Mat Foundation	Cranes	0	7.00	231	0.29
Mat Foundation	Forklifts	0	8.00	89	0.20
Mat Foundation	Generator Sets	0	8.00	84	0.74
Mat Foundation	Pumps	4	8.00	84	0.74
Mat Foundation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Mat Foundation	Welders	2	8.00	46	0.45
Foundation	Concrete/Industrial Saws	1	8.00	81	0.73
Foundation	Cranes	1	8.00	231	0.29
Foundation	Forklifts	2	8.00	89	0.20
Foundation	Graders	0	8.00	187	0.41
Foundation	Plate Compactors	4	8.00	8	0.43
Foundation	Pumps	2	8.00	84	0.74
Foundation	Rough Terrain Forklifts	2	8.00	100	0.40
Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Foundation	Scrapers	0	8.00	367	0.48
Foundation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Foundation	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Concrete/Industrial Saws	1	8.00	81	0.73

Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Aerial Lifts	4	8.00	63	0.31
Architectural Coating	Air Compressors	4	8.00	78	0.48
Architectural Coating	Forklifts	3	8.00	89	0.20
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Rollers	0	8.00	80	0.38
Paving	Skid Steer Loaders	2	8.00	65	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Trenchers	1	8.00	78	0.50

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	10	30.00	10.00	820.00	14.70	6.90	35.40	LD_Mix	HDT_Mix	HHDT
Grading	9	30.00	10.00	10,686.00	14.70	6.90	35.40	LD_Mix	HDT_Mix	HHDT
Mat Foundation	8	30.00	400.00	0.00	14.70	6.90	20.00	LD_Mix	HHDT	HHDT
Foundation	14	100.00	100.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	11	180.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	11	200.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	40.00	20.00	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					1.4487	0.0000	1.4487	0.2193	0.0000	0.2193						
Off-Road	4.3198	42.6685	26.5787	0.0538		2.0751	2.0751		1.9468	1.9468						
Total	**4.3198**	**42.6685**	**26.5787**	**0.0538**	**1.4487**	**2.0751**	**3.5238**	**0.2193**	**1.9468**	**2.1662**						

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	0.2748	8.2318	2.1202	0.0257	0.6187	0.0288	0.6475	0.1696	0.0276	0.1972						
Vendor	0.0319	0.9689	0.2808	2.5000e-003	0.0640	2.0500e-003	0.0661	0.0184	1.9600e-003	0.0204						
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914						
Total	**0.4497**	**9.2985**	**3.5057**	**0.0315**	**1.0180**	**0.0336**	**1.0516**	**0.2769**	**0.0321**	**0.3090**						

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					0.5650	0.0000	0.5650	0.0855	0.0000	0.0855						
Off-Road	4.3198	42.6685	26.5787	0.0538		2.0751	2.0751		1.9468	1.9468						
Total	**4.3198**	**42.6685**	**26.5787**	**0.0538**	**0.5650**	**2.0751**	**2.6401**	**0.0855**	**1.9468**	**2.0324**						

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	0.2748	8.2318	2.1202	0.0257	0.6187	0.0288	0.6475	0.1696	0.0276	0.1972						
Vendor	0.0319	0.9689	0.2808	2.5000e-003	0.0640	2.0500e-003	0.0661	0.0184	1.9600e-003	0.0204						
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914						
Total	**0.4497**	**9.2985**	**3.5057**	**0.0315**	**1.0180**	**0.0336**	**1.0516**	**0.2769**	**0.0321**	**0.3090**						

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					6.1859	0.0000	6.1859	3.3335	0.0000	3.3335						
Off-Road	2.8301	27.8437	20.4147	0.0433		1.2887	1.2887		1.1915	1.1915						
Total	**2.8301**	**27.8437**	**20.4147**	**0.0433**	**6.1859**	**1.2887**	**7.4746**	**3.3335**	**1.1915**	**4.5250**						

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	2.2243	66.6402	17.1639	0.2082	5.0083	0.2335	5.2418	1.3726	0.2234	1.5960						
Vendor	0.0319	0.9689	0.2808	2.5000e-003	0.0640	2.0500e-003	0.0661	0.0184	1.9600e-003	0.0204						
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914						
Total	**2.3992**	**67.7069**	**18.5494**	**0.2139**	**5.4077**	**0.2383**	**5.6459**	**1.4800**	**0.2279**	**1.7078**						

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					2.4125	0.0000	2.4125	1.3001	0.0000	1.3001						
Off-Road	2.8301	27.8437	20.4147	0.0433		1.2887	1.2887		1.1915	1.1915						
Total	**2.8301**	**27.8437**	**20.4147**	**0.0433**	**2.4125**	**1.2887**	**3.7012**	**1.3001**	**1.1915**	**2.4916**						

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	2.2243	66.6402	17.1639	0.2082	5.0083	0.2335	5.2418	1.3726	0.2234	1.5960						
Vendor	0.0319	0.9689	0.2808	2.5000e-003	0.0640	2.0500e-003	0.0661	0.0184	1.9600e-003	0.0204						
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914						
Total	**2.3992**	**67.7069**	**18.5494**	**0.2139**	**5.4077**	**0.2383**	**5.6459**	**1.4800**	**0.2279**	**1.7078**						

3.4 Mat 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					
Off-Road	2.2445	16.5942	19.0169	0.0328		0.8873	0.8873		0.8873	0.8873						
Total	**2.2445**	**16.5942**	**19.0169**	**0.0328**		**0.8873**	**0.8873**		**0.8873**	**0.8873**						

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						
Vendor	1.6464	60.9548	13.2996	0.1300	2.4185	0.1280	2.5465	0.6635	0.1225	0.7859						
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914						
Total	**1.7894**	**61.0527**	**14.4044**	**0.1332**	**2.7539**	**0.1307**	**2.8846**	**0.7524**	**0.1250**	**0.8774**						

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	2.2445	16.5942	19.0169	0.0328		0.8873	0.8873		0.8873	0.8873						
Total	**2.2445**	**16.5942**	**19.0169**	**0.0328**		**0.8873**	**0.8873**		**0.8873**	**0.8873**						

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						
Vendor	1.6464	60.9548	13.2996	0.1300	2.4185	0.1280	2.5465	0.6635	0.1225	0.7859						
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914						
Total	**1.7894**	**61.0527**	**14.4044**	**0.1332**	**2.7539**	**0.1307**	**2.8846**	**0.7524**	**0.1250**	**0.8774**						

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					

Off-Road	2.8294	23.9130	24.3417	0.0422		1.2048	1.2048		1.1657	1.1657						
Total	**2.8294**	**23.9130**	**24.3417**	**0.0422**		**1.2048**	**1.2048**		**1.1657**	**1.1657**						

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						
Vendor	0.3191	9.6889	2.8077	0.0250	0.6402	0.0205	0.6607	0.1843	0.0196	0.2039						
Worker	0.4768	0.3262	3.6826	0.0108	1.1178	9.0300e-003	1.1268	0.2964	8.3200e-003	0.3048						
Total	**0.7959**	**10.0150**	**6.4903**	**0.0358**	**1.7580**	**0.0295**	**1.7875**	**0.4808**	**0.0279**	**0.5087**						

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	2.8294	23.9130	24.3417	0.0422		1.2048	1.2048		1.1657	1.1657						
Total	**2.8294**	**23.9130**	**24.3417**	**0.0422**		**1.2048**	**1.2048**		**1.1657**	**1.1657**						

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						
Vendor	0.3191	9.6889	2.8077	0.0250	0.6402	0.0205	0.6607	0.1843	0.0196	0.2039						
Worker	0.4768	0.3262	3.6826	0.0108	1.1178	9.0300e-003	1.1268	0.2964	8.3200e-003	0.3048						
Total	**0.7959**	**10.0150**	**6.4903**	**0.0358**	**1.7580**	**0.0295**	**1.7875**	**0.4808**	**0.0279**	**0.5087**						

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	2.0893	17.7463	19.4167	0.0328		0.9037	0.9037		0.8660	0.8660						
Total	**2.0893**	**17.7463**	**19.4167**	**0.0328**		**0.9037**	**0.9037**		**0.8660**	**0.8660**						

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						
Vendor	0.1498	4.6040	1.3289	0.0124	0.3201	8.9600e-003	0.3291	0.0922	8.5700e-003	0.1007						
Worker	0.8061	0.5302	6.1052	0.0187	2.0120	0.0158	2.0277	0.5336	0.0145	0.5481						
Total	**0.9559**	**5.1341**	**7.4340**	**0.0311**	**2.3321**	**0.0247**	**2.3568**	**0.6258**	**0.0231**	**0.6488**						

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	2.0893	17.7463	19.4167	0.0328		0.9037	0.9037		0.8660	0.8660						
Total	**2.0893**	**17.7463**	**19.4167**	**0.0328**		**0.9037**	**0.9037**		**0.8660**	**0.8660**						

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						
Vendor	0.1498	4.6040	1.3289	0.0124	0.3201	8.9600e-003	0.3291	0.0922	8.5700e-003	0.1007						
Worker	0.8061	0.5302	6.1052	0.0187	2.0120	0.0158	2.0277	0.5336	0.0145	0.5481						
Total	**0.9559**	**5.1341**	**7.4340**	**0.0311**	**2.3321**	**0.0247**	**2.3568**	**0.6258**	**0.0231**	**0.6488**						

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	1.9411	16.3922	19.2912	0.0328		0.7848	0.7848		0.7518	0.7518						
Total	**1.9411**	**16.3922**	**19.2912**	**0.0328**		**0.7848**	**0.7848**		**0.7518**	**0.7518**						

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						
Vendor	0.1113	3.4869	1.1808	0.0120	0.3201	4.2600e-003	0.3244	0.0922	4.0700e-003	0.0962						
Worker	0.7594	0.4795	5.6118	0.0180	2.0120	0.0153	2.0273	0.5336	0.0141	0.5477						
Total	**0.8707**	**3.9665**	**6.7926**	**0.0300**	**2.3321**	**0.0196**	**2.3517**	**0.6258**	**0.0182**	**0.6439**						

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	1.9411	16.3922	19.2912	0.0328		0.7848	0.7848		0.7518	0.7518						
Total	**1.9411**	**16.3922**	**19.2912**	**0.0328**		**0.7848**	**0.7848**		**0.7518**	**0.7518**						

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						
Vendor	0.1113	3.4869	1.1808	0.0120	0.3201	4.2600e-003	0.3244	0.0922	4.0700e-003	0.0962						
Worker	0.7594	0.4795	5.6118	0.0180	2.0120	0.0153	2.0273	0.5336	0.0141	0.5477						

Total	**0.8707**	**3.9665**	**6.7926**	**0.0300**	**2.3321**	**0.0196**	**2.3517**	**0.6258**	**0.0182**	**0.6439**						

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	8.8404					0.0000	0.0000		0.0000	0.0000						
Off-Road	1.4683	11.9613	17.4617	0.0272		0.5925	0.5925		0.5753	0.5753						
Total	**10.3087**	**11.9613**	**17.4617**	**0.0272**		**0.5925**	**0.5925**		**0.5753**	**0.5753**						

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						
Vendor	0.1113	3.4869	1.1808	0.0120	0.3201	4.2600e-003	0.3244	0.0922	4.0700e-003	0.0962						
Worker	0.8438	0.5328	6.2353	0.0200	2.2355	0.0170	2.2525	0.5929	0.0157	0.6085						
Total	**0.9551**	**4.0197**	**7.4162**	**0.0320**	**2.5557**	**0.0213**	**2.5769**	**0.6850**	**0.0197**	**0.7048**						

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	8.8404					0.0000	0.0000		0.0000	0.0000						
Off-Road	1.4683	11.9613	17.4617	0.0272		0.5925	0.5925		0.5753	0.5753						
Total	**10.3087**	**11.9613**	**17.4617**	**0.0272**		**0.5925**	**0.5925**		**0.5753**	**0.5753**						

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						

Vendor	0.1113	3.4869	1.1808	0.0120	0.3201	4.2600e-003	0.3244	0.0922	4.0700e-003	0.0962						
Worker	0.8438	0.5328	6.2353	0.0200	2.2355	0.0170	2.2525	0.5929	0.0157	0.6085						
Total	**0.9551**	**4.0197**	**7.4162**	**0.0320**	**2.5557**	**0.0213**	**2.5769**	**0.6850**	**0.0197**	**0.7048**						

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	0.8978	8.7206	10.6697	0.0159		0.4606	0.4606		0.4257	0.4257						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**0.8978**	**8.7206**	**10.6697**	**0.0159**		**0.4606**	**0.4606**		**0.4257**	**0.4257**						

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						
Vendor	0.0445	1.3948	0.4723	4.7900e-003	0.1281	1.7000e-003	0.1298	0.0369	1.6300e-003	0.0385						
Worker	0.1688	0.1066	1.2471	4.0000e-003	0.4471	3.4000e-003	0.4505	0.1186	3.1300e-003	0.1217						
Total	**0.2133**	**1.5013**	**1.7194**	**8.7900e-003**	**0.5752**	**5.1000e-003**	**0.5803**	**0.1554**	**4.7600e-003**	**0.1602**						

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	0.8978	8.7206	10.6697	0.0159		0.4606	0.4606		0.4257	0.4257						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**0.8978**	**8.7206**	**10.6697**	**0.0159**		**0.4606**	**0.4606**		**0.4257**	**0.4257**						

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						
Vendor	0.0445	1.3948	0.4723	4.7900e-003	0.1281	1.7000e-003	0.1298	0.0369	1.6300e-003	0.0385						
Worker	0.1688	0.1066	1.2471	4.0000e-003	0.4471	3.4000e-003	0.4505	0.1186	3.1300e-003	0.1217						
Total	**0.2133**	**1.5013**	**1.7194**	**8.7900e-003**	**0.5752**	**5.1000e-003**	**0.5803**	**0.1554**	**4.7600e-003**	**0.1602**						

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	0.5938	2.5603	7.5086	0.0280	2.4544	0.0217	2.4762	0.6568	0.0202	0.6770						
Unmitigated	0.5938	2.5603	7.5086	0.0280	2.4544	0.0217	2.4762	0.6568	0.0202	0.6770						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
User Defined Commercial	400.00	400.00	400.00	1,154,244	1,154,244
Total	400.00	400.00	400.00	1,154,244	1,154,244

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
Congregate Care (Assisted Living)	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
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
User Defined Commercial	0.00	7.93	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Congregate Care (Assisted Living)	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Enclosed Parking with Elevator	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Health Club	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
User Defined Commercial	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

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	0.0748	0.6524	0.3716	4.0800e-003		0.0517	0.0517		0.0517	0.0517						
NaturalGas Unmitigated	0.0793	0.6921	0.3962	4.3200e-003		0.0548	0.0548		0.0548	0.0548						

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					
Congregate Care (Assisted Living)	4848.36	0.0523	0.4468	0.1901	2.8500e-003		0.0361	0.0361		0.0361	0.0361						
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Health Club	2502.41	0.0270	0.2453	0.2061	1.4700e-003		0.0187	0.0187		0.0187	0.0187						
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0793**	**0.6921**	**0.3962**	**4.3200e-003**		**0.0548**	**0.0548**		**0.0548**	**0.0548**						

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					
Congregate Care (Assisted Living)	4.61765	0.0498	0.4256	0.1811	2.7200e-003		0.0344	0.0344		0.0344	0.0344						
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Health Club	2.31369	0.0250	0.2268	0.1905	1.3600e-003		0.0172	0.0172		0.0172	0.0172						
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0748**	**0.6524**	**0.3716**	**4.0800e-003**		**0.0517**	**0.0517**		**0.0517**	**0.0517**						

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	5.6951	0.5146	16.0045	2.9600e-003		0.1146	0.1146		0.1146	0.1146						
Unmitigated	5.6951	0.5146	16.0045	2.9600e-003		0.1146	0.1146		0.1146	0.1146						

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	0.3706					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.8066					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0388	0.3318	0.1412	2.1200e-003		0.0268	0.0268		0.0268	0.0268						
Landscaping	0.4791	0.1828	15.8633	8.4000e-004		0.0878	0.0878		0.0878	0.0878						
Total	**5.6951**	**0.5146**	**16.0045**	**2.9600e-003**		**0.1146**	**0.1146**		**0.1146**	**0.1146**						

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	0.3706					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.8066					0.0000	0.0000		0.0000	0.0000						
Hearth	0.0388	0.3318	0.1412	2.1200e-003		0.0268	0.0268		0.0268	0.0268						
Landscaping	0.4791	0.1828	15.8633	8.4000e-004		0.0878	0.0878		0.0878	0.0878						
Total	**5.6951**	**0.5146**	**16.0045**	**2.9600e-003**		**0.1146**	**0.1146**		**0.1146**	**0.1146**						

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	1	12	300	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)	0.4923	1.3760	1.2553	2.3700e-003		0.0724	0.0724		0.0724	0.0724						
Total	**0.4923**	**1.3760**	**1.2553**	**2.3700e-003**		**0.0724**	**0.0724**		**0.0724**	**0.0724**						

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2

Bellwood - Project Construction and Operations - Los Angeles-South Coast County, Winter

Bellwood - 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
Enclosed Parking with Elevator	140.00	Space	0.00	56,000.00	0
Health Club	50.46	1000sqft	1.16	50,463.00	0
Congregate Care (Assisted Living)	192.00	Dwelling Unit	2.22	191,291.00	549

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2023
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	678	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP SB100 RPS - 2023 Buildout Year - 678 lbs CO2/MWh

Land Use - site specific. Includes 50,560 sf of indoor common areas.
241,754 SF of floor area

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 - see assumptions

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Trips and VMT - Site Specific

Demolition - Existing uses = 43,939 SF
Parking/Pavement = 16,400 SF

Grading - 2.22 acres

Woodstoves - No Wood Stoves
Assumes limited fire places throughout Project site

Energy Use - see parking garage ventilation calculations

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation - City of LA 2012 Waste Diversion Rate

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	25,232.00	7,315.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	75,695.00	21,945.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	129,121.00	129,600.00
tblArchitecturalCoating	ConstArea_Residential_Interior	387,364.00	388,800.00
tblAreaCoating	Area_Nonresidential_Exterior	25232	7315
tblAreaCoating	Area_Nonresidential_Interior	75695	21945
tblAreaCoating	Area_Residential_Exterior	129121	129600
tblAreaCoating	Area_Residential_Interior	387364	388800
tblConstructionPhase	NumDays	18.00	153.00
tblConstructionPhase	NumDays	230.00	2.00
tblConstructionPhase	NumDays	230.00	152.00
tblConstructionPhase	NumDays	230.00	302.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	8.00	66.00
tblConstructionPhase	NumDays	18.00	22.00
tblEnergyUse	LightingElect	1.75	2.33
tblEnergyUse	T24E	3.92	0.41
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	163.20	20.00
tblFireplaces	NumberWood	9.60	0.00
tblGrading	AcresOfGrading	0.00	2.22
tblGrading	MaterialExported	0.00	74,800.00
tblLandUse	LandUseSquareFeet	50,460.00	50,463.00
tblLandUse	LandUseSquareFeet	192,000.00	191,291.00
tblLandUse	LotAcreage	1.26	0.00
tblLandUse	LotAcreage	12.00	2.22
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	678
tblSolidWaste	SolidWasteGenerationRate	287.62	83.39
tblTripsAndVMT	HaulingTripLength	20.00	0.10
tblTripsAndVMT	HaulingTripLength	20.00	0.10
tblTripsAndVMT	HaulingTripLength	20.00	0.10
tblTripsAndVMT	HaulingTripLength	20.00	0.10
tblTripsAndVMT	HaulingTripLength	20.00	0.10
tblTripsAndVMT	HaulingTripLength	20.00	0.10
tblTripsAndVMT	HaulingTripLength	20.00	0.10
tblTripsAndVMT	HaulingTripNumber	274.00	820.00
tblTripsAndVMT	HaulingTripNumber	9,350.00	10,686.00
tblTripsAndVMT	VendorTripLength	6.90	0.10
tblTripsAndVMT	VendorTripLength	6.90	0.10
tblTripsAndVMT	VendorTripLength	6.90	0.10
tblTripsAndVMT	VendorTripLength	6.90	0.10
tblTripsAndVMT	VendorTripLength	6.90	0.10
tblTripsAndVMT	VendorTripLength	6.90	0.10
tblTripsAndVMT	VendorTripLength	6.90	0.10
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	38.00	400.00
tblTripsAndVMT	VendorTripNumber	38.00	100.00
tblTripsAndVMT	VendorTripNumber	38.00	50.00
tblTripsAndVMT	VendorTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripLength	14.70	0.10
tblTripsAndVMT	WorkerTripLength	14.70	0.10
tblTripsAndVMT	WorkerTripLength	14.70	0.10
tblTripsAndVMT	WorkerTripLength	14.70	0.10
tblTripsAndVMT	WorkerTripLength	14.70	0.10
tblTripsAndVMT	WorkerTripLength	14.70	0.10
tblTripsAndVMT	WorkerTripLength	14.70	0.10
tblTripsAndVMT	WorkerTripNumber	25.00	30.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00
tblTripsAndVMT	WorkerTripNumber	183.00	30.00
tblTripsAndVMT	WorkerTripNumber	183.00	100.00
tblTripsAndVMT	WorkerTripNumber	183.00	180.00
tblTripsAndVMT	WorkerTripNumber	37.00	200.00
tblTripsAndVMT	WorkerTripNumber	18.00	40.00
tblVehicleTrips	ST_TR	2.20	2.17
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	SU_TR	2.44	2.41
tblVehicleTrips	SU_TR	26.73	0.00

tblVehicleTrips	WD_TR	2.74	2.71
tblVehicleTrips	WD_TR	32.93	0.00
tblWater	IndoorWaterUseRate	2,984,363.05	865,264.20
tblWater	OutdoorWaterUseRate	1,829,125.74	530,323.22
tblWoodstoves	NumberCatalytic	9.60	0.00
tblWoodstoves	NumberNoncatalytic	9.60	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	6.0768	82.4549	51.9225	0.1189	6.2073	2.0767	7.5049	3.3397	1.9483	4.5398	0.0000	11,655.0544	11,655.0544	1.6767	0.0000	11,696.9716
2022	2.3185	20.5736	20.9064	0.0359	0.0214	0.9062	0.9276	6.1800e-003	0.8683	0.8745	0.0000	3,434.4319	3,434.4319	0.6583	0.0000	3,450.8903
2023	10.5267	18.8620	20.6183	0.0358	0.0231	0.7868	0.8082	6.6600e-003	0.7537	0.7599	0.0000	3,420.5098	3,420.5098	0.6399	0.0000	3,436.5063
Maximum	**10.5267**	**82.4549**	**51.9225**	**0.1189**	**6.2073**	**2.0767**	**7.5049**	**3.3397**	**1.9483**	**4.5398**	**0.0000**	**11,655.0544**	**11,655.0544**	**1.6767**	**0.0000**	**11,696.9716**

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	6.0768	82.4549	51.9225	0.1189	2.4339	2.0767	3.7315	1.3063	1.9483	2.5063	0.0000	11,655.0544	11,655.0544	1.6767	0.0000	11,696.9716
2022	2.3185	20.5736	20.9064	0.0359	0.0214	0.9062	0.9276	6.1800e-003	0.8683	0.8745	0.0000	3,434.4319	3,434.4319	0.6583	0.0000	3,450.8903
2023	10.5267	18.8620	20.6183	0.0358	0.0231	0.7868	0.8082	6.6600e-003	0.7537	0.7599	0.0000	3,420.5098	3,420.5098	0.6399	0.0000	3,436.5063
Maximum	**10.5267**	**82.4549**	**51.9225**	**0.1189**	**2.4339**	**2.0767**	**3.7315**	**1.3063**	**1.9483**	**2.5063**	**0.0000**	**11,655.0544**	**11,655.0544**	**1.6767**	**0.0000**	**11,696.9716**

	ROG	NOx	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**	**60.36**	**0.00**	**40.84**	**60.65**	**0.00**	**32.94**	**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	1/1/2021	2/26/2021	5	41	

2	Grading	Grading	3/1/2021	5/31/2021	5	66	
3	Mat Foundation	Building Construction	6/1/2021	6/2/2021	5	2	
4	Foundation	Building Construction	6/3/2021	12/31/2021	5	152	
5	Building Construction	Building Construction	1/1/2022	2/28/2023	5	302	
6	Architectural Coating	Architectural Coating	3/1/2023	9/30/2023	5	153	
7	Paving	Paving	10/1/2023	10/31/2023	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.22

Acres of Paving: 0

Residential Indoor: 388,800; Residential Outdoor: 129,600; Non-Residential Indoor: 21,945; Non-Residential Outdoor: 7,315; 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	2	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Other Construction Equipment	1	2.00	172	0.42
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Rubber Tired Loaders	2	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Bore/Drill Rigs	1	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	Other Construction Equipment	1	2.00	172	0.42
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Welders	1	8.00	46	0.45
Mat Foundation	Cement and Mortar Mixers	2	8.00	9	0.56
Mat Foundation	Cranes	0	7.00	231	0.29
Mat Foundation	Forklifts	0	8.00	89	0.20
Mat Foundation	Generator Sets	0	8.00	84	0.74
Mat Foundation	Pumps	4	8.00	84	0.74
Mat Foundation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Mat Foundation	Welders	2	8.00	46	0.45
Foundation	Concrete/Industrial Saws	1	8.00	81	0.73
Foundation	Cranes	1	8.00	231	0.29
Foundation	Forklifts	2	8.00	89	0.20
Foundation	Graders	0	8.00	187	0.41
Foundation	Plate Compactors	4	8.00	8	0.43
Foundation	Pumps	2	8.00	84	0.74
Foundation	Rough Terrain Forklifts	2	8.00	100	0.40
Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Foundation	Scrapers	0	8.00	367	0.48
Foundation	Tractors/Loaders/Backhoes	0	7.00	97	0.37

Foundation	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Aerial Lifts	4	8.00	63	0.31
Architectural Coating	Air Compressors	4	8.00	78	0.48
Architectural Coating	Forklifts	3	8.00	89	0.20
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Rollers	0	8.00	80	0.38
Paving	Skid Steer Loaders	2	8.00	65	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Trenchers	1	8.00	78	0.50

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	10	30.00	10.00	820.00	0.10	0.10	0.10	LD_Mix	HDT_Mix	HHDT
Grading	9	30.00	10.00	10,686.00	0.10	0.10	0.10	LD_Mix	HDT_Mix	HHDT
Mat Foundation	8	30.00	400.00	0.00	0.10	0.10	0.10	LD_Mix	HHDT	HHDT
Foundation	14	100.00	100.00	0.00	0.10	0.10	0.10	LD_Mix	HDT_Mix	HHDT
Building Construction	11	180.00	50.00	0.00	0.10	0.10	0.10	LD_Mix	HDT_Mix	HHDT
Architectural Coating	11	200.00	50.00	0.00	0.10	0.10	0.10	LD_Mix	HDT_Mix	HHDT
Paving	7	40.00	20.00	0.00	0.10	0.10	0.10	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					1.4487	0.0000	1.4487	0.2193	0.0000	0.2193			0.0000			0.0000
Off-Road	4.3198	42.6685	26.5787	0.0538		2.0751	2.0751		1.9468	1.9468		5,177.1815	5,177.1815	1.2643		5,208.7880
Total	**4.3198**	**42.6685**	**26.5787**	**0.0538**	**1.4487**	**2.0751**	**3.5238**	**0.2193**	**1.9468**	**2.1662**		**5,177.1815**	**5,177.1815**	**1.2643**		**5,208.7880**

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	0.0364	1.8108	0.3178	1.9100e-003	2.1700e-003	1.0500e-003	3.2200e-003	6.3000e-004	1.0000e-003	1.6300e-003		206.6272	206.6272	0.0356		207.5182
Vendor	0.0149	0.5692	0.1624	5.2000e-004	1.1900e-003	2.9000e-004	1.4700e-003	3.7000e-004	2.7000e-004	6.4000e-004		56.2484	56.2484	9.7200e-003		56.4913
Worker	0.0291	8.9400e-003	0.1348	9.0000e-005	2.5800e-003	2.1000e-004	2.7800e-003	7.2000e-004	1.9000e-004	9.1000e-004		8.7572	8.7572	7.2000e-004		8.7753
Total	**0.0804**	**2.3890**	**0.6150**	**2.5200e-003**	**5.9400e-003**	**1.5500e-003**	**7.4700e-003**	**1.7200e-003**	**1.4600e-003**	**3.1800e-003**		**271.6328**	**271.6328**	**0.0461**		**272.7848**

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					0.5650	0.0000	0.5650	0.0855	0.0000	0.0855			0.0000			0.0000
Off-Road	4.3198	42.6685	26.5787	0.0538		2.0751	2.0751		1.9468	1.9468	0.0000	5,177.1814	5,177.1814	1.2643		5,208.7880
Total	**4.3198**	**42.6685**	**26.5787**	**0.0538**	**0.5650**	**2.0751**	**2.6401**	**0.0855**	**1.9468**	**2.0324**	**0.0000**	**5,177.1814**	**5,177.1814**	**1.2643**		**5,208.7880**

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	0.0364	1.8108	0.3178	1.9100e-003	2.1700e-003	1.0500e-003	3.2200e-003	6.3000e-004	1.0000e-003	1.6300e-003		206.6272	206.6272	0.0356		207.5182
Vendor	0.0149	0.5692	0.1624	5.2000e-004	1.1900e-003	2.9000e-004	1.4700e-003	3.7000e-004	2.7000e-004	6.4000e-004		56.2484	56.2484	9.7200e-003		56.4913
Worker	0.0291	8.9400e-003	0.1348	9.0000e-005	2.5800e-003	2.1000e-004	2.7800e-003	7.2000e-004	1.9000e-004	9.1000e-004		8.7572	8.7572	7.2000e-004		8.7753
Total	**0.0804**	**2.3890**	**0.6150**	**2.5200e-003**	**5.9400e-003**	**1.5500e-003**	**7.4700e-003**	**1.7200e-003**	**1.4600e-003**	**3.1800e-003**		**271.6328**	**271.6328**	**0.0461**		**272.7848**

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					6.1859	0.0000	6.1859	3.3335	0.0000	3.3335			0.0000			0.0000

Off-Road	2.8301	27.8437	20.4147	0.0433		1.2887	1.2887		1.1915	1.1915		4,151.0645	4,151.0645	1.3025		4,183.6258
Total	**2.8301**	**27.8437**	**20.4147**	**0.0433**	**6.1859**	**1.2887**	**7.4746**	**3.3335**	**1.1915**	**4.5250**		**4,151.0645**	**4,151.0645**	**1.3025**		**4,183.6258**

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	0.2947	14.6596	2.5725	0.0155	0.0176	8.4600e-003	0.0260	5.1200e-003	8.0900e-003	0.0132		1,672.7411	1,672.7411	0.2885		1,679.9544
Vendor	0.0149	0.5692	0.1624	5.2000e-004	1.1900e-003	2.9000e-004	1.4700e-003	3.7000e-004	2.7000e-004	6.4000e-004		56.2484	56.2484	9.7200e-003		56.4913
Worker	0.0291	8.9400e-003	0.1348	9.0000e-005	2.5800e-003	2.1000e-004	2.7800e-003	7.2000e-004	1.9000e-004	9.1000e-004		8.7572	8.7572	7.2000e-004		8.7753
Total	**0.3387**	**15.2378**	**2.8698**	**0.0161**	**0.0213**	**8.9600e-003**	**0.0303**	**6.2100e-003**	**8.5500e-003**	**0.0148**		**1,737.7467**	**1,737.7467**	**0.2990**		**1,745.2210**

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					2.4125	0.0000	2.4125	1.3001	0.0000	1.3001			0.0000			0.0000
Off-Road	2.8301	27.8437	20.4147	0.0433		1.2887	1.2887		1.1915	1.1915	0.0000	4,151.0645	4,151.0645	1.3025		4,183.6258
Total	**2.8301**	**27.8437**	**20.4147**	**0.0433**	**2.4125**	**1.2887**	**3.7012**	**1.3001**	**1.1915**	**2.4916**	**0.0000**	**4,151.0645**	**4,151.0645**	**1.3025**		**4,183.6258**

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	0.2947	14.6596	2.5725	0.0155	0.0176	8.4600e-003	0.0260	5.1200e-003	8.0900e-003	0.0132		1,672.7411	1,672.7411	0.2885		1,679.9544
Vendor	0.0149	0.5692	0.1624	5.2000e-004	1.1900e-003	2.9000e-004	1.4700e-003	3.7000e-004	2.7000e-004	6.4000e-004		56.2484	56.2484	9.7200e-003		56.4913
Worker	0.0291	8.9400e-003	0.1348	9.0000e-005	2.5800e-003	2.1000e-004	2.7800e-003	7.2000e-004	1.9000e-004	9.1000e-004		8.7572	8.7572	7.2000e-004		8.7753
Total	**0.3387**	**15.2378**	**2.8698**	**0.0161**	**0.0213**	**8.9600e-003**	**0.0303**	**6.2100e-003**	**8.5500e-003**	**0.0148**		**1,737.7467**	**1,737.7467**	**0.2990**		**1,745.2210**

3.4 Mat 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					
Off-Road	2.2445	16.5942	19.0169	0.0328		0.8873	0.8873		0.8873	0.8873		3,008.1308	3,008.1308	0.2005		3,013.1424
Total	**2.2445**	**16.5942**	**19.0169**	**0.0328**		**0.8873**	**0.8873**		**0.8873**	**0.8873**		**3,008.1308**	**3,008.1308**	**0.2005**		**3,013.1424**

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	0.0000	0.0000		0.0000
Vendor	0.7281	36.2169	6.3555	0.0382	0.0434	0.0209	0.0643	0.0127	0.0200	0.0327		4,132.5440	4,132.5440	0.7128		4,150.3646
Worker	0.0291	8.9400e-003	0.1348	9.0000e-005	2.5800e-003	2.1000e-004	2.7800e-003	7.2000e-004	1.9000e-004	9.1000e-004		8.7572	8.7572	7.2000e-004		8.7753
Total	**0.7572**	**36.2258**	**6.4903**	**0.0383**	**0.0460**	**0.0211**	**0.0671**	**0.0134**	**0.0202**	**0.0336**		**4,141.3013**	**4,141.3013**	**0.7135**		**4,159.1399**

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	2.2445	16.5942	19.0169	0.0328		0.8873	0.8873		0.8873	0.8873	0.0000	3,008.1308	3,008.1308	0.2005		3,013.1424
Total	**2.2445**	**16.5942**	**19.0169**	**0.0328**		**0.8873**	**0.8873**		**0.8873**	**0.8873**	**0.0000**	**3,008.1308**	**3,008.1308**	**0.2005**		**3,013.1424**

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	0.0000	0.0000		0.0000
Vendor	0.7281	36.2169	6.3555	0.0382	0.0434	0.0209	0.0643	0.0127	0.0200	0.0327		4,132.5440	4,132.5440	0.7128		4,150.3646
Worker	0.0291	8.9400e-003	0.1348	9.0000e-005	2.5800e-003	2.1000e-004	2.7800e-003	7.2000e-004	1.9000e-004	9.1000e-004		8.7572	8.7572	7.2000e-004		8.7753
Total	**0.7572**	**36.2258**	**6.4903**	**0.0383**	**0.0460**	**0.0211**	**0.0671**	**0.0134**	**0.0202**	**0.0336**		**4,141.3013**	**4,141.3013**	**0.7135**		**4,159.1399**

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					
Off-Road	2.8294	23.9130	24.3417	0.0422		1.2048	1.2048		1.1657	1.1657		3,913.9480	3,913.9480	0.6631		3,930.5253
Total	**2.8294**	**23.9130**	**24.3417**	**0.0422**		**1.2048**	**1.2048**		**1.1657**	**1.1657**		**3,913.9480**	**3,913.9480**	**0.6631**		**3,930.5253**

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	0.0000	0.0000		0.0000
Vendor	0.1487	5.6921	1.6242	5.2400e-003	0.0119	2.8700e-003	0.0147	3.6900e-003	2.7500e-003	6.4400e-003		562.4836	562.4836	0.0972		564.9131
Worker	0.0970	0.0298	0.4495	3.0000e-004	8.5800e-003	7.0000e-004	9.2800e-003	2.4100e-003	6.4000e-004	3.0500e-003		29.1908	29.1908	2.4100e-003		29.2509
Total	**0.2457**	**5.7219**	**2.0736**	**5.5400e-003**	**0.0205**	**3.5700e-003**	**0.0240**	**6.1000e-003**	**3.3900e-003**	**9.4900e-003**		**591.6745**	**591.6745**	**0.0996**		**594.1641**

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	2.8294	23.9130	24.3417	0.0422		1.2048	1.2048		1.1657	1.1657	0.0000	3,913.9480	3,913.9480	0.6631		3,930.5253
Total	**2.8294**	**23.9130**	**24.3417**	**0.0422**		**1.2048**	**1.2048**		**1.1657**	**1.1657**	**0.0000**	**3,913.9480**	**3,913.9480**	**0.6631**		**3,930.5253**

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	0.0000	0.0000		0.0000
Vendor	0.1487	5.6921	1.6242	5.2400e-003	0.0119	2.8700e-003	0.0147	3.6900e-003	2.7500e-003	6.4400e-003		562.4836	562.4836	0.0972		564.9131
Worker	0.0970	0.0298	0.4495	3.0000e-004	8.5800e-003	7.0000e-004	9.2800e-003	2.4100e-003	6.4000e-004	3.0500e-003		29.1908	29.1908	2.4100e-003		29.2509
Total	**0.2457**	**5.7219**	**2.0736**	**5.5400e-003**	**0.0205**	**3.5700e-003**	**0.0240**	**6.1000e-003**	**3.3900e-003**	**9.4900e-003**		**591.6745**	**591.6745**	**0.0996**		**594.1641**

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	2.0893	17.7463	19.4167	0.0328		0.9037	0.9037		0.8660	0.8660		3,104.7623	3,104.7623	0.6086		3,119.9784
Total	**2.0893**	**17.7463**	**19.4167**	**0.0328**		**0.9037**	**0.9037**		**0.8660**	**0.8660**		**3,104.7623**	**3,104.7623**	**0.6086**		**3,119.9784**

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	0.0000	0.0000		0.0000
Vendor	0.0690	2.7800	0.7583	2.5900e-003	5.9400e-003	1.2200e-003	7.1500e-003	1.8500e-003	1.1600e-003	3.0100e-003		278.8959	278.8959	0.0459		280.0423
Worker	0.1603	0.0474	0.7314	5.2000e-004	0.0155	1.2200e-003	0.0167	4.3300e-003	1.1200e-003	5.4500e-003		50.7738	50.7738	3.8300e-003		50.8696
Total	**0.2292**	**2.8274**	**1.4897**	**3.1100e-003**	**0.0214**	**2.4400e-003**	**0.0238**	**6.1800e-003**	**2.2800e-003**	**8.4600e-003**		**329.6696**	**329.6696**	**0.0497**		**330.9120**

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	2.0893	17.7463	19.4167	0.0328		0.9037	0.9037		0.8660	0.8660	0.0000	3,104.7622	3,104.7622	0.6086		3,119.9783
Total	**2.0893**	**17.7463**	**19.4167**	**0.0328**		**0.9037**	**0.9037**		**0.8660**	**0.8660**	**0.0000**	**3,104.7622**	**3,104.7622**	**0.6086**		**3,119.9783**

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	0.0000	0.0000		0.0000
Vendor	0.0690	2.7800	0.7583	2.5900e-003	5.9400e-003	1.2200e-003	7.1500e-003	1.8500e-003	1.1600e-003	3.0100e-003		278.8959	278.8959	0.0459		280.0423

Worker	0.1603	0.0474	0.7314	5.2000e-004	0.0155	1.2200e-003	0.0167	4.3300e-003	1.1200e-003	5.4500e-003		50.7738	50.7738	3.8300e-003		50.8696
Total	**0.2292**	**2.8274**	**1.4897**	**3.1100e-003**	**0.0214**	**2.4400e-003**	**0.0238**	**6.1800e-003**	**2.2800e-003**	**8.4600e-003**		**329.6696**	**329.6696**	**0.0497**		**330.9120**

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	1.9411	16.3922	19.2912	0.0328		0.7848	0.7848		0.7518	0.7518		3,105.0053	3,105.0053	0.5994		3,119.9914
Total	**1.9411**	**16.3922**	**19.2912**	**0.0328**		**0.7848**	**0.7848**		**0.7518**	**0.7518**		**3,105.0053**	**3,105.0053**	**0.5994**		**3,119.9914**

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	0.0000	0.0000		0.0000
Vendor	0.0541	2.4276	0.6649	2.4700e-003	5.9400e-003	8.3000e-004	6.7700e-003	1.8500e-003	7.9000e-004	2.6400e-003		266.5206	266.5206	0.0370		267.4461
Worker	0.1475	0.0421	0.6621	5.0000e-004	0.0155	1.2000e-003	0.0167	4.3300e-003	1.1000e-003	5.4300e-003		48.9838	48.9838	3.4000e-003		49.0688
Total	**0.2016**	**2.4697**	**1.3270**	**2.9700e-003**	**0.0214**	**2.0300e-003**	**0.0234**	**6.1800e-003**	**1.8900e-003**	**8.0700e-003**		**315.5045**	**315.5045**	**0.0404**		**316.5149**

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	1.9411	16.3922	19.2912	0.0328		0.7848	0.7848		0.7518	0.7518	0.0000	3,105.0053	3,105.0053	0.5994		3,119.9914
Total	**1.9411**	**16.3922**	**19.2912**	**0.0328**		**0.7848**	**0.7848**		**0.7518**	**0.7518**	**0.0000**	**3,105.0053**	**3,105.0053**	**0.5994**		**3,119.9914**

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	0.0000	0.0000		0.0000
Vendor	0.0541	2.4276	0.6649	2.4700e-003	5.9400e-003	8.3000e-004	6.7700e-003	1.8500e-003	7.9000e-004	2.6400e-003		266.5206	266.5206	0.0370		267.4461
Worker	0.1475	0.0421	0.6621	5.0000e-004	0.0155	1.2000e-003	0.0167	4.3300e-003	1.1000e-003	5.4300e-003		48.9838	48.9838	3.4000e-003		49.0688
Total	**0.2016**	**2.4697**	**1.3270**	**2.9700e-003**	**0.0214**	**2.0300e-003**	**0.0234**	**6.1800e-003**	**1.8900e-003**	**8.0700e-003**		**315.5045**	**315.5045**	**0.0404**		**316.5149**

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	8.8404					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.4683	11.9613	17.4617	0.0272		0.5925	0.5925		0.5753	0.5753		2,595.6281	2,595.6281	0.4438		2,606.7234
Total	**10.3087**	**11.9613**	**17.4617**	**0.0272**		**0.5925**	**0.5925**		**0.5753**	**0.5753**		**2,595.6281**	**2,595.6281**	**0.4438**		**2,606.7234**

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	0.0000	0.0000		0.0000
Vendor	0.0541	2.4276	0.6649	2.4700e-003	5.9400e-003	8.3000e-004	6.7700e-003	1.8500e-003	7.9000e-004	2.6400e-003		266.5206	266.5206	0.0370		267.4461
Worker	0.1639	0.0468	0.7357	5.6000e-004	0.0172	1.3300e-003	0.0185	4.8100e-003	1.2200e-003	6.0400e-003		54.4265	54.4265	3.7700e-003		54.5209
Total	**0.2180**	**2.4744**	**1.4006**	**3.0300e-003**	**0.0231**	**2.1600e-003**	**0.0253**	**6.6600e-003**	**2.0100e-003**	**8.6800e-003**		**320.9471**	**320.9471**	**0.0408**		**321.9670**

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	8.8404					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.4683	11.9613	17.4617	0.0272		0.5925	0.5925		0.5753	0.5753	0.0000	2,595.6281	2,595.6281	0.4438		2,606.7234
Total	**10.3087**	**11.9613**	**17.4617**	**0.0272**		**0.5925**	**0.5925**		**0.5753**	**0.5753**	**0.0000**	**2,595.6281**	**2,595.6281**	**0.4438**		**2,606.7234**

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	0.0000	0.0000		0.0000
Vendor	0.0541	2.4276	0.6649	2.4700e-003	5.9400e-003	8.3000e-004	6.7700e-003	1.8500e-003	7.9000e-004	2.6400e-003		266.5206	266.5206	0.0370		267.4461
Worker	0.1639	0.0468	0.7357	5.6000e-004	0.0172	1.3300e-003	0.0185	4.8100e-003	1.2200e-003	6.0400e-003		54.4265	54.4265	3.7700e-003		54.5209
Total	**0.2180**	**2.4744**	**1.4006**	**3.0300e-003**	**0.0231**	**2.1600e-003**	**0.0253**	**6.6600e-003**	**2.0100e-003**	**8.6800e-003**		**320.9471**	**320.9471**	**0.0408**		**321.9670**

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	0.8978	8.7206	10.6697	0.0159		0.4606	0.4606		0.4257	0.4257		1,509.2116	1,509.2116	0.4694		1,520.9477
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8978**	**8.7206**	**10.6697**	**0.0159**		**0.4606**	**0.4606**		**0.4257**	**0.4257**		**1,509.2116**	**1,509.2116**	**0.4694**		**1,520.9477**

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	0.0000	0.0000		0.0000
Vendor	0.0216	0.9710	0.2660	9.9000e-004	2.3700e-003	3.3000e-004	2.7100e-003	7.4000e-004	3.2000e-004	1.0600e-003		106.6083	106.6083	0.0148		106.9784
Worker	0.0328	9.3600e-003	0.1471	1.1000e-004	3.4300e-003	2.7000e-004	3.7000e-003	9.6000e-004	2.4000e-004	1.2100e-003		10.8853	10.8853	7.5000e-004		10.9042
Total	**0.0544**	**0.9804**	**0.4131**	**1.1000e-003**	**5.8000e-003**	**6.0000e-004**	**6.4100e-003**	**1.7000e-003**	**5.6000e-004**	**2.2700e-003**		**117.4936**	**117.4936**	**0.0156**		**117.8826**

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	0.8978	8.7206	10.6697	0.0159		0.4606	0.4606		0.4257	0.4257	0.0000	1,509.2116	1,509.2116	0.4694		1,520.9477
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8978**	**8.7206**	**10.6697**	**0.0159**		**0.4606**	**0.4606**		**0.4257**	**0.4257**	**0.0000**	**1,509.2116**	**1,509.2116**	**0.4694**		**1,520.9477**

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	0.0000	0.0000		0.0000
Vendor	0.0216	0.9710	0.2660	9.9000e-004	2.3700e-003	3.3000e-004	2.7100e-003	7.4000e-004	3.2000e-004	1.0600e-003		106.6083	106.6083	0.0148		106.9784
Worker	0.0328	9.3600e-003	0.1471	1.1000e-004	3.4300e-003	2.7000e-004	3.7000e-003	9.6000e-004	2.4000e-004	1.2100e-003		10.8853	10.8853	7.5000e-004		10.9042
Total	**0.0544**	**0.9804**	**0.4131**	**1.1000e-003**	**5.8000e-003**	**6.0000e-004**	**6.4100e-003**	**1.7000e-003**	**5.6000e-004**	**2.2700e-003**		**117.4936**	**117.4936**	**0.0156**		**117.8826**

Bellwood

CO Hotspots

CO Hotspots Analysis - Maximum Impacted Intersection

Peak Hour Volumes		
Intersection	ɛverly Glen and Santa Moni	
Direction	**AM**	**PM**
NBL	137	55
NBT	636	1019
NBR	678	385
SBL	218	664
SBT	1369	2030
SBR	188	299
EBL	437	151
EBT	712	689
EBR	132	118
WBL		
WBT	2075	1717
WBR	125	197
Peak Hour Totals	6707	7324
Daily Maximum	68,000	74,000

Bellwood Senior Residential Community

Draft EIR

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

- Appendix C-3: Greenhouse Gas Worksheets and Modeling Output Files
  - Appendix C-3.1: GHG Modeling Parameters and Summary of Emissions
    - GHG Emissions Summary
    - GHG Parameters and Summary
    - Electric Vehicle Charging Calculations
  - Appendix C-3.2: CalEEMod Outputs
    - Baseline Operations (Existing Year)
    - Baseline Operations (Buildout Year)
    - Project Construction and Operations (Buildout Year)

Bellwood Senior Housing

Operational Emissions Summary (GHG)

CalEEMod Output Summary	Project with PDFs	Project with no PDFs
Baseline (Buildout Year)[a]	**CO_2e**	**CO_2e**
Area	25	25
Energy (Natural Gas)	282	282
Mobile	482	482
Emergency Generators	0	0
Solid Waste	6	6
Water/Wastewater	55	55
Total	850	850
Buildout (Buildout Year)[b]		
Area	8	8
Energy (Natural Gas)	556	589
Mobile	479	634
Electric Vehicle Charging Credit	(33)	(33)
Emergency Generators	1	1
Solid Waste	31	31
Water/Wastewater	81	101
Construction	95	95
Total	1,217	1,425
Project (Buildout less Baseline)		
Area	(17)	(17)
Energy (Natural Gas)	274	307
Mobile	(3)	152
Electric Vehicle Charging Credit	(33)	(33)
Emergency Generators	1	1
Solid Waste	25	25
Water/Wastewater	26	46
Construction	95	95
Total	**367**	**575**

[a] Existing Uses

[b] Please refer to CalEEMod outputs for Future uses

GHG SOURCE CALCULATIONS:

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.

Calculation of Parking Garage Ventilation Energy Factor

Full Power Ventilation Flowrate:	0.5	cfm/sf	Section 120.6(c) of California Building Code, Mandatory Requirements for Enclosed Parking Garages, provides a minimum 0.15 cfm/sf flowrate. Conservatively assumed 0.5 cfm/sf.
Fan Horsepower/1,000 sf:	0.19	hp/1,000 sf	Fan Horsepower = (CFM x Static Pressure of 1.6 in WC)/(6356 x Motor Fan Efficiency of 65%)
Setback Mode Power Ventilation Flowrate:	0.05	cfm/sf	Energy Star technical reference recommends a minimum flow rate of 0.05 cfm/sf when fan is in setback mode.
Fan Horsepower/1,000 sf:	0.02	hp/1,000 sf	Fan Horsepower = (CFM x Static Pressure of 1.6 in WC)/(6356 x Motor Fan Efficiency of 65%)
Fan Horsepower/1,000 sf per Day:	1.51	hp/1,000 sf/Day	Energy Star technical reference recommends 6 hours per day at full power and 18 hours per day at 0.05 cfm/sf in setback mode
Horsepower to kW Conv.	0.746	kW per hp	
Fan kW/1,000 sf per Day:	1.13	kW/1,000 sf/Day	
Annual kW/sf	0.41	kWh/sf Annual	

Source: Energy Star Portfolio Manger Technical Reference: Parking and the Energy Star Score in the United States and Canada, August 2018

Buildout Parking Garage Lighting

Square Footage =	56,000	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 =	97,867	conservatively assumes maximum lighting power 24 hours per day)
Annual kW/sq ft =	**1.75**	kWh/sq ft annual
Adjustment:	2.33	(CalEEMod applies mititgation to all land uses. So, this adjustement accounts for the 25% reduction in lighting associated with LEED Silver)
Elevator (no change CalEEMod Default)	**0.19**	kWh/sq ft annual

APPLICABLE GHG REDUCTION MEASURES Included within CalEEMod

Energy Reduction Measures Included in CalEEMod Run:

High Efficiency Lighting (25%)
Title 24 (Above 10%)

Water Reduction Measures Included in CalEEMod Run:

20 Percent Reduction Beyond Code Requirements

Waste Diversion Rate Reduction Measures Included in CalEEMod Run:

-Project assumes a 76.4% Diversion Rate (Los Angeles, 2011)

Area Source Reduction Measure Included in CalEEMod Run:

-New Residential DU's do not include fireplaces.

Bellwood

LADOT VMT Calculator Data

VMT Summary

	Existing	Proposed Project	With Mitigation	Project Weekday Trips	Weekend Trips	Weekend Vs. Weekday Ratio
Daily Trips	477	400	400	1	1	**1.00**
Daily VMT	3,153	3,171	3,171			
Pass-by trips	0	0				

Project without TDM (MXD Data)

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	27	-44.4%	15	5.6	151	84
Home Based Other Production	53	-39.6%	32	4.9	260	157
Non-Home Based Other Production	53	-5.7%	50	8.1	429	405
Home-Based Work Attraction	240	-27.9%	173	8.6	2,064	1,488
Home-Based Other Attraction	53	-41.5%	31	8.4	445	260
Non-Home Based Other Attraction	107	-5.6%	101	7.9	845	798
Total	**533**				**4,194**	**3,192**

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	-0.6%	15	83	-0.6%	15	83
Home Based Other Production	-0.6%	32	156	-0.6%	32	156
Non-Home Based Other Production	-0.6%	50	402	-0.6%	50	402
Home-Based Work Attraction	-0.6%	172	1,479	-0.6%	172	1,479
Home-Based Other Attraction	-0.6%	31	258	-0.6%	31	258
Non-Home Based Other Attraction	-0.6%	100	793	-0.6%	100	793
Total		**400**	**3,171**		**400**	**3,171**
Residential VMT			239			239

Source: Fehr and Peers

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

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

LADWP Electricity Emission Factor[1]	0.27	MTCO2E/MWh
Fuel Economy of Electric Vehicle[2]	0.33	kWh/mile
Electric Vehicle GHG Emissions	89.4	grams/mile
GHG Emissions from Residential Miles Traveled (CalEEMod)[3]	376.5	grams/mile
GHG Emissions Reduction from Additional Electric Vehicles, per mile	287.1	grams/mile

Step 2: Estimating Project Residential-Related VMT GHG Emissions

Residential Average Yearly VMT with TDM and PDFs[4]	1,163,060	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	116,306	miles/year
GHG Emisisons Reduction from Residential Electric Vehicles	**33**	MTCO2E/MWh
Energy Usage for Charging Vehicles	**38,381**	kWH/year

Notes:
1) CO2 intensity factor reflects a 2023 RPS for LADWP (672 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 XX.X 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 utlized 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/).

Bellwood - Existing Baseline Operations (2019) - Los Angeles-South Coast County, Annual

Bellwood - Existing Baseline Operations (2019)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Condo/Townhouse	112.00	Dwelling Unit	2.20	43,939.00	320

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	801	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP SB100 RPS - 801 lbs CO2/MWh (2019)

Land Use - see project description

Vehicle Trips - see assumptions

Woodstoves - No Wood Stoves

Energy Use - Existing Baseline

Mobile Land Use Mitigation -

Energy Mitigation -

Waste Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	29,659.00	75,600.00
tblArchitecturalCoating	ConstArea_Residential_Interior	88,976.00	226,800.00
tblAreaCoating	Area_Residential_Exterior	29659	75600
tblAreaCoating	Area_Residential_Interior	88976	226800
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	220.00	230.00
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	10.00
tblEnergyUse	NT24E	3,125.85	3,795.01
tblEnergyUse	NT24NG	3,046.55	4,831.00
tblEnergyUse	T24E	286.69	186.63
tblEnergyUse	T24NG	15,240.45	13,424.50
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	5.60	0.00

tblLandUse	LandUseSquareFeet	112,000.00	43,939.00
tblLandUse	LotAcreage	7.00	2.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	801
tblVehicleTrips	CC_TL	8.40	6.61
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	11.00	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	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	5.67	0.00
tblVehicleTrips	ST_TR	0.00	477.00
tblVehicleTrips	SU_TR	4.84	0.00
tblVehicleTrips	SU_TR	0.00	477.00
tblVehicleTrips	WD_TR	5.81	0.00
tblVehicleTrips	WD_TR	0.00	477.00
tblWoodstoves	NumberCatalytic	5.60	0.00
tblWoodstoves	NumberNoncatalytic	5.60	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																24.9299
Energy																313.1540
Mobile																535.3753
Waste																25.9095
Water																63.1918
Total																**962.5606**

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																24.9299
Energy																313.1540
Mobile																535.3753
Waste																6.1665
Water																63.1918
Total																**942.8175**

	ROG	NOx	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.05**

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																535.3753
Unmitigated																535.3753

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	0.00	0.00	0.00		
User Defined Commercial	477.00	477.00	477.00	1,147,681	1,147,681
Total	477.00	477.00	477.00	1,147,681	1,147,681

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
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
User Defined Commercial	0.00	6.61	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
User Defined Commercial	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

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																203.3972
Electricity Unmitigated																203.3972
NaturalGas Mitigated																109.7569
NaturalGas Unmitigated																109.7569

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					
Condo/Townhouse	2.04462e+006																109.7569
User Defined Commercial	0																0.0000
Total																	**109.7569**

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					
Condo/Townhouse	2.04462e+006																109.7569
User Defined Commercial	0																0.0000
Total																	**109.7569**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	558067				203.3972
User Defined Commercial	0				0.0000
Total					**203.3972**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	558067				203.3972
User Defined Commercial	0				0.0000
Total					**203.3972**

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																24.9299
Unmitigated																24.9299

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																0.0000
Consumer Products																0.0000
Hearth																22.9969
Landscaping																1.9330
Total																**24.9299**

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																0.0000
Consumer Products																0.0000
Hearth																22.9969
Landscaping																1.9330
Total																**24.9299**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				63.1918
Unmitigated				63.1918

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	7.29725 / 4.60044				63.1918
User Defined Commercial	0 / 0				0.0000
Total					**63.1918**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	7.29725 / 4.60044				63.1918
User Defined Commercial	0 / 0				0.0000
Total					**63.1918**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				6.1665
Unmitigated				25.9095

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	51.52				25.9095
User Defined Commercial	0				0.0000

Total				**25.9095**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	12.2618				6.1665
User Defined Commercial	0				0.0000
Total					**6.1665**

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

Bellwood - Existing Operations (2023) - Los Angeles-South Coast County, Annual

Bellwood - Existing Operations (2023)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Condo/Townhouse	112.00	Dwelling Unit	2.22	43,939.00	320

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2023
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	678	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP SB100 RPS - 678 lbs CO2/MWh (2023)

Land Use - see project description

Vehicle Trips - see assumptions

Woodstoves - No Wood Stoves

Mobile Land Use Mitigation -

Energy Mitigation -

Waste Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	29,659.00	75,600.00
tblArchitecturalCoating	ConstArea_Residential_Interior	88,976.00	226,800.00
tblAreaCoating	Area_Residential_Exterior	29659	75600
tblAreaCoating	Area_Residential_Interior	88976	226800
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	220.00	230.00
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	10.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	5.60	0.00
tblLandUse	LandUseSquareFeet	112,000.00	43,939.00
tblLandUse	LotAcreage	7.00	2.22
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	678
tblVehicleTrips	CC_TL	8.40	6.61
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	11.00	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	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	5.67	0.00
tblVehicleTrips	ST_TR	0.00	477.00
tblVehicleTrips	SU_TR	4.84	0.00
tblVehicleTrips	SU_TR	0.00	477.00
tblVehicleTrips	WD_TR	5.81	0.00
tblVehicleTrips	WD_TR	0.00	477.00
tblWoodstoves	NumberCatalytic	5.60	0.00
tblWoodstoves	NumberNoncatalytic	5.60	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																24.9290

Energy																282.0185
Mobile																482.1688
Waste																25.9095
Water																55.0390
Total																**870.0647**

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																24.9290
Energy																282.0185
Mobile																482.1688
Waste																6.1665
Water																55.0390
Total																**850.3217**

	ROG	NOx	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.27**

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																482.1688
Unmitigated																482.1688

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	0.00	0.00	0.00		
User Defined Commercial	477.00	477.00	477.00	1,147,681	1,147,681

Total	477.00	477.00	477.00	1,147,681	1,147,681

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
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
User Defined Commercial	0.00	6.61	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
User Defined Commercial	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated																172.2616
Electricity Unmitigated																172.2616
NaturalGas Mitigated																109.7569
NaturalGas Unmitigated																109.7569

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					
Condo/Townhouse	2.04462e+006																109.7569
User Defined Commercial	0																0.0000
Total																	**109.7569**

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					
Condo/Townhouse	2.04462e+006																109.7569
User Defined Commercial	0																0.0000
Total																	**109.7569**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	558067				172.2616
User Defined Commercial	0				0.0000
Total					**172.2616**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	558067				172.2616
User Defined Commercial	0				0.0000
Total					**172.2616**

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																24.9290
Unmitigated																24.9290

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																0.0000
Consumer Products																0.0000
Hearth																22.9969
Landscaping																1.9321
Total																**24.9290**

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																0.0000
Consumer Products																0.0000
Hearth																22.9969
Landscaping																1.9321
Total																**24.9290**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				55.0390
Unmitigated				55.0390

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr		
Condo/Townhouse	7.29725 / 4.60044			55.0390
User Defined Commercial	0 / 0			0.0000
Total				**55.0390**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	7.29725 / 4.60044				55.0390
User Defined Commercial	0 / 0				0.0000
Total					**55.0390**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				6.1665
Unmitigated				25.9095

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	51.52				25.9095
User Defined Commercial	0				0.0000
Total					**25.9095**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	12.2618				6.1665
User Defined Commercial	0				0.0000
Total					**6.1665**

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

Bellwood - Project Construction and Operations (No MXD or PDFs)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking with Elevator	140.00	Space	0.00	56,000.00	0
Health Club	50.46	1000sqft	1.16	50,463.00	0
Congregate Care (Assisted Living)	192.00	Dwelling Unit	2.22	191,291.00	549

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2023
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	678	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP SB100 RPS - 2023 Buildout Year - 678 lbs CO2/MWh

Land Use - site specific. Includes 50,560 sf of indoor common areas.
241,754 SF of floor area

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 - see assumptions

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Trips and VMT - Site Specific

Demolition - Existing uses = 43,939 SF
Parking/Pavement = 16,400 SF

Grading - 2.22 acres

Woodstoves - Unmitigated Scenario - Natural gas fireplaces in all units

Energy Use - see parking garage ventilation calculations

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation - City of LA 2012 Waste Diversion Rate

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	25,232.00	7,315.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	75,695.00	21,945.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	129,121.00	129,600.00
tblArchitecturalCoating	ConstArea_Residential_Interior	387,364.00	388,800.00
tblAreaCoating	Area_Nonresidential_Exterior	25232	7315
tblAreaCoating	Area_Nonresidential_Interior	75695	21945
tblAreaCoating	Area_Residential_Exterior	129121	129600
tblAreaCoating	Area_Residential_Interior	387364	388800
tblEnergyUse	LightingElect	1.75	2.33
tblEnergyUse	T24E	3.92	0.41
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	163.20	20.00
tblFireplaces	NumberWood	9.60	0.00
tblGrading	AcresOfGrading	0.00	2.22
tblGrading	MaterialExported	0.00	74,800.00
tblLandUse	LandUseSquareFeet	50,460.00	50,463.00
tblLandUse	LandUseSquareFeet	192,000.00	191,291.00
tblLandUse	LotAcreage	1.26	0.00
tblLandUse	LotAcreage	12.00	2.22
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	678

tblSolidWaste	SolidWasteGenerationRate	287.62	83.39
tblTripsAndVMT	HaulingTripLength	20.00	35.40
tblTripsAndVMT	HaulingTripLength	20.00	35.40
tblTripsAndVMT	HaulingTripNumber	274.00	820.00
tblTripsAndVMT	HaulingTripNumber	9,350.00	10,686.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	38.00	400.00
tblTripsAndVMT	VendorTripNumber	38.00	100.00
tblTripsAndVMT	VendorTripNumber	38.00	50.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	50.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	25.00	30.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00
tblTripsAndVMT	WorkerTripNumber	183.00	30.00
tblTripsAndVMT	WorkerTripNumber	183.00	100.00
tblTripsAndVMT	WorkerTripNumber	183.00	180.00
tblTripsAndVMT	WorkerTripNumber	18.00	40.00
tblTripsAndVMT	WorkerTripNumber	37.00	200.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	7.87
tblVehicleTrips	CC_TTP	64.10	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_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_TTP	16.90	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	39.00	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	9.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	52.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	2.20	0.00
tblVehicleTrips	ST_TR	20.87	0.00

tblVehicleTrips	ST_TR	0.00	533.00
tblVehicleTrips	SU_TR	2.44	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	0.00	533.00
tblVehicleTrips	WD_TR	2.74	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	0.00	533.00
tblWater	IndoorWaterUseRate	2,984,363.05	865,264.20
tblWater	OutdoorWaterUseRate	1,829,125.74	530,323.22
tblWoodstoves	NumberCatalytic	9.60	0.00
tblWoodstoves	NumberNoncatalytic	9.60	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																8.1485
Energy																602.2733
Mobile																633.6969
Stationary																1.3757
Waste																130.0453
Water																100.8267
Total																**1,476.3663**

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																8.1485
Energy																588.8666
Mobile																633.6969
Stationary																1.3757
Waste																30.6907

Water																100.8267
Total																**1,363.6050**

	ROG	NOx	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**7.64**

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																633.6969
Unmitigated																633.6969

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
User Defined Commercial	533.00	533.00	533.00	1,526,616	1,526,616
Total	533.00	533.00	533.00	1,526,616	1,526,616

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
Congregate Care (Assisted	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
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
User Defined Commercial	0.00	7.87	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Congregate Care (Assisted Living)	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Enclosed Parking with Elevator	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Health Club	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
User Defined Commercial	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

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																453.0570
Electricity Unmitigated																458.2457
NaturalGas Mitigated																135.8096
NaturalGas Unmitigated																144.0277

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					
Congregate Care (Assisted Living)	1.76965e+006																94.9966
Enclosed Parking with Elevator	0																0.0000
Health Club	913380																49.0311
User Defined Commercial	0																0.0000
Total																	**144.0277**

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					
Congregate Care (Assisted Living)	1.68544e+006																90.4761
Enclosed Parking with Elevator	0																0.0000
Health Club	844498																45.3335
User Defined Commercial	0																0.0000
Total																	**135.8096**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	760335				234.6969
Enclosed Parking with Elevator	164080				50.6475
Health Club	560139				172.9013
User Defined Commercial	0				0.0000
Total					**458.2457**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	757176				233.7217
Enclosed Parking with Elevator	161784				49.9388
Health Club	548785				169.3965
User Defined Commercial	0				0.0000
Total					**453.0570**

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																8.1485
Unmitigated																8.1485

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																0.0000
Consumer Products																0.0000
Hearth																4.8313
Landscaping																3.3172
Total																**8.1484**

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																0.0000
Consumer Products																0.0000
Hearth																4.8313
Landscaping																3.3172
Total																**8.1484**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				100.8267
Unmitigated				100.8267

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	12.5096 / 7.88647				94.3526
Enclosed Parking with Elevator	0 / 0				0.0000

Health Club	0.865264 / 0.530323			6.4742
User Defined Commercial	0 / 0			0.0000
Total				**100.8267**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	12.5096 / 7.88647				94.3526
Enclosed Parking with Elevator	0 / 0				0.0000
Health Club	0.865264 / 0.530323				6.4742
User Defined Commercial	0 / 0				0.0000
Total					**100.8267**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				30.6907
Unmitigated				130.0453

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	175.2				88.1084
Enclosed Parking with Elevator	0				0.0000
Health Club	83.39				41.9370
User Defined Commercial	0				0.0000

Total				**130.0453**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	41.3472				20.7936
Enclosed Parking with Elevator	0				0.0000
Health Club	19.68				9.8971
User Defined Commercial	0				0.0000
Total					**30.6907**

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	1	12	300	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)																1.3757
Total																**1.3757**

11.0 Vegetation

Bellwood - 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
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking with Elevator	140.00	Space	0.00	56,000.00	0
Health Club	50.46	1000sqft	1.16	50,463.00	0
Congregate Care (Assisted Living)	192.00	Dwelling Unit	2.22	191,291.00	549

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2023
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	678	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP SB100 RPS - 2023 Buildout Year - 678 lbs CO2/MWh

Land Use - site specific. Includes 50,560 sf of indoor common areas.
241,754 SF of floor area

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 - see assumptions

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Trips and VMT - Site Specific

Demolition - Existing uses = 43,939 SF
Parking/Pavement = 16,400 SF

Grading - 2.22 acres

Woodstoves - No Wood Stoves
Assumes limited fire places throughout Project site

Energy Use - see parking garage ventilation calculations

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation - City of LA 2012 Waste Diversion Rate

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	25,232.00	7,315.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	75,695.00	21,945.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	129,121.00	129,600.00
tblArchitecturalCoating	ConstArea_Residential_Interior	387,364.00	388,800.00
tblAreaCoating	Area_Nonresidential_Exterior	25232	7315
tblAreaCoating	Area_Nonresidential_Interior	75695	21945
tblAreaCoating	Area_Residential_Exterior	129121	129600
tblAreaCoating	Area_Residential_Interior	387364	388800
tblConstructionPhase	NumDays	18.00	153.00
tblConstructionPhase	NumDays	230.00	2.00
tblConstructionPhase	NumDays	230.00	152.00
tblConstructionPhase	NumDays	230.00	302.00
tblConstructionPhase	NumDays	20.00	41.00
tblConstructionPhase	NumDays	8.00	66.00
tblConstructionPhase	NumDays	18.00	22.00
tblEnergyUse	LightingElect	1.75	2.33
tblEnergyUse	T24E	3.92	0.41
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	163.20	20.00
tblFireplaces	NumberWood	9.60	0.00
tblGrading	AcresOfGrading	0.00	2.22
tblGrading	MaterialExported	0.00	74,800.00
tblLandUse	LandUseSquareFeet	50,460.00	50,463.00
tblLandUse	LandUseSquareFeet	192,000.00	191,291.00
tblLandUse	LotAcreage	1.26	0.00
tblLandUse	LotAcreage	12.00	2.22
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	678
tblSolidWaste	SolidWasteGenerationRate	287.62	83.39
tblTripsAndVMT	HaulingTripLength	20.00	35.40
tblTripsAndVMT	HaulingTripLength	20.00	35.40
tblTripsAndVMT	HaulingTripNumber	274.00	820.00
tblTripsAndVMT	HaulingTripNumber	9,350.00	10,686.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	38.00	400.00
tblTripsAndVMT	VendorTripNumber	38.00	100.00
tblTripsAndVMT	VendorTripNumber	38.00	50.00
tblTripsAndVMT	VendorTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	25.00	30.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00
tblTripsAndVMT	WorkerTripNumber	183.00	30.00
tblTripsAndVMT	WorkerTripNumber	183.00	100.00
tblTripsAndVMT	WorkerTripNumber	183.00	180.00
tblTripsAndVMT	WorkerTripNumber	37.00	200.00
tblTripsAndVMT	WorkerTripNumber	18.00	40.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	7.93
tblVehicleTrips	CC_TTP	64.10	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_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_TTP	16.90	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	39.00	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	9.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	52.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	2.20	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	0.00	400.00
tblVehicleTrips	SU_TR	2.44	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	0.00	400.00
tblVehicleTrips	WD_TR	2.74	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	0.00	400.00
tblWater	IndoorWaterUseRate	2,984,363.05	865,264.20
tblWater	OutdoorWaterUseRate	1,829,125.74	530,323.22
tblWoodstoves	NumberCatalytic	9.60	0.00
tblWoodstoves	NumberNoncatalytic	9.60	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																1,535.1356
2022																750.4302
2023																555.8268
Maximum																**1,535.1356**

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																1,535.1350
2022																750.4297
2023																555.8265

Maximum																**1,535.1350**

	ROG	NOx	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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																8.1485
Energy																602.2733
Mobile																478.8995
Stationary																1.3757
Waste																130.0453
Water																100.8267
Total																**1,321.5690**

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																8.1485
Energy																555.7402
Mobile																478.8995
Stationary																1.3757
Waste																30.6907
Water																80.6614
Total																**1,155.5159**

	ROG	NOx	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**12.56**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	2/26/2021	5	41	
2	Grading	Grading	3/1/2021	5/31/2021	5	66	
3	Mat Foundation	Building Construction	6/1/2021	6/2/2021	5	2	
4	Foundation	Building Construction	6/3/2021	12/31/2021	5	152	
5	Building Construction	Building Construction	1/1/2022	2/28/2023	5	302	
6	Architectural Coating	Architectural Coating	3/1/2023	9/30/2023	5	153	
7	Paving	Paving	10/1/2023	10/31/2023	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.22

Acres of Paving: 0

Residential Indoor: 388,800; Residential Outdoor: 129,600; Non-Residential Indoor: 21,945; Non-Residential Outdoor: 7,315; 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	2	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Other Construction Equipment	1	2.00	172	0.42
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Rubber Tired Loaders	2	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Bore/Drill Rigs	1	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	Other Construction Equipment	1	2.00	172	0.42
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Welders	1	8.00	46	0.45
Mat Foundation	Cement and Mortar Mixers	2	8.00	9	0.56
Mat Foundation	Cranes	0	7.00	231	0.29
Mat Foundation	Forklifts	0	8.00	89	0.20
Mat Foundation	Generator Sets	0	8.00	84	0.74
Mat Foundation	Pumps	4	8.00	84	0.74
Mat Foundation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Mat Foundation	Welders	2	8.00	46	0.45
Foundation	Concrete/Industrial Saws	1	8.00	81	0.73
Foundation	Cranes	1	8.00	231	0.29
Foundation	Forklifts	2	8.00	89	0.20
Foundation	Graders	0	8.00	187	0.41
Foundation	Plate Compactors	4	8.00	8	0.43
Foundation	Pumps	2	8.00	84	0.74
Foundation	Rough Terrain Forklifts	2	8.00	100	0.40

Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Foundation	Scrapers	0	8.00	367	0.48
Foundation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Foundation	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Aerial Lifts	4	8.00	63	0.31
Architectural Coating	Air Compressors	4	8.00	78	0.48
Architectural Coating	Forklifts	3	8.00	89	0.20
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Rollers	0	8.00	80	0.38
Paving	Skid Steer Loaders	2	8.00	65	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Trenchers	1	8.00	78	0.50

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	10	30.00	10.00	820.00	14.70	6.90	35.40	LD_Mix	HDT_Mix	HHDT
Grading	9	30.00	10.00	10,686.00	14.70	6.90	35.40	LD_Mix	HDT_Mix	HHDT
Mat Foundation	8	30.00	400.00	0.00	14.70	6.90	20.00	LD_Mix	HHDT	HHDT
Foundation	14	100.00	100.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	11	180.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	11	200.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	40.00	20.00	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																0.0000
Off-Road																96.8693

Total																**96.8693**

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																52.3064
Vendor																5.0609
Worker																6.0863
Total																**63.4537**

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
Off-Road																96.8692
Total																**96.8692**

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																52.3064
Vendor																5.0609
Worker																6.0863
Total																**63.4537**

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																0.0000
Off-Road																125.2456
Total																**125.2456**

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																681.6421
Vendor																8.1469
Worker																9.7975
Total																**699.5864**

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
Off-Road																125.2455
Total																**125.2455**

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																681.6421
Vendor																8.1469
Worker																9.7975
Total																**699.5864**

3.4 Mat 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					
Off-Road																2.7335
Total																**2.7335**

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
Vendor																13.1184
Worker																0.2969
Total																**13.4153**

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																2.7335
Total																**2.7335**

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
Vendor																13.1184
Worker																0.2969
Total																**13.4153**

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					
Off-Road																270.9942
Total																**270.9942**

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
Vendor																187.6247
Worker																75.2130
Total																**262.8377**

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																270.9938
Total																**270.9938**

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
Vendor																187.6247
Worker																75.2130

Total																**262.8377**

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																367.9516
Total																**367.9516**

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
Vendor																159.0526
Worker																223.4259
Total																**382.4786**

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																367.9511
Total																**367.9511**

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

Vendor																159.0526
Worker																223.4259
Total																**382.4786**

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																59.4386
Total																**59.4386**

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
Vendor																24.8855
Worker																34.7696
Total																**59.6551**

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																59.4385
Total																**59.4385**

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
Vendor																24.8855
Worker																34.7696
Total																**59.6551**

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																0.0000
Off-Road																180.9057
Total																**180.9057**

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
Vendor																90.6544
Worker																140.7342
Total																**231.3885**

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																0.0000
Off-Road																180.9054
Total																**180.9054**

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
Vendor																90.6544
Worker																140.7342
Total																**231.3885**

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																15.1776
Paving																0.0000
Total																**15.1776**

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
Vendor																5.2141
Worker																4.0473
Total																**9.2614**

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																15.1776
Paving																0.0000
Total																**15.1776**

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
Vendor																5.2141
Worker																4.0473
Total																**9.2614**

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																478.8995
Unmitigated																478.8995

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
User Defined Commercial	400.00	400.00	400.00	1,154,244	1,154,244
Total	400.00	400.00	400.00	1,154,244	1,154,244

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
Congregate Care (Assisted	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
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
User Defined Commercial	0.00	7.93	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Congregate Care (Assisted Living)	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Enclosed Parking with Elevator	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

Health Club	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
User Defined Commercial	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

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																419.9306
Electricity Unmitigated																458.2457
NaturalGas Mitigated																135.8096
NaturalGas Unmitigated																144.0277

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					
Congregate Care (Assisted Living)	1.76965e+006																94.9966
Enclosed Parking with Elevator	0																0.0000
Health Club	913380																49.0311
User Defined Commercial	0																0.0000
Total																	**144.0277**

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					
Congregate Care (Assisted Living)	1.68544e+006																90.4761
Enclosed Parking with Elevator	0																0.0000

Health Club	844498																45.3335
User Defined Commercial	0																0.0000
Total																	**135.8096**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	760335				234.6969
Enclosed Parking with Elevator	164080				50.6475
Health Club	560139				172.9013
User Defined Commercial	0				0.0000
Total					**458.2457**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	721587				222.7363
Enclosed Parking with Elevator	129164				39.8698
Health Club	509676				157.3246
User Defined Commercial	0				0.0000
Total					**419.9306**

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																8.1485
Unmitigated																8.1485

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																0.0000
Consumer Products																0.0000
Hearth																4.8313
Landscaping																3.3172
Total																**8.1484**

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																0.0000
Consumer Products																0.0000
Hearth																4.8313
Landscaping																3.3172
Total																**8.1484**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				80.6614
Unmitigated				100.8267

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	12.5096 / 7.88647				94.3526
Enclosed Parking with Elevator	0 / 0				0.0000
Health Club	0.865264 / 0.530323				6.4742
User Defined Commercial	0 / 0				0.0000
Total					**100.8267**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	10.0077 / 6.30918				75.4821
Enclosed Parking with Elevator	0 / 0				0.0000
Health Club	0.692211 / 0.424259				5.1793
User Defined Commercial	0 / 0				0.0000
Total					**80.6614**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				30.6907
Unmitigated				130.0453

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	175.2				88.1084
Enclosed Parking with Elevator	0				0.0000
Health Club	83.39				41.9370
User Defined Commercial	0				0.0000
Total					**130.0453**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	41.3472				20.7936
Enclosed Parking with Elevator	0				0.0000
Health Club	19.68				9.8971
User Defined Commercial	0				0.0000
Total					**30.6907**

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	1	12	300	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)																1.3757
Total																**1.3757**

11.0 Vegetation