Initial Study/Mitigated Negative Declaration

Alta Cuvee Mixed Use Project

APPENDIX A
AIR QUALITY IMPACTS ASSESSMENT

Technical Memorandum

TO: AECOM
c/o Kathalyn Tung, AICP

FROM: Terry A. Hayes Associates Inc.

DATE: August 11, 2021

RE: Air Quality Impacts Assessment for the Alta Cuvee Mixed Use Project

SUMMARY

The purpose of this Technical Memorandum is to evaluate potential environmental impacts related to air quality in accordance with California Environmental Quality Act (CEQA) requirements for the Alta Cuvee Mixed Use Project (proposed Project). The proposed Project would not result in a significant air quality impact in the context of the Appendix G Environmental Checklist criteria of the CEQA Guidelines during construction or operational activities.

PROJECT DESCRIPTION

The proposed Project involves the construction of two four-story, 260-unit apartment community located at 12901-12939 Foothill Boulevard in the City of Rancho Cucamonga. The Project site is bound by Foothill Boulevard, a vacant lot, and condominiums to the north; Etiwanda Avenue and a shopping center to the west; and residential single-family homes to the south and east. The 5.56-acre vacant and undeveloped site is comprised of two parcels (Assessor's Parcel Numbers (APN) 0229-311-14 and 0229-311-15). **Figures 1** and **2** show the Regional Location and the Project Location, respectively. **Figure 3** illustrates the Site Plan.

The proposed Project would include two four-story buildings with 259 apartments units and one live-work unit. The center of the west building would have a courtyard with a pool and spa, and the center of the east building would have a courtyard. The proposed Project would also include commercial space totaling 3,339 square feet. Vehicular access to the Project site would be provided off Etiwanda Avenue and along eastbound Foothill Boulevard. Both locations would provide access to the surface parking area and to the south-facing entrance/exit of the subterranean garage. The proposed Project would provide 465 total parking spaces: 200 surface parking spaces and 265 garage parking spaces. The proposed Project would also construct an 11-foot wide and 62-foot long bus bay on eastbound Foothill Boulevard to accommodate the Omnitrans Transit Agency's bus transit Route 66 and other potential future bus service.

Figure 1: Regional Location

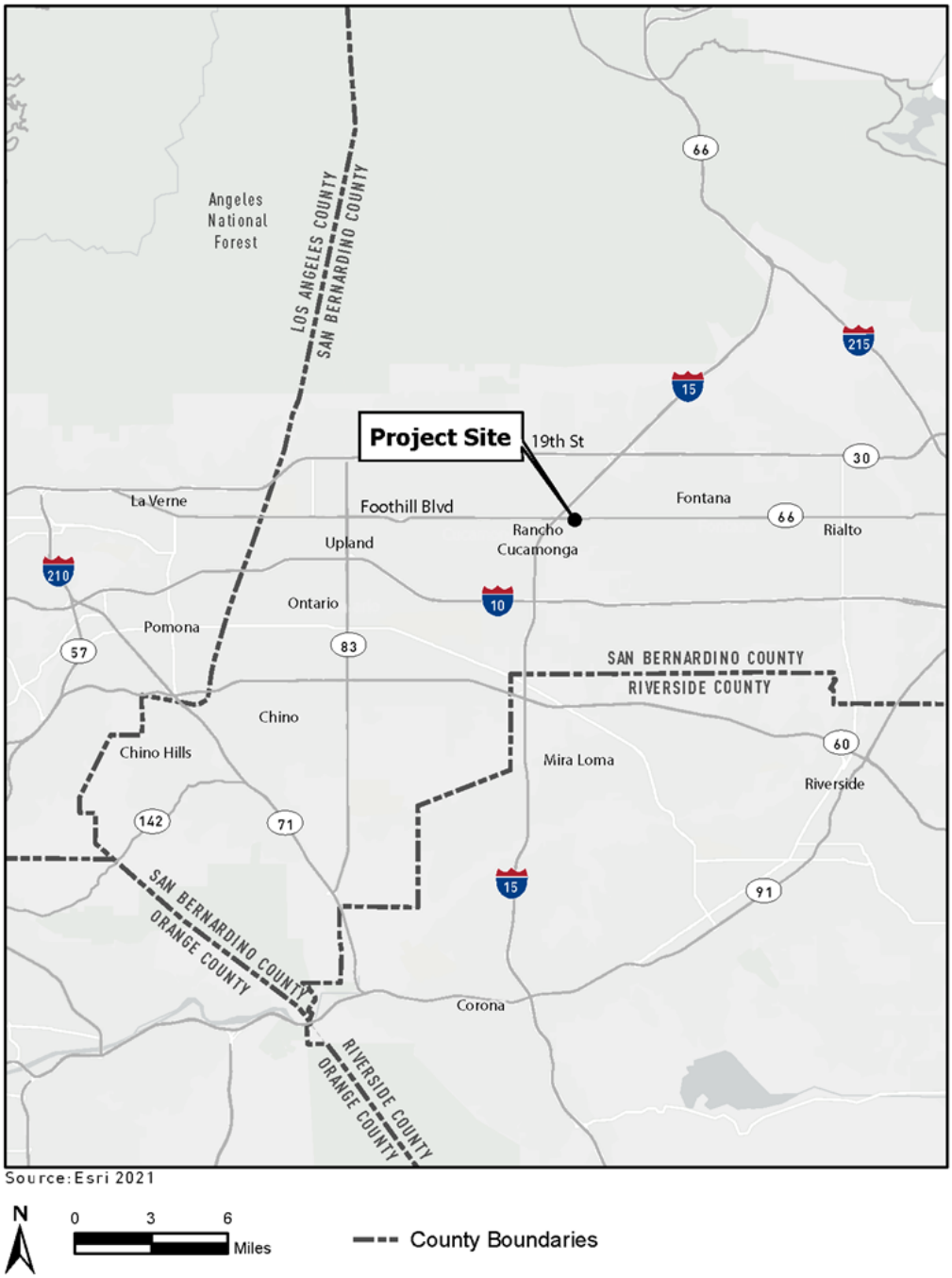
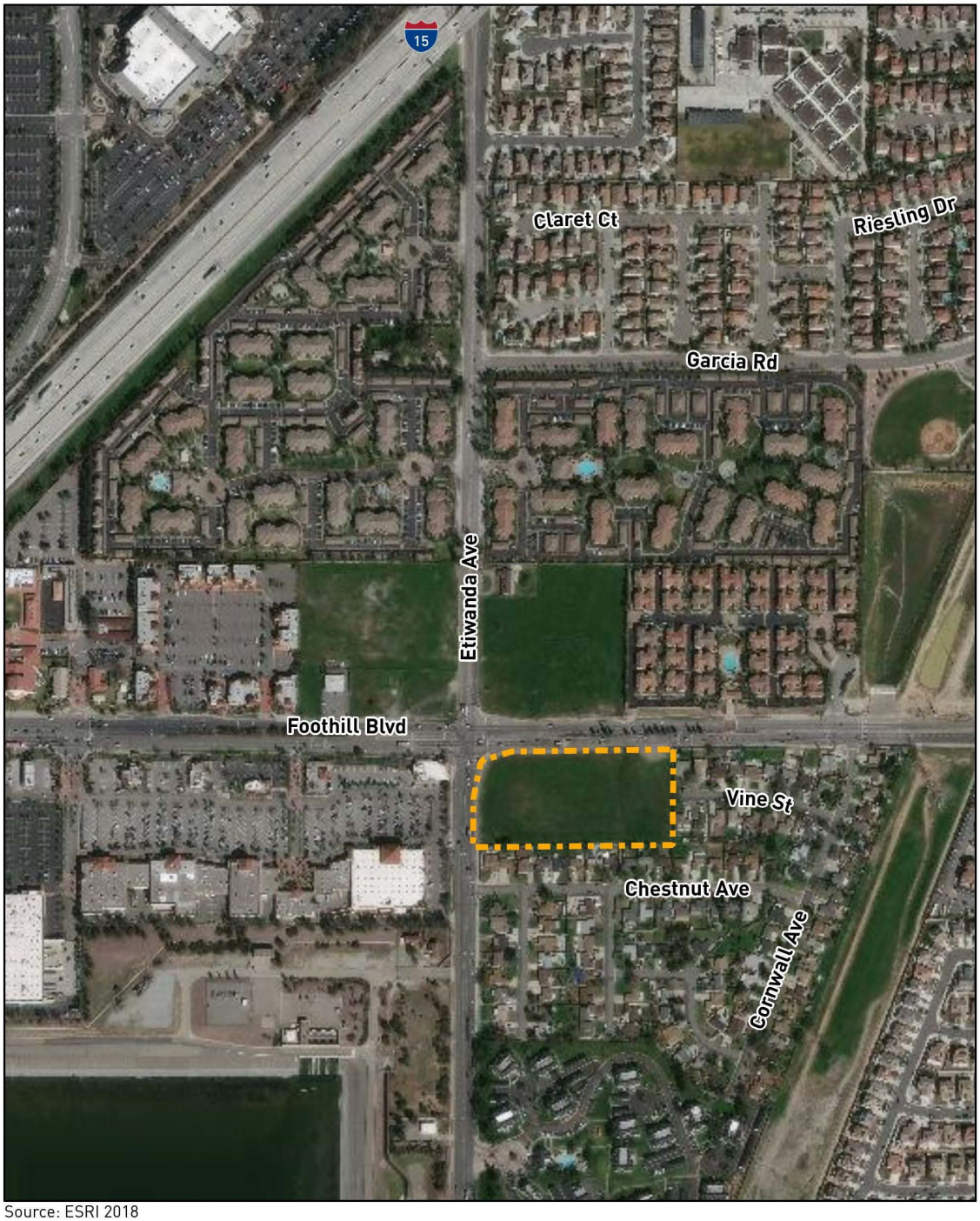


Figure 2: Project Location



Source: ESRI 2018

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0 400 800

Feet

Project Site

Figure 3: Site Plan

Construction of the proposed Project is anticipated to begin in March 2022 and take approximately 24 months to complete, concluding in early 2024. Construction activities would occur Monday through Saturday from 7:00 a.m. to 7:00 p.m. The construction period would include excavation and grading activities, installation of building foundations and utilities, and installation of landscaping and hardscape elements. Approximately 52,010 cubic yards of material would be excavated as part of the proposed Project of which approximately 31,770 cubic yards would be hauled away from the Project site. Approximately 20,240 cubic yards of material would remain on the Project site to be used as backfill.

AIR QUALITY TOPICAL BACKGROUND

Air quality is a general characterization of how levels of air pollution and other atmospheric conditions can affect public health and the environment. Through decades of rigorous scientific research, the United States Environmental Protection Agency (USEPA) identified seven specific air pollutants that are environmentally prevalent and produced by human activities to be of concern with respect to health and welfare of the public. These specific pollutants, known as criteria air pollutants, are pollutants for which the federal and State governments have established ambient air quality standards—or criteria—for outdoor concentrations to protect public health. These pollutants are common byproducts of human activities and have been documented through scientific research to cause various adverse health effect outcomes. The federal ambient concentration criteria are known as the National Ambient Air Quality Standards (NAAQS), and the California ambient concentration criteria are referred to as the California Ambient Air Quality Standards (CAAQS). The criteria air pollutants regulated at the federal jurisdiction include ground-level ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), respirable particulate matter ten microns or less in diameter (PM_{10}), fine particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), and lead (Pb). In addition to the federal criteria pollutants, the State regulates visibility-reducing particles, sulfates ($-SO_4^{2-}$), hydrogen sulfide (H_2S), and vinyl chloride (VC).

In addition to the criteria pollutants, other classes of air pollutants have been identified, studied, and determined to cause adverse health effects. Toxic air contaminants (TACs) are generally defined as those contaminants that are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. Some TACs are also defined as an air pollutant that may increase a person's risk of developing cancer and/or other serious health effects; however, the emission of a toxic chemical does not automatically create a health hazard. Carcinogenic risks resulting from TAC exposure, for example, are typically evaluated over an exposure period of decade. Air toxics include, but are not limited to, diesel PM, metals, gases absorbed by particles, and certain vapors from fuels and other sources. Sources of substantial TAC emissions typically include large stationary industrial facilities such as petroleum refineries and locations of concentrated mobile sources such as distribution centers and heavily trafficked highways that are used by a large number of diesel-fueled vehicles.

REGULATORY FRAMEWORK

Federal

The Clean Air Act (CAA) governs air quality at the national level and the USEPA is responsible for administering the provisions in the CAA. The USEPA is authorized to establish the NAAQS that set protective limits on concentrations of air pollutants in ambient air. Enforcement of the NAAQS is required under the 1977 CAA and subsequent amendments. The CAA grants the USEPA authority to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether ambient concentrations have been consistently below the corresponding NAAQS on a regional scale relying upon air monitoring data from the most recent three-year period. The USEPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan

(SIP) that demonstrates the means to attain the federal standards through emissions control strategies. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution at the state and regional scale, using a combination of performance standards and market-based programs within the timeframe identified in the SIP. **Table 1** presents the NAAQS for each criteria pollutant along with the averaging periods. San Bernardino County exists within two air basins (i.e., the South Coast Air Basin (SCAB) and Mojave Desert Air Basin), although the Project site is located within the portion of the County within the SCAB. The SCAB proposed Projectis currently designated nonattainment of the NAAQS for O_3 and $PM_{2.5}$.

TABLE 1: AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS DESIGNATIONS

Pollutant	Averaging Period	California		Federal	
		Standards (CAAQS)	Attainment Status	Standards (NAAQS)	Attainment Status
Ozone (O_3)	1-Hour Average	0.09 ppm (180 µg/m^3)	Nonattainment	--	--
	8-Hour Average	0.070 ppm (137 µg/m^3)	Nonattainment	0.070 ppm (137 µg/m^3)	Nonattainment (Extreme)
Carbon Monoxide (CO)	1-Hour Average	20 ppm (23 mg/m^3)	Attainment	35.0 ppm (40 mg/m^3)	Attainment (Maintenance)
	8-Hour Average	9.0 ppm (10 mg/m^3)	Attainment	9.0 ppm (10 mg/m^3)	Attainment (Maintenance)
Nitrogen Dioxide (NO_2)	1-Hour Average	0.18 ppm (338 µg/m^3)	Attainment	0.10 ppm (188 µg/m^3)	Unclassifiable/ Attainment
	Annual Arithmetic Mean	0.03 ppm (57 µg/m^3)	Attainment	0.053 ppm (100 µg/m^3)	Attainment (Maintenance)
Sulfur Dioxide (SO_2)	1-Hour Average	0.25 ppm (655 µg/m^3)	Attainment	0.075 ppm (196 µg/m^3)	Unclassifiable/ Attainment
	24-Hour Average	0.04 ppm (105 µg/m^3)	Attainment	0.14 ppm (365 µg/m^3)	Unclassifiable/ Attainment
	Annual Arithmetic Mean	--	--	0.030 ppm (80 µg/m^3)	Unclassifiable/ Attainment
Respirable Particulate Matter (PM_{10})	24-Hour Average	50 µg/m^3	Nonattainment	150 µg/m^3	Attainment (Maintenance)
	Annual Arithmetic Mean	20 µg/m^3	Nonattainment	--	--
Fine Particulate Matter ($PM_{2.5}$)	24-Hour Average	--	--	35 µg/m^3	Nonattainment (Serious)
	Annual Arithmetic Mean	12 µg/m^3	Nonattainment	12.0 µg/m^3	Nonattainment (Serious)
	30-day Average	1.5 µg/m^3	Attainment	--	--

TABLE 1: AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS DESIGNATIONS

Pollutant	Averaging Period	California		Federal	
		Standards (CAAQS)	Attainment Status	Standards (NAAQS)	Attainment Status
Lead (Pb)	Calendar Quarter	--	--	1.5 µg/m^3	Attainment (Project Area)
	Rolling 3-Month Average	--	--	0.15 µg/m^3	Attainment (Project Area)
Sulfates ($-SO_4^{2-}$)	24-Hour Average	25 µg/m^3	Attainment	**No Federal Standards**	
Hydrogen Sulfide (H_2S)	1-Hour Average	0.03 ppm (42 µg/m^3)	Attainment		
Vinyl Chloride	24-Hour Average	0.01 ppm (26 µg/m^3)	Attainment		

ppm = parts per million; µg/m^3 = micrograms per cubic meter.

NOTE: San Bernardino County exists within two air basins (i.e., the SCAB and Mojave Desert Air Basin), although the Project site is located within the portion of the County within the SCAB.

SOURCE: CARB, *Air Quality Standards and Area Designations*, December 3, 2019.

State

In addition to being subject to the requirements of the CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). In California, the CCAA is administered by California Air Resources Board (CARB) at the State level and by air quality management districts and air pollution control districts at the regional and local levels. CARB, which became part of the California Environmental Protection Agency (Cal/EPA) in 1991, is responsible for meeting the State requirements of the CAA, administering the CCAA, and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA was amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the CAAQS. The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a State standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as nonattainment. The CAAQS are also summarized in **Table 1**, which presents the attainment status designations for the San Bernardino County portion of the SCAB. The SCAB does not meet the CAAQS for O_3, PM_{10}, and $PM_{2.5}$.

CARB regulates mobile air pollution sources, such as motor vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications, which became effective in March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels.

The California Toxic Air Contaminant Identification and Control Act created a program to reduce exposure to air toxics. The CARB is required to prioritize the identification and control of air toxics emissions. In selecting substances for review, the CARB must consider criteria relating to the risk of harm to public health, such as amount or potential amount of emissions, manner of and exposure to usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community.

Regional

The South Coast Air Quality Management District (SCAQMD) was created to coordinate air quality planning efforts in non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, the Riverside County portion of the Salton Sea and Mojave Desert Air Basins, and Orange County. The SCAQMD is tasked with preparing regional programs and policies designed to improve air quality within the SCAB, which are assessed and published in the form of the Air Quality Management Plan (AQMP). The AQMP is updated every four years to evaluate the effectiveness of the adopted programs and policies and to forecast attainment dates for nonattainment pollutants to support the SIP based on measured regional air quality and anticipated implementation of new technologies and emissions reductions. The most recent publication is the 2016 AQMP, which is intended to serve as a regional blueprint for achieving the federal air quality standards and healthful air. The AQMP includes strategies to ensure that attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the air quality standards are not met by the established date.

The AQMP also includes an element that is related to transportation and sustainable communities planning. Pursuant to California Health and Safety Code Section 40450, the Southern California Association of Governments (SCAG) has the responsibility of preparing and approving the portions of the AQMP relating to regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. The analysis incorporated into the 2016 AQMP is based on the forecasts contained within the SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). SCAG has approved the 2020-2045 RTP/SCS, although these growth projections have not been incorporated by SCAQMD into the current AQMP. The SCAQMD has also established various rules to manage and improve air quality in the SCAB. The City would be required to comply with all applicable SCAQMD Rules and Regulations pertaining to construction activities, including, but not limited to:

Regulation IV – Prohibitions: This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, start-up/shutdown exemptions and breakdown events, including the following rules directly applicable to the proposed Project:

- Rule 401 (Visible Emissions) states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No 1. On the Ringelmann Chart or of such opacity as to obscure an observer's view.
- Rule 402 (Nuisance) states that a person should not emit air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- Rule 403 (Fugitive Dust) controls fugitive dust through various requirements including, but not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project site, limiting vehicle speeds on unpaved roads to 15 miles per hour (mph), and maintaining effective cover over exposed areas. Rule 403 also prohibits the release of fugitive dust emissions from any active operation, open storage piles, or disturbed surface area beyond the property line of the emission source and prohibits particulate matter deposits on public roadways.

EXISTING CONDITIONS

Local Climate

The SCAB is subject to high levels of air pollution due to the immense magnitude of emissions sources and the combination of topography, low mean atmospheric mixing height, and abundant sunshine. Although the SCAB has a semiarid climate, air near the surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. The mountains and hills surrounding the SCAB contribute to the variation of rainfall, temperature, and winds throughout the region. During the spring and early summer, pollution produced during any one day is typically blown out of the SCAB through mountain passes or lifted by warm, vertical currents adjacent to mountain slopes. The vertical dispersion of air pollutants in the SCAB is limited by temperature inversions in the atmosphere close to the Earth's surface. The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants become more concentrated in urbanized areas with pollution sources of greater magnitude.

Monitored Pollutant Concentrations

Air quality within the SCAB region is characterized by concentrations of air pollutants measured at 37 monitoring stations located throughout the SCAQMD jurisdiction.[1] The SCAB is divided geographically into 38 source receptors areas (SRAs), each of which contains an air quality monitoring station with the exception of SRA 7. The SRA boundaries were drawn based on regional modeling considering proximity to the nearest air monitoring station, the local emission inventories, and surrounding topography. The proposed Project site is located in SRA 34 (Central San Bernardino Valley). The monitoring station that collects ambient air quality data in SRA 34 is the Fontana monitoring station located at Fire Station 73, approximately 1.75 miles east-southeast of the site. The proximity of the Fontana monitoring station and the flat topography between the monitor and the Project site indicate that the concentrations of air pollutants measured at the station are most representative of ambient air quality conditions at the Project site. The Fontana monitor actively measures and records concentrations of O_3, NO_2, SO_2, CO, PM_{10}, and $PM_{2.5}$.

Table 2 presents concentrations of criteria pollutants measured at the Fontana station between 2017–2019. Air quality data for 2020 has not yet been compiled and published. Consistent with the federal and State nonattainment designations, concentrations of O_3, PM_{10}, and $PM_{2.5}$ exceeded applicable federal and State air quality standards on numerous occasions during the three-year period. The nonattainment statuses for these pollutants represent ongoing cumulatively considerable air quality conditions. Emissions of NO_X and fine particles contribute to the formation of O_3 in the atmosphere and are therefore given special consideration for proposed Projects under CEQA. Concentrations of NO_2, SO_2, and CO remained substantially below applicable standards throughout the monitoring period, demonstrating the continued attainment of the air quality standards. Ambient concentrations and emissions magnitudes of SO_X and CO have been reduced considerably through effective regulation and control strategies over the past several decades.

[1]SCAQMD, *Annual Air Quality Monitoring Network Plan*, July 1, 2018.

TABLE 2: AMBIENT AIR QUALITY DATA

Pollutant	Air Quality Standards Comparison	Maximum Concentrations and Frequencies of Exceeded Standards		
		2017	2018	2019
Ozone (O_3)	Maximum 1-hr Concentration (ppm)	0.137	0.141	0.124
	# Days > 0.09 ppm (CAAQS)	33	38	41
	Maximum 8-hr Concentration (ppm)	0.118	0.111	0.109
	# Days > 0.070 ppm (NAAQS/CAAQS)	49	69	67
Nitrogen Dioxide (NO_2)	Maximum 1-hr Concentration (ppm)	0.069	0.063	0.076
	# Days > 0.180 ppm (CAAQS)	0	0	0
	# Days > 0.100 ppm (NAAQS)	0	0	0
Sulfur Dioxide (SO_2)	Maximum 1-hr Concentration (ppm)	0.004	0.003	0.002
	# Days > 0.250 ppm (CAAQS)	0	0	0
	# Days > 0.075 ppm (NAAQS)	0	0	0
Carbon Monoxide (CO)	Maximum 1-hr Concentration (ppm)	1.6	1.9	2.7
	# Days > 20 ppm (CAAQS)	0	0	0
	# Days > 35 ppm (NAAQS)	0	0	0
	Maximum 8-hr Concentration (ppm)	1.3	1.1	1.0
	# Days > 9.0 ppm (CAAQS)	0	0	0
	# Days > 9 ppm (NAAQS)	0	0	0
Respirable Particulate Matter (PM_{10})	Maximum 24-hr Concentration (µg/m^3)	86.0	64.0	88.0
	# Days > 50 µg/m^3 (CAAQS)	35	9	12
	# Days > 150 µg/m^3 (NAAQS)	0	0	0
	Annual Concentration (µg/m^3)	30.9	34.1	34.8
	Exceed 20 µg/m^3 (CAAQS)?	Yes	Yes	Yes
Fine Particulate Matter ($PM_{2.5}$)	Maximum 24-hr Concentration (µg/m^3)	38.2	29.2	46.5
	# Days > 35 µg/m^3 (NAAQS)	1	0	2
	Annual Concentration (µg/m^3)	11.4	11.1	10.8
	Exceed 12.0 µg/m^3 (NAAQS)?	No	No	No
	Exceed 12.0 µg/m^3 (CAAQS)?	No	No	No

SOURCE: SCAQMD, *Historical Data By Year (2017, 2018, 2019 Air Quality Data Tables)*, accessed October 5, 2020.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The CARB has identified the following groups who are most likely to experience adverse health effects due to exposure to air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, land uses that constitute sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The SCAQMD recommends that air quality assessments consider the potential localized impacts to sensitive receptors at distances up to 500 meters (1,640 feet) from proposed Project, depending on the proximity of sensitive land uses. The proposed Project is located in a developed urban setting surrounded by numerous land uses that qualify as sensitive receptors. Concentrations of pollutants are typically highest near emission sources and dissipate with distance,

therefore the closest sensitive receptors in each direction are considered. Sensitive receptors within 500 feet of the Project site include:

- Residences located adjacent to the south and east;
- Residences located approximately 180 feet to the south;
- Residences located approximately 190 feet to the north;
- Residences located approximately 200 feet to the east;
- Residences located approximately 330 feet to the southwest;
- Residences located approximately 420 feet to the northeast;
- Residences located approximately 470 feet to the north;
- Residences located approximately 500 feet to the south and east; and
- Single-family residence located approximately 540 feet to the north.

THRESHOLDS OF SIGNIFICANCE

The assessment has considered the potential to result in significant environmental impacts related to air quality in the context of the Appendix G Environmental Checklist criteria of the CEQA Statute and Guidelines. Implementation of the proposed Project may result in a significant impact related to air quality if it would:

a) Conflict with or obstruct implementation of the applicable air quality plan;
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard;
c) Expose sensitive receptors to substantial pollutant concentrations; and/or
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD published a CEQA Air Quality Handbook to guide air quality assessments for CEQA projects within its jurisdiction. SCAQMD methodologies recommend that air pollutant emissions be analyzed in both regional and local contexts. Regional emissions refer to all emissions that would be associated with construction and operation of a project, while localized emissions refer to only those emissions that would be produced by sources located on the Project site. To assist in the assessment of air pollutant emissions, the SCAQMD established maximum daily threshold values for air pollutant emissions from CEQA projects within the SCAB. The mass daily thresholds were derived using regional emissions modeling techniques to prevent the occurrence of air quality violations that would obstruct implementation of the AQMP and hinder efforts to improve regional air quality.

The SCAQMD has established localized significance thresholds (LSTs) for assessing local impacts. The LST values were derived from regionally-specific modeling of pollutant emissions and designed to prevent localized pollutant concentrations from exceeding applicable ambient air quality standards near construction sites based on existing ambient air quality. SCAQMD guidance states that the site-specific LSTs are chosen based on the maximum acres disturbed per day and the distance from the Project site to the nearest sensitive land use beginning at 25 meters. Based on the equipment mix anticipated for the proposed Project, the appropriate LSTs specific to SCAQMD SRA 34 are for a two-acre construction site with sensitive receptors within 25 meters.[2,3]

[2]SCAQMD, *Final Localized Significance Threshold Methodology Appendix C Mass Rate Lookup Tables*, October 21, 2009.
[3]SCAQMD, *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*, 2008.

Table 3 presents the SCAQMD mass daily air quality significance thresholds for regional and localized emissions of regulated pollutants resulting from construction activities, as well as regional mass daily thresholds for operational emissions.[4] The mass daily emissions thresholds were established as screening criteria for emissions from proposed CEQA projects. The SCAQMD generally advises that a project generating maximum daily emissions of the pollutants shown in **Table 3** of lesser magnitude than the corresponding threshold values would not cause a significant air quality impact at the regional or local level.

TABLE 3: SCAQMD AIR QUALITY SIGNIFICANCE THRESHOLDS – MASS DAILY EMISSIONS

Pollutant	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
CONSTRUCTION						
Regional Threshold (lbs/day)	75	100	550	150	150	55
Localized Threshold (lbs/day)	--	170	972	--	7	4
OPERATION						
Regional Threshold (lbs/day)	55	55	550	150	150	55

Note: Construction LST values selected for two-acre daily disturbance based on equipment inventory and 25-meter receptor distance in SRA 34.
SOURCE: SCAQMD, 2019.

The SCAQMD recognizes that emissions for individual projects that remain below the thresholds shown in **Table 3** would be considered less than significant at the project level and would not be cumulatively considerable. If maximum daily emissions would exceed applicable threshold values during construction or operations, opportunities to mitigate and reduce those emissions are required to be explored and implemented as feasible.

In addition to the mass daily thresholds for criteria pollutants and O_3 precursors, SCAQMD has established CEQA significance thresholds related to TACs and odorous emissions. As a diverse class of pollutants, TACs include many different pollutants with varying degrees of toxicity and that affect human health in different ways. Within the field of health risk assessment (HRA), carcinogenic risk and non-carcinogenic hazards can be determined based on multipollutant exposures. According to SCAQMD methodology, health effects from carcinogenic air toxics are described in terms of excess incremental individual cancer risk. "Individual Cancer Risk" is the likelihood that a person continuously exposed to TAC concentrations over a 70-year lifetime will contract cancer based on the use of standard risk assessment methodology. SCAQMD established a project-specific TAC carcinogenic exposure threshold of an incremental excess cancer risk of 10 cases per million. For non-carcinogenic TACs, the acute and chronic exposures should not exceed a combined calculated Hazard Index value of 1.0, based on pollutant-specific reference-exposure levels (RELs).

Construction and operation of certain land use development projects may create public nuisances related to visible dust plumes and odors. The SCAQMD air quality significance thresholds address odorous emissions by invoking compliance with SCAQMD Rule 402. A project may have a significant air quality impact if construction or operation of that project create a public nuisance condition in violation of SCAQMD Rule 402. Visible dust plumes are controlled through the enforcement of SCAQMD Rule 401 and SCAQMD Rule 403.

[4]SCAQMD, *SCAQMD Air Quality Significance Thresholds – Mass Daily Thresholds*, April 2019.

METHODOLOGY

Emissions of air pollutants that would be generated by short-term construction activities and future operations were calculated using the California Emissions Estimator Model (CalEEMod, Version 2016.3.2). CalEEMod is the preferred regulatory tool for estimating air pollutant emissions associated with land use developments in California. The land use inputs to CalEEMod for the proposed Project included 260 mid-rise apartments comprising approximately 228,000 square feet of rentable floor area, commercial space totaling 3,339 square feet, ancillary leasing office and lobby space, two interior open space courtyards including a pool, a parking lot comprising 200 surface parking spaces, and a subterranean parking garage providing 265 additional spaces. Air pollutant emissions that would be generated by construction and operation of the proposed Project were estimated using the following approach.

Construction

Construction of the proposed Project would last approximately 24 months, beginning in March 2022 and completing in spring 2024. General construction phases include demolition, grading, trenching/utilities, building construction, paving and architectural coatings. The proposed Project comprises two four-story buildings that would be constructed simultaneously, such that different activities for the two buildings will overlap at various stages throughout construction. A summary of the proposed Project construction schedule is provided in **Table 4**. It is anticipated that construction activities would occur Monday through Saturday. As the construction emissions analysis characterizes maximum daily emissions during construction, **Table 4** also presents the overlapping activities that were also addressed in the air quality impacts assessment.

TABLE 4: PROPOSED PROJECT CONSTRUCTION SCHEDULE

Phase Number	Phase Name	Approx. Start	Approx. End	Approx. Workdays (Six Days per Week)
1	Demolition & Site Clearing	March 2022	March 2022	12
2	East Building – Grading	April 2022	April 2022	24
3	East Building – Trenching/Utilities	May 2022	May 2022	24
4	East Building – Construction	May 2022	February 2024	540
5	West Building – Grading	November 2022	November 2022	18
6	West Building – Trenching Utilities	November 2022	December 2022	12
7	West Building – Construction	December 2022	March 2024	390
8	East Building – Paving	May 2023	September 2023	108
9	East Building – Architectural Coating	May 2023	July 2023	72
10	West Building – Paving	August 2023	November 2023	96
11	West Building – Architectural Coating	September 2023	December 2023	72
12	Bus Bay on Eastbound Foothill Blvd	January 2024	March 2024	48
OVERLAPPING ACTIVITIES ANALYSIS				
4/5	EB – Con + WB – Grading	November 2022	November 2022	-
4/6	EB – Con + WB – Trenching/Utilities	November 2022	December2022	-
4/7/8/9	EB – Con/Paving/AC + WB – Con	May 2023	July 2023	-
4/7/8/10	EB – Con/Paving + WB – Con/Paving	August 2023	September 2023	-
4/7/10/11	EB – Con + WB – Con/Paving/AC	September 2023	November 2023	-

SOURCE: TAHA, 2021.

For construction activities, CalEEMod allows the user to input project-specific information describing the size of the Project site, land uses to be developed, construction schedule, the equipment and vehicle inventory, and quantities of materials that may be imported or exported throughout the course of construction. Sources of air pollutant emissions associated with proposed Project construction include heavy-duty diesel equipment exhaust, fugitive dust generation from material movement, off-gassing of volatile compounds from architectural finishing, haul truck trips, vendor material delivery trips, and construction worker trips. **Table 5** presents a summary of activities and sources of air pollutants involved in construction of the proposed Project. Detailed information related to the construction schedule and equipment and vehicle inventories can be found in the **Appendix**.

TABLE 5: CALEEMOD CONSTRUCTION EMISSIONS SOURCES

Phase(s)	Activity	Source(s)	Pollutants
All Phases	Off-Road Equipment Use	Engine Exhaust	VOC, NO_X, CO, SO_X, PM_{10}, $PM_{2.5}$
All Phases	On-Road Vehicle Trips	Engine Exhaust	VOC, NO_X, CO, SO_X, PM_{10}, $PM_{2.5}$
All Phases	On-Road Vehicle Trips	Engine Evaporative Losses	VOC
All Phases	On-Road Vehicle Trips	Brake & Tire Wear	PM_{10}, $PM_{2.5}$
All Phases	On-Road Vehicle Trips	Re-Entrained Road Dust	PM_{10}, $PM_{2.5}$
Demolition, Excavation	Truck Loading	Fugitive Dust	PM_{10}, $PM_{2.5}$
Site Clearing, Grading	Ground Disturbance	Fugitive Dust (Dozers/Graders)	PM_{10}, $PM_{2.5}$
Building Construction	Architectural Coating	Off-Gassing (Evaporation)	VOC
Building Construction	Paving	Off-Gassing (Evaporation)	VOC

SOURCE: CAPCOA, 2017.

Construction of the proposed Project will involve a considerable volume of soil displacement to accommodate the subterranean parking structure and foundations. Preliminary engineering estimates that approximately 52,011 cubic yards of soil would be excavated, of which approximately 20,241 cubic yards would be rebalanced and used as fill onsite. Approximately 31,770 cubic yards of excavated material would be hauled off-site and disposed of during a total of approximately six weeks (36 workdays) between the east and west portions of the site. The construction planning logistics analysis determined that the maximum daily hauling activity would not exceed 60 truckloads per day. All construction staging and truck loading activities would occur on the Project site.

Operations

Implementation of the proposed Project would introduce a new multi-family residential development of 260 dwelling units and 3,339 square feet of commercial space to the City of Rancho Cucamonga, with proposed Project inhabitance anticipated in spring 2024. CalEEMod was used to produce estimates of daily air pollutant emissions that would be generated by operational sources including on-site fugitive and area sources, indirect sources of emissions involved in the provision of energy to the project, and on-road mobile source emissions from project-related vehicle trips. On-site area source emissions would include VOC emissions from chemically formulated consumer products use and landscaping activities, while energy-related emissions would be associated with natural gas combustion. CalEEMod uses emission factors derived from extensive land use and utility surveys to estimate emissions associated with building facility operations. It is anticipated that the proposed Project would accommodate approximately 788 future residents generating approximately 1,420 daily vehicle trips and the commercial uses would generate 83 daily vehicle trips. The proposed Project would generate a total of 1,503 daily vehicle trips. Transportation

modeling performed for the proposed Project determined an average trip length of approximately 10.9 miles. Therefore, the daily vehicle miles traveled (VMT) associated with proposed Project operations would be approximately 16,382.7 miles. The technical Appendix provides detailed operational emissions.

IMPACT ASSESSMENT

The air quality impacts assessment individually addresses each of the Appendix G Environmental Checklist criteria for both short-term construction and future operation of the proposed Project.

a) Would the proposed Project conflict with or obstruct implementation of the applicable air quality plan?

The currently applicable air quality plan is the 2016 AQMP, which was developed in conjunction with regional growth projections incorporated into the SCAG 2016–2040 RTP/SCS. The ensuing discussions address potential air quality impacts in the context of the attainment timeline set forth in the 2016 AQMP and the underlying growth projections derived from the SCAG 2016–2040 RTP/SCS. According to SCAQMD, there are two key indicators of evaluating consistency with the AQMP and whether a project may conflict with or obstruct its implementation:

1) Whether the proposed Project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plan; and,
2) Whether the proposed Project would exceed the forecasted growth incorporated into the AQMP.

Construction

Less-Than-Significant Impact. Construction activity would not affect forecasted growth assumptions; therefore, the construction impacts assessment focuses on air quality violations. The first indicator is related to air quality violations, which are determined by an SCAQMD Air Quality Inspector when a business is out of compliance with applicable SCAQMD rule requirements, permit conditions or legal requirements, or with applicable state or federal air pollution regulations. Air quality violations typically involve large industrial facilities that emit vast quantities of highly regulated pollutants and are not common among typical land use development projects. Construction of the proposed Project would be conducted in accordance with the best management practices (BMPs) provided in SCAQMD Regulation IV, Rule 401 (Visible Emissions) and Rule 403 (Fugitive Dust). The application of water as a dust suppressant to material stockpiles and disturbed ground areas would reduce fugitive dust emissions during construction activities by approximately 61 percent. All construction equipment and vehicles would be maintained and operated within manufacturer specifications to limit unnecessary emissions during use, and any vehicles traveling on unpaved surfaces would be required to limit their speed to 15 miles per hour or less. Construction of the proposed Project would not have the potential to obstruct or conflict with implementation of the 2016 AQMP in the context of SCAQMD rule requirements.

Estimates of maximum daily air pollutant emissions that would be generated by construction activities can be used to demonstrate that the proposed Project would not conflict with or obstruct implementation of the 2016 AQMP with regards to increasing the frequency or severity of existing air quality violations The SCAQMD devised its mass daily thresholds of significance as a screening tool for determining the potential significance of air pollutant emissions from CEQA projects. **Table 6** presents the maximum daily regional emissions that would be generated by each construction activity, as well as the maximum potential overlapping emissions from activities that would be ongoing concurrently on the Project site as described in **Table 4**. Maximum daily emissions during construction are compared to the applicable SCAQMD mass daily thresholds of significance. Construction of the proposed Project would not generate daily emissions of criteria pollutants or O_3 precursors in excess of any SCAQMD regional threshold.

TABLE 6: PROPOSED PROJECT CONSTRUCTION EMISSIONS – REGIONAL ANALYSIS

Phase	Source Location	Daily Emissions (lbs/day)					
		VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition & Site Clearing	On-Site Emissions	1.1	9.2	12.8	<0.1	0.5	0.5
	Off-Site Emissions	0.2	0.1	1.2	<0.1	0.4	0.1
	Total Emissions	***1.3***	***9.4***	***14.1***	***0.1***	***1.0***	***0.6***
East Building – Grading	On-Site Emissions	2.6	29.7	16.4	<0.1	2.2	1.2
	Off-Site Emissions	0.2	0.1	1.2	<0.1	0.4	0.1
	Total Emissions	***2.8***	***29.8***	***17.7***	***0.1***	***2.7***	***1.4***
East Building – Trenching/Utilities	On-Site Emissions	2.1	22.2	15.3	<0.1	1.6	1.1
	Off-Site Emissions	0.9	25.3	5.9	0.1	2.6	0.8
	Total Emissions	***3.0***	***47.5***	***21.3***	***0.2***	***4.2***	***1.9***
East Building – Construction	On-Site Emissions	2.1	18.1	18.1	<0.1	0.8	0.8
	Off-Site Emissions	1.1	4.2	7.0	<0.1	2.5	0.7
	Total Emissions	***3.2***	***22.3***	***25.1***	***0.1***	***3.4***	***1.5***
West Building – Grading	On-Site Emissions	2.6	29.7	16.4	<0.1	2.2	1.2
	Off-Site Emissions	0.2	0.1	1.2	<0.1	0.4	0.1
	Total Emissions	***2.8***	***29.8***	***17.7***	***0.1***	***2.7***	***1.4***
West Building – Trenching/Utilities	On-Site Emissions	2.1	22.2	15.3	<0.1	1.6	1.1
	Off-Site Emissions	0.9	25.3	5.9	0.1	2.6	0.8
	Total Emissions	***3.0***	***47.5***	***21.3***	***0.2***	***4.2***	***1.9***
West Building – Construction	On-Site Emissions	1.8	14.4	16.4	<0.1	0.7	0.6
	Off-Site Emissions	1.1	4.2	7.0	<0.1	2.5	0.7
	Total Emissions	***2.9***	***18.7***	***23.5***	***0.1***	***3.2***	***1.4***
East Building - Paving	On-Site Emissions	1.1	10.2	14.6	<0.1	0.5	0.5
	Off-Site Emissions	0.3	2.9	1.8	<0.1	1.3	0.7
	Total Emissions	***1.4***	***13.1***	***16.4***	***0.1***	***1.3***	***0.7***
East Building – Architectural Coating	On-Site Emissions	21.6	5.2	7.2	<0.1	0.3	0.3
	Off-Site Emissions	0.2	0.1	1.1	<0.1	0.4	0.1
	Total Emissions	***21.8***	***5.4***	***8.4***	***0.1***	***0.8***	***0.5***
West Building - Paving	On-Site Emissions	1.1	10.2	14.6	<0.1	0.5	0.5
	Off-Site Emissions	0.3	2.9	1.8	<0.1	0.7	0.2
	Total Emissions	***1.4***	***13.1***	***16.4***	***0.1***	***1.3***	***0.7***
West Building – Architectural Coating	On-Site Emissions	21.6	5.2	7.2	<0.1	0.3	0.3
	Off-Site Emissions	0.2	0.1	1.1	<0.1	0.4	0.1
	Total Emissions	***21.8***	***5.4***	***8.4***	***0.1***	***0.8***	***0.5***
OVERLAPPING ACTIVITIES							
EB – Con + WB – Grading	Total Emissions	5.9	52.1	42.8	0.1	6.0	2.8
EB – Con + WB – Trenching/Utilities	Total Emissions	6.1	69.8	46.3	0.2	7.5	3.3
EB – Con/Paving/AC + WB – Con	Total Emissions	29.1	59.3	73.3	0.2	8.5	3.9
EB – Con/Paving + WB – Con/Paving	Total Emissions	8.7	67.1	81.3	0.2	8.9	4.1
EB – Con + WB – Con/Paving/AC	Total Emissions	29.1	59.3	73.3	0.2	8.5	3.9
REGIONAL ANALYSIS							
Maximum Regional Daily Emissions		**29.1**	**69.8**	**81.3**	**0.2**	**8.9**	**4.1**
Regional Significance Threshold		75	100	550	150	150	55
Exceed Regional Threshold?		**No**	**No**	**No**	**No**	**No**	**No**

SOURCE: TAHA, 2021.

Following completion of the proposed Project building facilities, an ancillary 11-foot wide and 62-foot long bus bay will be constructed on eastbound Foothill Boulevard to accommodate the Omnitrans Transit Agency's bus transit Route 66 and other potential future bus service that would provide convenient transit accessibility to future occupants and visitors. Construction of the bus bay would occur subsequently to the building structure components of the proposed Project and would not have the potential to overlap with other phases of construction, as shown in **Table 4**. **Table 7** presents the daily air pollutant emissions that would be generated by sources involved in construction of the bus bay.

TABLE 7: PROPOSED PROJECT BUS BAY CONSTRUCTION EMISSIONS – REGIONAL ANALYSIS

Phase	Source Location	Daily Emissions (lbs/day)					
		VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition	On-Site Emissions	0.5	3.8	5.4	<0.1	0.2	0.2
	Off-Site Emissions	0.1	0.3	0.6	<0.1	0.3	0.1
	Total Emissions	***0.6***	***4.2***	***6.0***	***0.1***	***0.5***	***0.3***
Site Preparation	On-Site Emissions	0.4	3.4	3.8	<0.1	0.4	0.3
	Off-Site Emissions	0.1	0.1	0.5	<0.1	0.2	0.1
	Total Emissions	***0.5***	***3.5***	***4.3***	***0.1***	***0.7***	***0.4***
Bus Bay Installation	On-Site Emissions	0.5	4.9	7.9	<0.1	0.2	0.2
	Off-Site Emissions	0.1	0.3	0.6	<0.1	0.3	0.1
	Total Emissions	***0.6***	***5.2***	***8.5***	***0.1***	***0.5***	***0.3***
Roadway Repaving	On-Site Emissions	0.6	5.4	7.2	<0.1	0.2	0.2
	Off-Site Emissions	0.1	0.2	0.6	<0.1	0.2	0.1
	Total Emissions	***0.7***	***5.6***	***7.8***	***0.1***	***0.5***	***0.3***
REGIONAL ANALYSIS							
Maximum Regional Daily Emissions		**0.7**	**5.6**	**8.5**	**0.1**	**0.7**	**0.4**
Regional Significance Threshold		75	100	550	150	150	55
Exceed Regional Threshold?		**No**	**No**	**No**	**No**	**No**	**No**

SOURCE: TAHA, 2021.

The emissions analysis presented in **Table 7** demonstrates that air pollutant emissions generated during construction of the bus bay would remain well below applicable SCAQMD regional significance thresholds. Therefore, construction of the proposed Project would not have the potential to result in a significant air quality impact related to air quality violations.

Operations

Less-Than-Significant Impact. The potential to interfere with the attainment of State and federal air quality standards is related to permanent sources of proposed Project-related emissions. Operation of the proposed Project following the completion of construction activities would involve typical residential use of the multi-family development. The predominant source of emissions would be attributed to mobile vehicle trips on the regional roadway network by proposed Project residents. Implementation of the proposed Project would introduce a new multi-family residential development to the City of Rancho Cucamonga. Operation of the proposed Project would not create a new substantial stationary source of air pollutant emissions that could potentially cause air quality violations directly. Residential uses are not identified by the SCAQMD or the CARB as facilities that require special permitting due to the presence of large emissions sources. Future operation of the proposed Project would involve emissions sources

including on-road vehicle trips, area and fugitive sources such as consumer products and landscaping, and minor indirect emissions associated with the provision and consumption of energy.

The air quality impacts assessment utilized CalEEMod to estimate the daily emissions of criteria pollutants and O_3 precursors that would be generated by operation of the proposed Project. Proposed project operations would generate approximately 1,503 daily vehicle trips and approximately 16,382.7 daily VMT. **Table 8** presents the results of the operational emissions analysis prepared in CalEEMod for opening year 2024. Daily emissions of criteria pollutants and O_3 precursors would remain substantially below the applicable SCAQMD mass daily thresholds. The results of the emissions modeling demonstrate that operation of the proposed Project would not have the potential to create or contribute to new air quality violations or exacerbate existing violations throughout the SCAB and would not delay timely attainment of the air quality standards as set forth in the 2016 AQMP.

TABLE 8: PROPOSED PROJECT OPERATIONAL EMISSIONS (2024)

	Daily Emissions (lbs./day)					
Operational Emissions Source	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	5.8	0.3	21.5	<0.1	0.1	0.1
Energy Sources	0.1	1.0	0.4	<0.1	0.1	0.1
Mobile Sources	2.7	4.8	34.4	0.1	12.6	3.4
REGIONAL ANALYSIS						
Daily Operational Emissions	**8.7**	**6.0**	**56.3**	**0.1**	**12.8**	**3.6**
Regional Threshold	55	55	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

SOURCE: TAHA, 2021.

With regards to the AQMP growth projections, operation of the proposed Project would introduce 259 new multi-family residential units and one live/work townhouse to the City of Rancho Cucamonga, with an expected population of approximately 788 individuals. Inhabitance of the proposed Project is expected to begin in 2024. The 2016 AQMP is formulated based on regional growth projections assessed in the SCAG 2016–2040 RTP/SCS. The 2016–2040 RTP/SCS demographic forecast analysis predicts that between 2012 and 2040, the City of Rancho Cucamonga will increase its population from 170,100 to 204,300—an increase of 34,200 people—and will increase its number of households from 55,400 to 73,100, an increase of 17,700 dwelling units.

Implementation of the proposed Project would represent approximately 2.3 percent of anticipated citywide population growth and 1.5 percent of anticipated household growth between 2012–2040, assuming that all new residents are transplanting from outside the city. In addition, the proposed Project would be consistent with the existing Mixed-Use land use designation in the City's General Plan. The growth in population and households attributed to the proposed Project would not disproportionately contribute to the City's growth in such a way that would render the population and household forecasts inaccurate. Operation of the proposed Project would result in a less than significant impact related to regional growth projections accounted for in the AQMP.

b) Would the proposed Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Construction

Less-than-Significant Impact. The SCAB is designated as nonattainment of the CAAQS and NAAQS for O_3, PM_{10}, and $PM_{2.5}$. Therefore, there is an ongoing cumulative regional impact associated with these air pollutants. As discussed above, the SCAQMD relies on the mass daily thresholds as a screening tool for evaluating potential cumulative impacts. Projects with daily emissions that exceed applicable SCAQMD thresholds during construction or operation would be considered potentially significant on both the project and cumulative scales. Conversely, the SCAQMD advises that projects with maximum daily emissions remaining below the project-specific mass daily thresholds would also not be considered cumulatively significant, even with the ongoing cumulative condition related to the nonattainment designations. As shown in **Table 6** and **Table 7**, construction of the proposed Project would not produce daily emissions of particulate matter or O_3 precursors in excess of the applicable SCAQMD thresholds. Therefore, construction of the proposed Project would result in a less than significant impact related to cumulatively considerable increases of nonattainment pollutants or their atmospheric precursors.

Operations

Less-Than-Significant Impact. Similar to the assessment of potential air quality impacts during construction, the SCAQMD advises that daily project-related emissions of particulate matter and O_3 precursors that are below the project-specific mass daily thresholds should be considered less than significant in the cumulative context. As shown in **Table 8**, operation of the proposed Project would not generate daily emissions of particulate matter (PM_{10} and $PM_{2.5}$) or O_3 precursors (VOC and NO_X) in excess of any applicable SCAQMD threshold. Therefore, operation of the proposed Project would result in a less than significant impact related to cumulatively considerable increases of nonattainment pollutants or their atmospheric precursors.

c) Would the proposed Project expose sensitive receptors to substantial pollutant concentrations?

Construction

Less-Than-Significant Impact. The Project site is surrounded in close proximity by residential developments that constitute sensitive receptors. The sensitive receptors surrounding the Project site may be exposed to pollutant concentrations emanating from emissions sources involved in construction activities. The SCAQMD established a LST methodology to determine the likelihood of substantial criteria pollutant concentrations reaching sensitive receptor locations. Mobile source emissions on the roadway network are spread across long distances and do not directly affect receptors in close proximity to the Project site. The LST methodology involves screening values for daily emissions of NO_X, CO, PM_{10}, and $PM_{2.5}$ that are generated exclusively by sources located on Project sites.

The LST values were determined using emissions modeling based on ambient air quality measured throughout the SCAB. If maximum daily emissions remain below the LST values during construction activities, it is highly unlikely that air pollutant concentrations in ambient air would reach substantial levels sufficient to create public health concerns for sensitive receptors. As shown in **Table 9**, below, maximum daily emissions of criteria pollutants and ozone precursors would not exceed any applicable LST values. Therefore, construction of the proposed Project would not result in exposure of sensitive receptors to substantial concentrations of criteria pollutants.

TABLE 9: PROPOSED PROJECT CONSTRUCTION EMISSIONS – LOCALIZED ANALYSIS				
	On-Site Daily Emissions (lbs./day)			
PHASE	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition & Site Clearing	9.2	12.8	0.5	0.5
East Building – Grading	29.7	16.4	2.2	1.2
East Building – Trenching/Utilities	22.2	15.3	1.6	1.1
East Building – Construction	18.1	18.1	0.8	0.8
West Building – Grading	29.7	16.4	2.2	1.2
West Building – Trenching/Utilities	22.2	15.3	1.6	1.1
West Building – Construction	14.4	16.4	0.7	0.6
East Building – Paving	10.2	14.6	0.5	0.5
East Building – Architectural Coating	5.2	7.2	0.3	0.3
West Building – Paving	10.2	14.6	0.5	0.5
West Building – Architectural Coating	5.2	7.2	0.3	0.3
Bus Bay Construction – Maximum Daily	5.4	7.9	0.4	0.3
OVERLAPPING ACTIVITIES				
EB – Con + WB – Grading	47.7	34.5	3.0	2.0
EB – Con + WB – Trenching/Utilities	40.3	33.4	2.4	1.9
EB – Con/Paving/AC + WB – Con	47.9	56.3	2.3	2.2
EB – Con/Paving + WB – Con/Paving	52.9	63.6	2.5	2.4
EB – Con + WB – Con/Paving/AC	47.9	56.3	2.3	2.2
LOCALIZED ANALYSIS				
Maximum Localized Daily Emissions	**52.9**	**63.6**	**3.0**	**2.0**
SRA 34 Localized Significance Threshold	170	972	7	4
Exceed Localized Threshold?	**No**	**No**	**No**	**No**

SOURCE: TAHA, 2021.

With regards to TAC emissions, carcinogenic risks, and non-carcinogenic hazards, the use of heavy-duty construction equipment and haul trucks during construction activities would release diesel PM to the atmosphere through exhaust emissions. However, carcinogenic risks are typically assessed over timescales of several decades, as the carcinogenic dose response is cumulative in nature. Construction of the proposed Project would last for approximately two years, and daily emissions of diesel PM would fluctuate throughout the construction period. It is possible for health risk impacts to occur on shorter timelines than decades for large construction projects with intensive, lengthy earthwork activities. Over the course of construction activities, average diesel exhaust PM_{10} emissions from on-site equipment would be approximately 1.35 pounds per day. When accounting for days on which no emissions would occur, the average daily emission rate during the construction period would decrease to 1.16 pounds of diesel exhaust PM_{10} per day. This calculated emission rate is based on underlying assumptions related to off-road equipment operation that are extremely conservative, in most cases assuming continuous operation of equipment over an eight-hour workday every day (with the exception of generators and cranes). In reality, equipment use would likely be intermittent throughout construction workdays and diesel exhaust emissions would be lower than those produced using CalEEMod.

The SCAQMD has not established a mass daily screening threshold for diesel emissions, and the only established TAC significance thresholds require estimating concentrations of TAC in ambient air resulting from project emissions using intensive air dispersion modeling. However, the low magnitude of proposed Projectdiesel exhaust emissions from construction equipment combined with the brevity of the construction period and local meteorological characteristics indicate that the proposed Project would not generate substantial emissions over an extended period of time that could cause a health risk to adjacent land uses.

In addition, the size of the site indicates that only during a limited portion of construction activities would heavy-duty diesel-powered equipment be operating within 100 feet of sensitive receptors, and all construction equipment would be maintained in accordance with the CARB Portable Engine Air Toxics Control Measure and the Off-Road Diesel Regulation to control emissions to the maximum extent feasible. Therefore, construction of the proposed Project would result in a less than significant impact related to pollutant concentrations at sensitive receptor locations.

Operations

Less-Than-Significant Impact. The proposed Project would introduce a new multi-family residential land use to the City of Rancho Cucamonga and would be consistent with existing surrounding land use developments. Operation of the proposed Project would not create a new substantial permanent source of air pollutant emissions to the project area. The proposed Project does not involve large boilers, generators, or any other equipment or facilities that would warrant special permitting under SCAQMD regulations. The operational emissions analysis shown in **Table 8** demonstrates that operation of the proposed Project would not produce emissions capable of resulting in substantial pollutant concentrations at sensitive receptor locations. Therefore, operation of the proposed Project would result in a less-than-significant impact related to substantial pollutant concentrations at sensitive receptor locations.

d) Would the proposed Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction

Less-Than-Significant Impact. The only source of potentially impactful construction emissions other than criteria pollutants, O_3 precursors, and TACs would be emissions leading to odors. Potential sources that may produce objectionable odors during construction activities include equipment exhaust, application of architectural coatings, and other interior and exterior finishes. Odors from these sources would be localized and generally confined to the immediate area surrounding the proposed Project site, would be temporary in nature, and would not persist beyond the termination of construction activities. The proposed Project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. In addition, as construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. Construction of the proposed Project would comply with the provisions of SCAQMD Rule 401 and Rule 403 to prevent the occurrence of visible dust plumes. Therefore, construction of the proposed Project would result in a less than significant impact related to emissions of odors and other potential nuisance conditions.

Operations

Less-Than-Significant Impact. The only source of potentially impactful emissions other than criteria pollutants, ozone precursors, and TACs would be emissions leading to odors. According to the SCAQMD *CEQA Air Quality Handbook*, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. The proposed Project would not include a land use typically associated with odor impacts. Operation of the multifamily residential development would comply with City codes and regulations pertaining to waste collection and disposal. Operational impacts would be less than significant related to the emissions of odors and other potential nuisance conditions.

REFERENCES

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TECHNICAL APPENDIX

California Emission Estimator Model (CalEEMod) Output Files – Daily Emissions

Alta Cuvee Mixed-Use Project

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.60	1000sqft	0.00	4,900.00	0
Enclosed Parking with Elevator	265.00	Space	0.00	106,000.00	0
Parking Lot	200.00	Space	1.80	80,000.00	0
City Park	0.33	Acre	0.33	14,374.80	0
Recreational Swimming Pool	3.00	1000sqft	0.07	3,000.00	0
Apartments Mid Rise	259.00	Dwelling Unit	3.00	228,000.00	785
Condo/Townhouse	1.00	Dwelling Unit	0.00	1,570.00	3
Strip Mall	3.34	1000sqft	0.00	3,339.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	531.98	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Electricity supplied by Rancho Cucamonga Municipal Utility, which is not available as input selection. SCE used as surrogate.

Land Use - Site Plan; Project population

Construction Phase - Schedule Provided by Applicant.

Site Preparation = Grading - East Building
Grading = Grading - West Building
Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory
"Grading" - West Grading
Off-road Equipment - Project Inventory

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Project Inventory
"Site Preparation" = East Grading
Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Trips and VMT - Max 60 haul loads per day during excavation/trenching.
Assume 20 vendor deliveries per day during construction.
Approximately 50-300 workers on-site during construction.

Grading - 31,770 total exported

Architectural Coating - SCAQMD Building Envelope - 50 g/L

Vehicle Trips - 1,420 daily residential trips/259 apartments = 5.483 trips/du
83 daily shopping trips/3.339 ksf = 24.86 trips/ksf

Woodstoves - No Hearths

Area Coating - SCAQMD Building Envelope 50 g/L

Energy Use -

Water And Wastewater - Remove duplicate water use.

Solid Waste - Remove duplicate waste generation.

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Mobile Land Use Mitigation - Electric Vehicle Charging Provided (Not Quantified)

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Area Mitigation - SCAQMD Rule 1113
Fleet Mix - Residential Trips

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstructionPhase	NumDays	20.00	72.00
tblConstructionPhase	NumDays	20.00	72.00
tblConstructionPhase	NumDays	230.00	540.00
tblConstructionPhase	NumDays	230.00	390.00
tblConstructionPhase	NumDays	20.00	12.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	20.00	18.00
tblConstructionPhase	NumDays	20.00	96.00
tblConstructionPhase	NumDays	20.00	108.00
tblConstructionPhase	NumDays	10.00	24.00
tblConstructionPhase	NumDays	10.00	12.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00

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tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	220.15	0.00
tblFireplaces	NumberGas	0.85	0.00
tblFireplaces	NumberNoFireplace	25.90	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00
tblFireplaces	NumberWood	12.95	0.00
tblFireplaces	NumberWood	0.05	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.56	0.60
tblFleetMix	LDA	0.56	0.60
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD2	4.7940e-003	5.0000e-003

tblFleetMix	LHD2	4.7940e-003	5.0000e-003
tblFleetMix	MCY	5.7250e-003	0.01
tblFleetMix	MCY	5.7250e-003	0.01
tblFleetMix	MDV	0.11	0.12
tblFleetMix	MDV	0.11	0.12
tblFleetMix	MH	8.3000e-004	0.00
tblFleetMix	MH	8.3000e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3650e-003	0.00
tblFleetMix	OBUS	1.3650e-003	0.00
tblFleetMix	SBUS	7.9900e-004	0.00
tblFleetMix	SBUS	7.9900e-004	0.00
tblFleetMix	UBUS	1.4910e-003	0.00
tblFleetMix	UBUS	1.4910e-003	0.00
tblGrading	MaterialExported	0.00	21,180.00
tblGrading	MaterialExported	0.00	10,590.00
tblLandUse	LandUseSquareFeet	7,600.00	4,900.00
tblLandUse	LandUseSquareFeet	259,000.00	228,000.00
tblLandUse	LandUseSquareFeet	1,000.00	1,570.00
tblLandUse	LandUseSquareFeet	3,340.00	3,339.00
tblLandUse	LotAcreage	0.17	0.00
tblLandUse	LotAcreage	2.38	0.00
tblLandUse	LotAcreage	6.82	3.00
tblLandUse	LotAcreage	0.06	0.00
tblLandUse	LotAcreage	0.08	0.00
tblLandUse	Population	741.00	785.00

tblOffRoadEquipment	HorsePower	78.00	15.00
tblOffRoadEquipment	HorsePower	78.00	15.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.98
tblSolidWaste	SolidWasteGenerationRate	119.14	119.60
tblSolidWaste	SolidWasteGenerationRate	7.07	0.00
tblSolidWaste	SolidWasteGenerationRate	17.10	0.00
tblTripsAndVMT	HaulingTripNumber	2,648.00	2,880.00
tblTripsAndVMT	HaulingTripNumber	1,324.00	1,440.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	62.00	40.00
tblTripsAndVMT	VendorTripNumber	62.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	WorkerTripNumber	13.00	40.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	55.00	40.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	275.00	200.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00

tblTripsAndVMT	WorkerTripNumber	275.00	200.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	55.00	40.00
tblVehicleTrips	CC_TL	8.40	10.90
tblVehicleTrips	CNW_TL	6.90	10.90
tblVehicleTrips	CW_TL	16.60	10.90
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	8.70	10.90
tblVehicleTrips	HO_TTP	40.60	40.00
tblVehicleTrips	HO_TTP	40.60	40.00
tblVehicleTrips	HS_TL	5.90	10.90
tblVehicleTrips	HS_TTP	19.20	20.00
tblVehicleTrips	HS_TTP	19.20	20.00
tblVehicleTrips	HW_TL	14.70	10.90
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00
tblVehicleTrips	ST_TR	6.39	5.48
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	0.00

tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	ST_TR	42.04	24.86
tblVehicleTrips	SU_TR	5.86	5.48
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	SU_TR	20.43	24.86
tblVehicleTrips	WD_TR	6.65	5.48
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblVehicleTrips	WD_TR	44.32	24.86
tblWater	IndoorWaterUseRate	16,874,892.64	16,940,046.66
tblWater	IndoorWaterUseRate	177,429.43	0.00
tblWater	OutdoorWaterUseRate	10,638,519.27	10,679,594.63
tblWater	OutdoorWaterUseRate	827,895.26	0.00
tblWaterMitigation	UseWaterEfficientIrrigationSystemPercentReduction	6.1	20
tblWoodstoves	NumberCatalytic	12.95	0.00
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	12.95	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	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					
2022	0.4274	3.7962	3.4034	0.0100	0.3829	0.1315	0.5144	0.0906	0.1257	0.2164	0.0000	879.0733	879.0733	0.1097	0.0000	881.8168
2023	2.5835	7.6021	9.7058	0.0241	0.8649	0.2850	1.1499	0.2321	0.2764	0.5085	0.0000	2,084.1050	2,084.1050	0.2283	0.0000	2,089.8127
2024	0.1328	0.9128	1.1818	3.0900e-003	0.1247	0.0312	0.1559	0.0334	0.0306	0.0640	0.0000	264.4672	264.4672	0.0236	0.0000	265.0569
Maximum	**2.5835**	**7.6021**	**9.7058**	**0.0241**	**0.8649**	**0.2850**	**1.1499**	**0.2321**	**0.2764**	**0.5085**	**0.0000**	**2,084.1050**	**2,084.1050**	**0.2283**	**0.0000**	**2,089.8127**

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					
2022	0.4274	3.7961	3.4034	0.0100	0.3362	0.1315	0.4677	0.0855	0.1257	0.2113	0.0000	879.0728	879.0728	0.1097	0.0000	881.8163
2023	2.5835	7.6021	9.7058	0.0241	0.8649	0.2850	1.1499	0.2321	0.2764	0.5085	0.0000	2,084.1037	2,084.1037	0.2283	0.0000	2,089.8114
2024	0.1328	0.9128	1.1818	3.0900e-003	0.1247	0.0312	0.1559	0.0334	0.0306	0.0640	0.0000	264.4671	264.4671	0.0236	0.0000	265.0568
Maximum	**2.5835**	**7.6021**	**9.7058**	**0.0241**	**0.8649**	**0.2850**	**1.1499**	**0.2321**	**0.2764**	**0.5085**	**0.0000**	**2,084.1037**	**2,084.1037**	**0.2283**	**0.0000**	**2,089.8114**

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	ROG	NOx	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**	**3.40**	**0.00**	**2.57**	**1.43**	**0.00**	**0.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**3-7-2022**	**6-6-2022**	1.1009	1.1009
2	**6-7-2022**	**9-6-2022**	1.0036	1.0036
3	**9-7-2022**	**12-6-2022**	1.4660	1.4660
4	**12-7-2022**	**3-6-2023**	1.7465	1.7465
5	**3-7-2023**	**6-6-2023**	2.2421	2.2421
6	**6-7-2023**	**9-6-2023**	3.0889	3.0889
7	**9-7-2023**	**12-6-2023**	3.1752	3.1752
8	**12-7-2023**	**3-6-2024**	1.4667	1.4667
9	**3-7-2024**	**6-6-2024**	0.0246	0.0246
		Highest	3.1752	3.1752

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0290	0.0309	2.6863	1.4000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	4.3917	4.3917	4.2300e-003	0.0000	4.4976
Energy	0.0209	0.1788	0.0766	1.1400e-003		0.0145	0.0145		0.0145	0.0145	0.0000	671.8913	671.8913	0.0293	9.0400e-003	675.3175
Mobile	0.4888	0.9064	6.5430	0.0198	2.2287	0.0144	2.2431	0.5926	0.0133	0.6059	0.0000	1,792.3959	1,792.3959	0.0642	0.0000	1,794.0016
Waste						0.0000	0.0000		0.0000	0.0000	25.0897	0.0000	25.0897	1.4828	0.0000	62.1586
Water						0.0000	0.0000		0.0000	0.0000	5.9020	88.9445	94.8465	0.6110	0.0153	114.6869
Total	**1.5386**	**1.1161**	**9.3059**	**0.0211**	**2.2287**	**0.0437**	**2.2724**	**0.5926**	**0.0427**	**0.6352**	**30.9917**	**2,557.6235**	**2,588.6152**	**2.1916**	**0.0244**	**2,650.6622**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0290	0.0309	2.6863	1.4000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	4.3917	4.3917	4.2300e-003	0.0000	4.4976
Energy	0.0197	0.1682	0.0720	1.0700e-003		0.0136	0.0136		0.0136	0.0136	0.0000	594.5472	594.5472	0.0255	8.0800e-003	597.5929
Mobile	0.4888	0.9064	6.5430	0.0198	2.2287	0.0144	2.2431	0.5926	0.0133	0.6059	0.0000	1,792.3959	1,792.3959	0.0642	0.0000	1,794.0016
Waste						0.0000	0.0000		0.0000	0.0000	25.0897	0.0000	25.0897	1.4828	0.0000	62.1586
Water						0.0000	0.0000		0.0000	0.0000	5.3708	77.5853	82.9561	0.5559	0.0139	100.9950
Total	**1.5374**	**1.1055**	**9.3013**	**0.0210**	**2.2287**	**0.0429**	**2.2716**	**0.5926**	**0.0418**	**0.6344**	**30.4605**	**2,468.9201**	**2,499.3806**	**2.1326**	**0.0220**	**2,559.2458**

	ROG	NOx	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	**0.08**	**0.95**	**0.05**	**0.33**	**0.00**	**1.97**	**0.04**	**0.00**	**2.02**	**0.14**	**1.71**	**3.47**	**3.45**	**2.69**	**9.77**	**3.45**

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	3/5/2022	3/18/2022	6	12	
2	Site Preparation	Grading	4/4/2022	4/30/2022	6	24	
3	Trenching/Utilities - East Building	Site Preparation	5/2/2022	5/28/2022	6	24	
4	Construction - East Building	Building Construction	5/30/2022	2/17/2024	6	540	
5	Grading	Grading	11/7/2022	11/26/2022	6	18	
6	Trenching/Utilities - West Building	Site Preparation	11/28/2022	12/10/2022	6	12	
7	Construction - West Building	Building Construction	12/12/2022	3/9/2024	6	390	
8	Paving - East Building	Paving	5/8/2023	9/9/2023	6	108	
9	Architectural Coatings - East Bldg	Architectural Coating	5/8/2023	7/29/2023	6	72	
10	Paving - West Building	Paving	8/7/2023	11/25/2023	6	96	
11	Architectural Coatings - West Bldg	Architectural Coating	9/11/2023	12/2/2023	6	72	

Acres of Grading (Site Preparation Phase): 60

Acres of Grading (Grading Phase): 45

Acres of Paving: 1.8

Residential Indoor: 464,879; Residential Outdoor: 154,960; Non-Residential Indoor: 12,359; Non-Residential Outdoor: 4,120; Striped Parking Area: 11,160 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Generator Sets	2	4.00	84	0.74
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Crawler Tractors	2	8.00	212	0.43

Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Scrapers	1	8.00	367	0.48
Trenching/Utilities - East Building	Crawler Tractors	2	8.00	212	0.43
Trenching/Utilities - East Building	Excavators	1	8.00	158	0.38
Trenching/Utilities - East Building	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Trenching/Utilities - East Building	Trenchers	2	8.00	78	0.50
Construction - East Building	Air Compressors	10	8.00	15	0.48
Construction - East Building	Cranes	1	7.00	231	0.29
Construction - East Building	Generator Sets	2	8.00	84	0.74
Construction - East Building	Rough Terrain Forklifts	2	8.00	100	0.40
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Graders	1	8.00	187	0.41
Grading	Rollers	2	8.00	80	0.38
Grading	Scrapers	1	8.00	367	0.48
Trenching/Utilities - West Building	Crawler Tractors	2	8.00	212	0.43
Trenching/Utilities - West Building	Excavators	1	8.00	158	0.38
Trenching/Utilities - West Building	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Trenching/Utilities - West Building	Trenchers	2	8.00	78	0.50
Construction - West Building	Air Compressors	10	8.00	15	0.48
Construction - West Building	Generator Sets	2	8.00	84	0.74
Construction - West Building	Rough Terrain Forklifts	2	8.00	100	0.40
Paving - East Building	Pavers	2	8.00	130	0.42
Paving - East Building	Paving Equipment	2	8.00	132	0.36
Paving - East Building	Rollers	2	8.00	80	0.38
Architectural Coatings - East Bldg	Air Compressors	4	6.00	78	0.48
Paving - West Building	Pavers	2	8.00	130	0.42

Paving - West Building	Paving Equipment	2	8.00	132	0.36
Paving - West Building	Rollers	2	8.00	80	0.38
Architectural Coatings - West Bldg	Air Compressors	4	6.00	78	0.48

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	5	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching/Utilities - East Building	6	40.00	0.00	2,880.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Construction - East Building	15	200.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching/Utilities - West Building	6	40.00	0.00	1,440.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Construction - West Building	14	200.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - East Building	6	40.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coatings - East Bldg	4	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - West Building	6	40.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coatings - West Bldg	4	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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	6.3300e-003	0.0551	0.0770	1.3000e-004		2.8400e-003	2.8400e-003		2.7500e-003	2.7500e-003	0.0000	10.9785	10.9785	1.7500e-003	0.0000	11.0222
Total	**6.3300e-003**	**0.0551**	**0.0770**	**1.3000e-004**		**2.8400e-003**	**2.8400e-003**		**2.7500e-003**	**2.7500e-003**	**0.0000**	**10.9785**	**10.9785**	**1.7500e-003**	**0.0000**	**11.0222**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	7.5000e-004	7.8400e-003	2.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.1000e-004	0.0000	2.1051	2.1051	5.0000e-005	0.0000	2.1064
Total	**1.0300e-003**	**7.5000e-004**	**7.8400e-003**	**2.0000e-005**	**2.6300e-003**	**2.0000e-005**	**2.6500e-003**	**7.0000e-004**	**2.0000e-005**	**7.1000e-004**	**0.0000**	**2.1051**	**2.1051**	**5.0000e-005**	**0.0000**	**2.1064**

3.2 Demolition - 2022

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	6.3300e-003	0.0551	0.0770	1.3000e-004		2.8400e-003	2.8400e-003		2.7500e-003	2.7500e-003	0.0000	10.9785	10.9785	1.7500e-003	0.0000	11.0222
Total	**6.3300e-003**	**0.0551**	**0.0770**	**1.3000e-004**		**2.8400e-003**	**2.8400e-003**		**2.7500e-003**	**2.7500e-003**	**0.0000**	**10.9785**	**10.9785**	**1.7500e-003**	**0.0000**	**11.0222**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	7.5000e-004	7.8400e-003	2.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.1000e-004	0.0000	2.1051	2.1051	5.0000e-005	0.0000	2.1064
Total	**1.0300e-003**	**7.5000e-004**	**7.8400e-003**	**2.0000e-005**	**2.6300e-003**	**2.0000e-005**	**2.6500e-003**	**7.0000e-004**	**2.0000e-005**	**7.1000e-004**	**0.0000**	**2.1051**	**2.1051**	**5.0000e-005**	**0.0000**	**2.1064**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0318	0.0000	0.0318	3.4400e-003	0.0000	3.4400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0306	0.3560	0.1974	5.1000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	45.0455	45.0455	0.0146	0.0000	45.4097
Total	**0.0306**	**0.3560**	**0.1974**	**5.1000e-004**	**0.0318**	**0.0140**	**0.0458**	**3.4400e-003**	**0.0129**	**0.0163**	**0.0000**	**45.0455**	**45.0455**	**0.0146**	**0.0000**	**45.4097**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0700e-003	1.5000e-003	0.0157	5.0000e-005	5.2600e-003	3.0000e-005	5.3000e-003	1.4000e-003	3.0000e-005	1.4300e-003	0.0000	4.2102	4.2102	1.1000e-004	0.0000	4.2129
Total	**2.0700e-003**	**1.5000e-003**	**0.0157**	**5.0000e-005**	**5.2600e-003**	**3.0000e-005**	**5.3000e-003**	**1.4000e-003**	**3.0000e-005**	**1.4300e-003**	**0.0000**	**4.2102**	**4.2102**	**1.1000e-004**	**0.0000**	**4.2129**

3.3 Site Preparation - 2022

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					0.0124	0.0000	0.0124	1.3400e-003	0.0000	1.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0306	0.3560	0.1974	5.1000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	45.0454	45.0454	0.0146	0.0000	45.4096
Total	**0.0306**	**0.3560**	**0.1974**	**5.1000e-004**	**0.0124**	**0.0140**	**0.0264**	**1.3400e-003**	**0.0129**	**0.0142**	**0.0000**	**45.0454**	**45.0454**	**0.0146**	**0.0000**	**45.4096**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0700e-003	1.5000e-003	0.0157	5.0000e-005	5.2600e-003	3.0000e-005	5.3000e-003	1.4000e-003	3.0000e-005	1.4300e-003	0.0000	4.2102	4.2102	1.1000e-004	0.0000	4.2129
Total	**2.0700e-003**	**1.5000e-003**	**0.0157**	**5.0000e-005**	**5.2600e-003**	**3.0000e-005**	**5.3000e-003**	**1.4000e-003**	**3.0000e-005**	**1.4300e-003**	**0.0000**	**4.2102**	**4.2102**	**1.1000e-004**	**0.0000**	**4.2129**

3.4 Trenching/Utilities - East Building - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0139	0.0000	0.0139	1.5600e-003	0.0000	1.5600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0249	0.2667	0.1839	3.7000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	32.3671	32.3671	0.0105	0.0000	32.6288
Total	**0.0249**	**0.2667**	**0.1839**	**3.7000e-004**	**0.0139**	**0.0133**	**0.0272**	**1.5600e-003**	**0.0122**	**0.0138**	**0.0000**	**32.3671**	**32.3671**	**0.0105**	**0.0000**	**32.6288**

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	8.2500e-003	0.3078	0.0524	1.0900e-003	0.0248	7.7000e-004	0.0256	6.8100e-003	7.4000e-004	7.5500e-003	0.0000	105.4147	105.4147	5.8500e-003	0.0000	105.5610
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0700e-003	1.5000e-003	0.0157	5.0000e-005	5.2600e-003	3.0000e-005	5.3000e-003	1.4000e-003	3.0000e-005	1.4300e-003	0.0000	4.2102	4.2102	1.1000e-004	0.0000	4.2129
Total	**0.0103**	**0.3093**	**0.0680**	**1.1400e-003**	**0.0300**	**8.0000e-004**	**0.0309**	**8.2100e-003**	**7.7000e-004**	**8.9800e-003**	**0.0000**	**109.6248**	**109.6248**	**5.9600e-003**	**0.0000**	**109.7739**

3.4 Trenching/Utilities - East Building - 2022

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					5.4300e-003	0.0000	5.4300e-003	6.1000e-004	0.0000	6.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0249	0.2667	0.1839	3.7000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	32.3671	32.3671	0.0105	0.0000	32.6288
Total	**0.0249**	**0.2667**	**0.1839**	**3.7000e-004**	**5.4300e-003**	**0.0133**	**0.0187**	**6.1000e-004**	**0.0122**	**0.0129**	**0.0000**	**32.3671**	**32.3671**	**0.0105**	**0.0000**	**32.6288**

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	8.2500e-003	0.3078	0.0524	1.0900e-003	0.0248	7.7000e-004	0.0256	6.8100e-003	7.4000e-004	7.5500e-003	0.0000	105.4147	105.4147	5.8500e-003	0.0000	105.5610
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0700e-003	1.5000e-003	0.0157	5.0000e-005	5.2600e-003	3.0000e-005	5.3000e-003	1.4000e-003	3.0000e-005	1.4300e-003	0.0000	4.2102	4.2102	1.1000e-004	0.0000	4.2129
Total	**0.0103**	**0.3093**	**0.0680**	**1.1400e-003**	**0.0300**	**8.0000e-004**	**0.0309**	**8.2100e-003**	**7.7000e-004**	**8.9800e-003**	**0.0000**	**109.6248**	**109.6248**	**5.9600e-003**	**0.0000**	**109.7739**

3.5 Construction - East Building - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1960	1.6811	1.6789	3.2800e-003		0.0750	0.0750		0.0731	0.0731	0.0000	263.5845	263.5845	0.0433	0.0000	264.6670
Total	**0.1960**	**1.6811**	**1.6789**	**3.2800e-003**		**0.0750**	**0.0750**		**0.0731**	**0.0731**	**0.0000**	**263.5845**	**263.5845**	**0.0433**	**0.0000**	**264.6670**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1900e-003	0.3428	0.0682	9.8000e-004	0.0235	5.2000e-004	0.0240	6.7700e-003	5.0000e-004	7.2700e-003	0.0000	93.7047	93.7047	6.1500e-003	0.0000	93.8584
Worker	0.0801	0.0582	0.6078	1.8000e-003	0.2039	1.2900e-003	0.2052	0.0542	1.1900e-003	0.0554	0.0000	163.1432	163.1432	4.2500e-003	0.0000	163.2494
Total	**0.0892**	**0.4009**	**0.6760**	**2.7800e-003**	**0.2274**	**1.8100e-003**	**0.2292**	**0.0609**	**1.6900e-003**	**0.0626**	**0.0000**	**256.8479**	**256.8479**	**0.0104**	**0.0000**	**257.1079**

3.5 Construction - East Building - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1960	1.6811	1.6789	3.2800e-003		0.0750	0.0750		0.0731	0.0731	0.0000	263.5841	263.5841	0.0433	0.0000	264.6667
Total	**0.1960**	**1.6811**	**1.6789**	**3.2800e-003**		**0.0750**	**0.0750**		**0.0731**	**0.0731**	**0.0000**	**263.5841**	**263.5841**	**0.0433**	**0.0000**	**264.6667**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1900e-003	0.3428	0.0682	9.8000e-004	0.0235	5.2000e-004	0.0240	6.7700e-003	5.0000e-004	7.2700e-003	0.0000	93.7047	93.7047	6.1500e-003	0.0000	93.8584
Worker	0.0801	0.0582	0.6078	1.8000e-003	0.2039	1.2900e-003	0.2052	0.0542	1.1900e-003	0.0554	0.0000	163.1432	163.1432	4.2500e-003	0.0000	163.2494
Total	**0.0892**	**0.4009**	**0.6760**	**2.7800e-003**	**0.2274**	**1.8100e-003**	**0.2292**	**0.0609**	**1.6900e-003**	**0.0626**	**0.0000**	**256.8479**	**256.8479**	**0.0104**	**0.0000**	**257.1079**

3.5 Construction - East Building - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3147	2.6682	2.8038	5.5000e-003		0.1142	0.1142		0.1114	0.1114	0.0000	442.1541	442.1541	0.0720	0.0000	443.9546
Total	**0.3147**	**2.6682**	**2.8038**	**5.5000e-003**		**0.1142**	**0.1142**		**0.1114**	**0.1114**	**0.0000**	**442.1541**	**442.1541**	**0.0720**	**0.0000**	**443.9546**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0116	0.4433	0.0987	1.6000e-003	0.0393	4.3000e-004	0.0398	0.0114	4.1000e-004	0.0118	0.0000	152.8593	152.8593	8.2900e-003	0.0000	153.0665
Worker	0.1258	0.0878	0.9345	2.9100e-003	0.3421	2.1100e-003	0.3442	0.0909	1.9400e-003	0.0928	0.0000	263.3840	263.3840	6.3800e-003	0.0000	263.5436
Total	**0.1374**	**0.5311**	**1.0332**	**4.5100e-003**	**0.3814**	**2.5400e-003**	**0.3840**	**0.1022**	**2.3500e-003**	**0.1046**	**0.0000**	**416.2433**	**416.2433**	**0.0147**	**0.0000**	**416.6101**

3.5 Construction - East Building - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3147	2.6682	2.8038	5.5000e-003		0.1142	0.1142		0.1114	0.1114	0.0000	442.1536	442.1536	0.0720	0.0000	443.9540
Total	**0.3147**	**2.6682**	**2.8038**	**5.5000e-003**		**0.1142**	**0.1142**		**0.1114**	**0.1114**	**0.0000**	**442.1536**	**442.1536**	**0.0720**	**0.0000**	**443.9540**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0116	0.4433	0.0987	1.6000e-003	0.0393	4.3000e-004	0.0398	0.0114	4.1000e-004	0.0118	0.0000	152.8593	152.8593	8.2900e-003	0.0000	153.0665
Worker	0.1258	0.0878	0.9345	2.9100e-003	0.3421	2.1100e-003	0.3442	0.0909	1.9400e-003	0.0928	0.0000	263.3840	263.3840	6.3800e-003	0.0000	263.5436
Total	**0.1374**	**0.5311**	**1.0332**	**4.5100e-003**	**0.3814**	**2.5400e-003**	**0.3840**	**0.1022**	**2.3500e-003**	**0.1046**	**0.0000**	**416.2433**	**416.2433**	**0.0147**	**0.0000**	**416.6101**

3.5 Construction - East Building - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0408	0.3431	0.3759	7.4000e-004		0.0141	0.0141		0.0137	0.0137	0.0000	59.5180	59.5180	9.5900e-003	0.0000	59.7577
Total	**0.0408**	**0.3431**	**0.3759**	**7.4000e-004**		**0.0141**	**0.0141**		**0.0137**	**0.0137**	**0.0000**	**59.5180**	**59.5180**	**9.5900e-003**	**0.0000**	**59.7577**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5400e-003	0.0600	0.0128	2.1000e-004	5.3000e-003	6.0000e-005	5.3500e-003	1.5300e-003	6.0000e-005	1.5800e-003	0.0000	20.5543	20.5543	1.1200e-003	0.0000	20.5821
Worker	0.0160	0.0107	0.1171	3.8000e-004	0.0461	2.8000e-004	0.0463	0.0122	2.6000e-004	0.0125	0.0000	34.3054	34.3054	7.8000e-004	0.0000	34.3250
Total	**0.0175**	**0.0707**	**0.1299**	**5.9000e-004**	**0.0514**	**3.4000e-004**	**0.0517**	**0.0138**	**3.2000e-004**	**0.0141**	**0.0000**	**54.8597**	**54.8597**	**1.9000e-003**	**0.0000**	**54.9072**

3.5 Construction - East Building - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0408	0.3431	0.3759	7.4000e-004		0.0141	0.0141		0.0137	0.0137	0.0000	59.5179	59.5179	9.5900e-003	0.0000	59.7576
Total	**0.0408**	**0.3431**	**0.3759**	**7.4000e-004**		**0.0141**	**0.0141**		**0.0137**	**0.0137**	**0.0000**	**59.5179**	**59.5179**	**9.5900e-003**	**0.0000**	**59.7576**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5400e-003	0.0600	0.0128	2.1000e-004	5.3000e-003	6.0000e-005	5.3500e-003	1.5300e-003	6.0000e-005	1.5800e-003	0.0000	20.5543	20.5543	1.1200e-003	0.0000	20.5821
Worker	0.0160	0.0107	0.1171	3.8000e-004	0.0461	2.8000e-004	0.0463	0.0122	2.6000e-004	0.0125	0.0000	34.3054	34.3054	7.8000e-004	0.0000	34.3250
Total	**0.0175**	**0.0707**	**0.1299**	**5.9000e-004**	**0.0514**	**3.4000e-004**	**0.0517**	**0.0138**	**3.2000e-004**	**0.0141**	**0.0000**	**54.8597**	**54.8597**	**1.9000e-003**	**0.0000**	**54.9072**

3.6 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0239	0.0000	0.0239	2.5800e-003	0.0000	2.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2670	0.1480	3.8000e-004		0.0105	0.0105		9.6800e-003	9.6800e-003	0.0000	33.7841	33.7841	0.0109	0.0000	34.0573
Total	**0.0230**	**0.2670**	**0.1480**	**3.8000e-004**	**0.0239**	**0.0105**	**0.0344**	**2.5800e-003**	**9.6800e-003**	**0.0123**	**0.0000**	**33.7841**	**33.7841**	**0.0109**	**0.0000**	**34.0573**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5500e-003	1.1300e-003	0.0118	3.0000e-005	3.9500e-003	2.0000e-005	3.9700e-003	1.0500e-003	2.0000e-005	1.0700e-003	0.0000	3.1576	3.1576	8.0000e-005	0.0000	3.1597
Total	**1.5500e-003**	**1.1300e-003**	**0.0118**	**3.0000e-005**	**3.9500e-003**	**2.0000e-005**	**3.9700e-003**	**1.0500e-003**	**2.0000e-005**	**1.0700e-003**	**0.0000**	**3.1576**	**3.1576**	**8.0000e-005**	**0.0000**	**3.1597**

3.6 Grading - 2022

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					9.3100e-003	0.0000	9.3100e-003	1.0000e-003	0.0000	1.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2670	0.1480	3.8000e-004		0.0105	0.0105		9.6800e-003	9.6800e-003	0.0000	33.7841	33.7841	0.0109	0.0000	34.0572
Total	**0.0230**	**0.2670**	**0.1480**	**3.8000e-004**	**9.3100e-003**	**0.0105**	**0.0198**	**1.0000e-003**	**9.6800e-003**	**0.0107**	**0.0000**	**33.7841**	**33.7841**	**0.0109**	**0.0000**	**34.0572**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5500e-003	1.1300e-003	0.0118	3.0000e-005	3.9500e-003	2.0000e-005	3.9700e-003	1.0500e-003	2.0000e-005	1.0700e-003	0.0000	3.1576	3.1576	8.0000e-005	0.0000	3.1597
Total	**1.5500e-003**	**1.1300e-003**	**0.0118**	**3.0000e-005**	**3.9500e-003**	**2.0000e-005**	**3.9700e-003**	**1.0500e-003**	**2.0000e-005**	**1.0700e-003**	**0.0000**	**3.1576**	**3.1576**	**8.0000e-005**	**0.0000**	**3.1597**

3.7 Trenching/Utilities - West Building - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.9600e-003	0.0000	6.9600e-003	7.8000e-004	0.0000	7.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0125	0.1334	0.0919	1.8000e-004		6.6500e-003	6.6500e-003		6.1200e-003	6.1200e-003	0.0000	16.1836	16.1836	5.2300e-003	0.0000	16.3144
Total	**0.0125**	**0.1334**	**0.0919**	**1.8000e-004**	**6.9600e-003**	**6.6500e-003**	**0.0136**	**7.8000e-004**	**6.1200e-003**	**6.9000e-003**	**0.0000**	**16.1836**	**16.1836**	**5.2300e-003**	**0.0000**	**16.3144**

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	4.1200e-003	0.1539	0.0262	5.5000e-004	0.0124	3.9000e-004	0.0128	3.4000e-003	3.7000e-004	3.7700e-003	0.0000	52.7073	52.7073	2.9300e-003	0.0000	52.7805
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	7.5000e-004	7.8400e-003	2.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.1000e-004	0.0000	2.1051	2.1051	5.0000e-005	0.0000	2.1064
Total	**5.1500e-003**	**0.1547**	**0.0340**	**5.7000e-004**	**0.0150**	**4.1000e-004**	**0.0154**	**4.1000e-003**	**3.9000e-004**	**4.4800e-003**	**0.0000**	**54.8124**	**54.8124**	**2.9800e-003**	**0.0000**	**54.8870**

3.7 Trenching/Utilities - West Building - 2022

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					2.7200e-003	0.0000	2.7200e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0125	0.1334	0.0919	1.8000e-004		6.6500e-003	6.6500e-003		6.1200e-003	6.1200e-003	0.0000	16.1835	16.1835	5.2300e-003	0.0000	16.3144
Total	**0.0125**	**0.1334**	**0.0919**	**1.8000e-004**	**2.7200e-003**	**6.6500e-003**	**9.3700e-003**	**3.0000e-004**	**6.1200e-003**	**6.4200e-003**	**0.0000**	**16.1835**	**16.1835**	**5.2300e-003**	**0.0000**	**16.3144**

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	4.1200e-003	0.1539	0.0262	5.5000e-004	0.0124	3.9000e-004	0.0128	3.4000e-003	3.7000e-004	3.7700e-003	0.0000	52.7073	52.7073	2.9300e-003	0.0000	52.7805
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	7.5000e-004	7.8400e-003	2.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.1000e-004	0.0000	2.1051	2.1051	5.0000e-005	0.0000	2.1064
Total	**5.1500e-003**	**0.1547**	**0.0340**	**5.7000e-004**	**0.0150**	**4.1000e-004**	**0.0154**	**4.1000e-003**	**3.9000e-004**	**4.4800e-003**	**0.0000**	**54.8124**	**54.8124**	**2.9800e-003**	**0.0000**	**54.8870**

3.8 Construction - West Building - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1297	0.1476	2.7000e-004		5.8900e-003	5.8900e-003		5.8200e-003	5.8200e-003	0.0000	21.5158	21.5158	2.9000e-003	0.0000	21.5883
Total	**0.0160**	**0.1297**	**0.1476**	**2.7000e-004**		**5.8900e-003**	**5.8900e-003**		**5.8200e-003**	**5.8200e-003**	**0.0000**	**21.5158**	**21.5158**	**2.9000e-003**	**0.0000**	**21.5883**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e-004	0.0332	6.6000e-003	9.0000e-005	2.2700e-003	5.0000e-005	2.3200e-003	6.6000e-004	5.0000e-005	7.0000e-004	0.0000	9.0682	9.0682	5.9000e-004	0.0000	9.0831
Worker	7.7500e-003	5.6300e-003	0.0588	1.7000e-004	0.0197	1.2000e-004	0.0199	5.2400e-003	1.2000e-004	5.3600e-003	0.0000	15.7881	15.7881	4.1000e-004	0.0000	15.7983
Total	**8.6400e-003**	**0.0388**	**0.0654**	**2.6000e-004**	**0.0220**	**1.7000e-004**	**0.0222**	**5.9000e-003**	**1.7000e-004**	**6.0600e-003**	**0.0000**	**24.8563**	**24.8563**	**1.0000e-003**	**0.0000**	**24.8814**

3.8 Construction - West Building - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1297	0.1476	2.7000e-004		5.8900e-003	5.8900e-003		5.8200e-003	5.8200e-003	0.0000	21.5158	21.5158	2.9000e-003	0.0000	21.5883
Total	**0.0160**	**0.1297**	**0.1476**	**2.7000e-004**		**5.8900e-003**	**5.8900e-003**		**5.8200e-003**	**5.8200e-003**	**0.0000**	**21.5158**	**21.5158**	**2.9000e-003**	**0.0000**	**21.5883**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e-004	0.0332	6.6000e-003	9.0000e-005	2.2700e-003	5.0000e-005	2.3200e-003	6.6000e-004	5.0000e-005	7.0000e-004	0.0000	9.0682	9.0682	5.9000e-004	0.0000	9.0831
Worker	7.7500e-003	5.6300e-003	0.0588	1.7000e-004	0.0197	1.2000e-004	0.0199	5.2400e-003	1.2000e-004	5.3600e-003	0.0000	15.7881	15.7881	4.1000e-004	0.0000	15.7983
Total	**8.6400e-003**	**0.0388**	**0.0654**	**2.6000e-004**	**0.0220**	**1.7000e-004**	**0.0222**	**5.9000e-003**	**1.7000e-004**	**6.0600e-003**	**0.0000**	**24.8563**	**24.8563**	**1.0000e-003**	**0.0000**	**24.8814**

3.8 Construction - West Building - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2667	2.1474	2.5534	4.7100e-003		0.0925	0.0925		0.0914	0.0914	0.0000	372.9552	372.9552	0.0496	0.0000	374.1961
Total	**0.2667**	**2.1474**	**2.5534**	**4.7100e-003**		**0.0925**	**0.0925**		**0.0914**	**0.0914**	**0.0000**	**372.9552**	**372.9552**	**0.0496**	**0.0000**	**374.1961**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0116	0.4433	0.0987	1.6000e-003	0.0393	4.3000e-004	0.0398	0.0114	4.1000e-004	0.0118	0.0000	152.8593	152.8593	8.2900e-003	0.0000	153.0665
Worker	0.1258	0.0878	0.9345	2.9100e-003	0.3421	2.1100e-003	0.3442	0.0909	1.9400e-003	0.0928	0.0000	263.3840	263.3840	6.3800e-003	0.0000	263.5436
Total	**0.1374**	**0.5311**	**1.0332**	**4.5100e-003**	**0.3814**	**2.5400e-003**	**0.3840**	**0.1022**	**2.3500e-003**	**0.1046**	**0.0000**	**416.2433**	**416.2433**	**0.0147**	**0.0000**	**416.6101**

3.8 Construction - West Building - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2667	2.1474	2.5534	4.7100e-003		0.0925	0.0925		0.0914	0.0914	0.0000	372.9547	372.9547	0.0496	0.0000	374.1956
Total	**0.2667**	**2.1474**	**2.5534**	**4.7100e-003**		**0.0925**	**0.0925**		**0.0914**	**0.0914**	**0.0000**	**372.9547**	**372.9547**	**0.0496**	**0.0000**	**374.1956**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0116	0.4433	0.0987	1.6000e-003	0.0393	4.3000e-004	0.0398	0.0114	4.1000e-004	0.0118	0.0000	152.8593	152.8593	8.2900e-003	0.0000	153.0665
Worker	0.1258	0.0878	0.9345	2.9100e-003	0.3421	2.1100e-003	0.3442	0.0909	1.9400e-003	0.0928	0.0000	263.3840	263.3840	6.3800e-003	0.0000	263.5436
Total	**0.1374**	**0.5311**	**1.0332**	**4.5100e-003**	**0.3814**	**2.5400e-003**	**0.3840**	**0.1022**	**2.3500e-003**	**0.1046**	**0.0000**	**416.2433**	**416.2433**	**0.0147**	**0.0000**	**416.6101**

3.8 Construction - West Building - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0495	0.3981	0.4905	9.1000e-004		0.0163	0.0163		0.0161	0.0161	0.0000	71.7185	71.7185	9.3900e-003	0.0000	71.9533
Total	**0.0495**	**0.3981**	**0.4905**	**9.1000e-004**		**0.0163**	**0.0163**		**0.0161**	**0.0161**	**0.0000**	**71.7185**	**71.7185**	**9.3900e-003**	**0.0000**	**71.9533**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2100e-003	0.0857	0.0183	3.1000e-004	7.5700e-003	8.0000e-005	7.6500e-003	2.1800e-003	8.0000e-005	2.2600e-003	0.0000	29.3632	29.3632	1.5900e-003	0.0000	29.4031
Worker	0.0228	0.0153	0.1673	5.4000e-004	0.0658	4.0000e-004	0.0662	0.0175	3.7000e-004	0.0178	0.0000	49.0077	49.0077	1.1200e-003	0.0000	49.0358
Total	**0.0250**	**0.1010**	**0.1856**	**8.5000e-004**	**0.0734**	**4.8000e-004**	**0.0738**	**0.0197**	**4.5000e-004**	**0.0201**	**0.0000**	**78.3710**	**78.3710**	**2.7100e-003**	**0.0000**	**78.4388**

3.8 Construction - West Building - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0495	0.3981	0.4905	9.1000e-004		0.0163	0.0163		0.0161	0.0161	0.0000	71.7184	71.7184	9.3900e-003	0.0000	71.9532
Total	**0.0495**	**0.3981**	**0.4905**	**9.1000e-004**		**0.0163**	**0.0163**		**0.0161**	**0.0161**	**0.0000**	**71.7184**	**71.7184**	**9.3900e-003**	**0.0000**	**71.9532**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2100e-003	0.0857	0.0183	3.1000e-004	7.5700e-003	8.0000e-005	7.6500e-003	2.1800e-003	8.0000e-005	2.2600e-003	0.0000	29.3632	29.3632	1.5900e-003	0.0000	29.4031
Worker	0.0228	0.0153	0.1673	5.4000e-004	0.0658	4.0000e-004	0.0662	0.0175	3.7000e-004	0.0178	0.0000	49.0077	49.0077	1.1200e-003	0.0000	49.0358
Total	**0.0250**	**0.1010**	**0.1856**	**8.5000e-004**	**0.0734**	**4.8000e-004**	**0.0738**	**0.0197**	**4.5000e-004**	**0.0201**	**0.0000**	**78.3710**	**78.3710**	**2.7100e-003**	**0.0000**	**78.4388**

3.9 Paving - East Building - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0558	0.5504	0.7876	1.2300e-003		0.0276	0.0276		0.0254	0.0254	0.0000	108.1451	108.1451	0.0350	0.0000	109.0195
Paving	2.3600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0581**	**0.5504**	**0.7876**	**1.2300e-003**		**0.0276**	**0.0276**		**0.0254**	**0.0254**	**0.0000**	**108.1451**	**108.1451**	**0.0350**	**0.0000**	**109.0195**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0300e-003	0.1535	0.0342	5.5000e-004	0.0136	1.5000e-004	0.0138	3.9300e-003	1.4000e-004	4.0700e-003	0.0000	52.9128	52.9128	2.8700e-003	0.0000	52.9846
Worker	8.7100e-003	6.0800e-003	0.0647	2.0000e-004	0.0237	1.5000e-004	0.0238	6.2900e-003	1.3000e-004	6.4200e-003	0.0000	18.2343	18.2343	4.4000e-004	0.0000	18.2453
Total	**0.0127**	**0.1595**	**0.0989**	**7.5000e-004**	**0.0373**	**3.0000e-004**	**0.0376**	**0.0102**	**2.7000e-004**	**0.0105**	**0.0000**	**71.1471**	**71.1471**	**3.3100e-003**	**0.0000**	**71.2299**

3.9 Paving - East Building - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0558	0.5504	0.7876	1.2300e-003		0.0276	0.0276		0.0254	0.0254	0.0000	108.1450	108.1450	0.0350	0.0000	109.0194
Paving	2.3600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0581**	**0.5504**	**0.7876**	**1.2300e-003**		**0.0276**	**0.0276**		**0.0254**	**0.0254**	**0.0000**	**108.1450**	**108.1450**	**0.0350**	**0.0000**	**109.0194**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0300e-003	0.1535	0.0342	5.5000e-004	0.0136	1.5000e-004	0.0138	3.9300e-003	1.4000e-004	4.0700e-003	0.0000	52.9128	52.9128	2.8700e-003	0.0000	52.9846
Worker	8.7100e-003	6.0800e-003	0.0647	2.0000e-004	0.0237	1.5000e-004	0.0238	6.2900e-003	1.3000e-004	6.4200e-003	0.0000	18.2343	18.2343	4.4000e-004	0.0000	18.2453
Total	**0.0127**	**0.1595**	**0.0989**	**7.5000e-004**	**0.0373**	**3.0000e-004**	**0.0376**	**0.0102**	**2.7000e-004**	**0.0105**	**0.0000**	**71.1471**	**71.1471**	**3.3100e-003**	**0.0000**	**71.2299**

3.10 Architectural Coatings - East Bldg - 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	0.7632					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0276	0.1876	0.2608	4.3000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	36.7669	36.7669	2.2000e-003	0.0000	36.8219
Total	**0.7908**	**0.1876**	**0.2608**	**4.3000e-004**		**0.0102**	**0.0102**		**0.0102**	**0.0102**	**0.0000**	**36.7669**	**36.7669**	**2.2000e-003**	**0.0000**	**36.8219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8100e-003	4.0500e-003	0.0431	1.3000e-004	0.0158	1.0000e-004	0.0159	4.1900e-003	9.0000e-005	4.2800e-003	0.0000	12.1562	12.1562	2.9000e-004	0.0000	12.1636
Total	**5.8100e-003**	**4.0500e-003**	**0.0431**	**1.3000e-004**	**0.0158**	**1.0000e-004**	**0.0159**	**4.1900e-003**	**9.0000e-005**	**4.2800e-003**	**0.0000**	**12.1562**	**12.1562**	**2.9000e-004**	**0.0000**	**12.1636**

3.10 Architectural Coatings - East Bldg - 2023

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	0.7632					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0276	0.1876	0.2608	4.3000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	36.7668	36.7668	2.2000e-003	0.0000	36.8218
Total	**0.7908**	**0.1876**	**0.2608**	**4.3000e-004**		**0.0102**	**0.0102**		**0.0102**	**0.0102**	**0.0000**	**36.7668**	**36.7668**	**2.2000e-003**	**0.0000**	**36.8218**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8100e-003	4.0500e-003	0.0431	1.3000e-004	0.0158	1.0000e-004	0.0159	4.1900e-003	9.0000e-005	4.2800e-003	0.0000	12.1562	12.1562	2.9000e-004	0.0000	12.1636
Total	**5.8100e-003**	**4.0500e-003**	**0.0431**	**1.3000e-004**	**0.0158**	**1.0000e-004**	**0.0159**	**4.1900e-003**	**9.0000e-005**	**4.2800e-003**	**0.0000**	**12.1562**	**12.1562**	**2.9000e-004**	**0.0000**	**12.1636**

3.11 Paving - West Building - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0496	0.4892	0.7000	1.0900e-003		0.0245	0.0245		0.0225	0.0225	0.0000	96.1290	96.1290	0.0311	0.0000	96.9062
Paving	2.3600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0519**	**0.4892**	**0.7000**	**1.0900e-003**		**0.0245**	**0.0245**		**0.0225**	**0.0225**	**0.0000**	**96.1290**	**96.1290**	**0.0311**	**0.0000**	**96.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5800e-003	0.1364	0.0304	4.9000e-004	0.0121	1.3000e-004	0.0122	3.4900e-003	1.3000e-004	3.6200e-003	0.0000	47.0336	47.0336	2.5500e-003	0.0000	47.0974
Worker	7.7400e-003	5.4000e-003	0.0575	1.8000e-004	0.0211	1.3000e-004	0.0212	5.5900e-003	1.2000e-004	5.7100e-003	0.0000	16.2083	16.2083	3.9000e-004	0.0000	16.2181
Total	**0.0113**	**0.1418**	**0.0879**	**6.7000e-004**	**0.0332**	**2.6000e-004**	**0.0334**	**9.0800e-003**	**2.5000e-004**	**9.3300e-003**	**0.0000**	**63.2419**	**63.2419**	**2.9400e-003**	**0.0000**	**63.3155**

3.11 Paving - West Building - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0496	0.4892	0.7000	1.0900e-003		0.0245	0.0245		0.0225	0.0225	0.0000	96.1288	96.1288	0.0311	0.0000	96.9061
Paving	2.3600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0519**	**0.4892**	**0.7000**	**1.0900e-003**		**0.0245**	**0.0245**		**0.0225**	**0.0225**	**0.0000**	**96.1288**	**96.1288**	**0.0311**	**0.0000**	**96.9061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5800e-003	0.1364	0.0304	4.9000e-004	0.0121	1.3000e-004	0.0122	3.4900e-003	1.3000e-004	3.6200e-003	0.0000	47.0336	47.0336	2.5500e-003	0.0000	47.0974
Worker	7.7400e-003	5.4000e-003	0.0575	1.8000e-004	0.0211	1.3000e-004	0.0212	5.5900e-003	1.2000e-004	5.7100e-003	0.0000	16.2083	16.2083	3.9000e-004	0.0000	16.2181
Total	**0.0113**	**0.1418**	**0.0879**	**6.7000e-004**	**0.0332**	**2.6000e-004**	**0.0334**	**9.0800e-003**	**2.5000e-004**	**9.3300e-003**	**0.0000**	**63.2419**	**63.2419**	**2.9400e-003**	**0.0000**	**63.3155**

3.12 Architectural Coatings - West Bldg - 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	0.7632					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0276	0.1876	0.2608	4.3000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	36.7669	36.7669	2.2000e-003	0.0000	36.8219
Total	**0.7908**	**0.1876**	**0.2608**	**4.3000e-004**		**0.0102**	**0.0102**		**0.0102**	**0.0102**	**0.0000**	**36.7669**	**36.7669**	**2.2000e-003**	**0.0000**	**36.8219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8100e-003	4.0500e-003	0.0431	1.3000e-004	0.0158	1.0000e-004	0.0159	4.1900e-003	9.0000e-005	4.2800e-003	0.0000	12.1562	12.1562	2.9000e-004	0.0000	12.1636
Total	**5.8100e-003**	**4.0500e-003**	**0.0431**	**1.3000e-004**	**0.0158**	**1.0000e-004**	**0.0159**	**4.1900e-003**	**9.0000e-005**	**4.2800e-003**	**0.0000**	**12.1562**	**12.1562**	**2.9000e-004**	**0.0000**	**12.1636**

3.12 Architectural Coatings - West Bldg - 2023

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	0.7632					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0276	0.1876	0.2608	4.3000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	36.7668	36.7668	2.2000e-003	0.0000	36.8218
Total	**0.7908**	**0.1876**	**0.2608**	**4.3000e-004**		**0.0102**	**0.0102**		**0.0102**	**0.0102**	**0.0000**	**36.7668**	**36.7668**	**2.2000e-003**	**0.0000**	**36.8218**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8100e-003	4.0500e-003	0.0431	1.3000e-004	0.0158	1.0000e-004	0.0159	4.1900e-003	9.0000e-005	4.2800e-003	0.0000	12.1562	12.1562	2.9000e-004	0.0000	12.1636
Total	**5.8100e-003**	**4.0500e-003**	**0.0431**	**1.3000e-004**	**0.0158**	**1.0000e-004**	**0.0159**	**4.1900e-003**	**9.0000e-005**	**4.2800e-003**	**0.0000**	**12.1562**	**12.1562**	**2.9000e-004**	**0.0000**	**12.1636**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4888	0.9064	6.5430	0.0198	2.2287	0.0144	2.2431	0.5926	0.0133	0.6059	0.0000	1,792.3959	1,792.3959	0.0642	0.0000	1,794.0016
Unmitigated	0.4888	0.9064	6.5430	0.0198	2.2287	0.0144	2.2431	0.5926	0.0133	0.6059	0.0000	1,792.3959	1,792.3959	0.0642	0.0000	1,794.0016

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,420.10	1,420.10	1420.10	5,634,377	5,634,377
City Park	0.00	0.00	0.00		
Condo/Townhouse	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Strip Mall	83.03	83.03	83.03	329,439	329,439
Total	1,503.13	1,503.13	1,503.13	5,963,816	5,963,816

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.90	10.90	10.90	40.00	20.00	40.00	100	0	0
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.00	20.00	40.00	100	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Strip Mall	10.90	10.90	10.90	16.60	64.40	19.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.600000	0.060000	0.190000	0.120000	0.015000	0.005000	0.000000	0.000000	0.000000	0.000000	0.010000	0.000000	0.000000
City Park	0.558745	0.035303	0.181800	0.111169	0.014289	0.004794	0.018611	0.065078	0.001365	0.001491	0.005725	0.000799	0.000830
Condo/Townhouse	0.600000	0.060000	0.190000	0.120000	0.015000	0.005000	0.000000	0.000000	0.000000	0.000000	0.010000	0.000000	0.000000
Enclosed Parking with Elevator	0.558745	0.035303	0.181800	0.111169	0.014289	0.004794	0.018611	0.065078	0.001365	0.001491	0.005725	0.000799	0.000830
General Office Building	0.558745	0.035303	0.181800	0.111169	0.014289	0.004794	0.018611	0.065078	0.001365	0.001491	0.005725	0.000799	0.000830
Parking Lot	0.558745	0.035303	0.181800	0.111169	0.014289	0.004794	0.018611	0.065078	0.001365	0.001491	0.005725	0.000799	0.000830
Recreational Swimming Pool	0.558745	0.035303	0.181800	0.111169	0.014289	0.004794	0.018611	0.065078	0.001365	0.001491	0.005725	0.000799	0.000830
Strip Mall	0.558745	0.035303	0.181800	0.111169	0.014289	0.004794	0.018611	0.065078	0.001365	0.001491	0.005725	0.000799	0.000830

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	399.8892	399.8892	0.0218	4.5100e-003	401.7783
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	464.9067	464.9067	0.0253	5.2400e-003	467.1028
NaturalGas Mitigated	0.0197	0.1682	0.0720	1.0700e-003		0.0136	0.0136		0.0136	0.0136	0.0000	194.6579	194.6579	3.7300e-003	3.5700e-003	195.8147
NaturalGas Unmitigated	0.0209	0.1788	0.0766	1.1400e-003		0.0145	0.0145		0.0145	0.0145	0.0000	206.9847	206.9847	3.9700e-003	3.7900e-003	208.2147

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.83167e+006	0.0207	0.1766	0.0751	1.1300e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.4723	204.4723	3.9200e-003	3.7500e-003	205.6874
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	22663.5	1.2000e-004	1.0400e-003	4.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.2094	1.2094	2.0000e-005	2.0000e-005	1.2166
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	17003	9.0000e-005	8.3000e-004	7.0000e-004	1.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.9073	0.9073	2.0000e-005	2.0000e-005	0.9127
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	7412.58	4.0000e-005	3.6000e-004	3.1000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3956	0.3956	1.0000e-005	1.0000e-005	0.3979
Total		**0.0209**	**0.1788**	**0.0766**	**1.1500e-003**		**0.0144**	**0.0144**		**0.0144**	**0.0144**	**0.0000**	**206.9846**	**206.9846**	**3.9700e-003**	**3.8000e-003**	**208.2147**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.60468e+006	0.0194	0.1661	0.0707	1.0600e-003		0.0134	0.0134		0.0134	0.0134	0.0000	192.3593	192.3593	3.6900e-003	3.5300e-003	193.5024
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	21000.2	1.1000e-004	9.7000e-004	4.1000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1207	1.1207	2.0000e-005	2.0000e-005	1.1273
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	15302.7	8.0000e-005	7.5000e-004	6.3000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8166	0.8166	2.0000e-005	1.0000e-005	0.8215
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	6771.49	4.0000e-005	3.3000e-004	2.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3614	0.3614	1.0000e-005	1.0000e-005	0.3635
Total		**0.0197**	**0.1682**	**0.0720**	**1.0700e-003**		**0.0136**	**0.0136**		**0.0136**	**0.0136**	**0.0000**	**194.6579**	**194.6579**	**3.7400e-003**	**3.5700e-003**	**195.8147**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.18304e+006	285.4693	0.0156	3.2200e-003	286.8178
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	5642.06	1.3614	7.0000e-005	2.0000e-005	1.3679
Enclosed Parking with Elevator	621160	149.8872	8.1700e-003	1.6900e-003	150.5952
General Office Building	46648	11.2563	6.1000e-004	1.3000e-004	11.3094
Parking Lot	28000	6.7565	3.7000e-004	8.0000e-005	6.7884
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	42171.6	10.1761	5.5000e-004	1.1000e-004	10.2242
Total		**464.9067**	**0.0253**	**5.2500e-003**	**467.1028**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.05873e+006	255.4736	0.0139	2.8800e-003	256.6805
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	5157.02	1.2444	7.0000e-005	1.0000e-005	1.2503
Enclosed Parking with Elevator	505408	121.9560	6.6500e-003	1.3800e-003	122.5321
General Office Building	37970.1	9.1623	5.0000e-004	1.0000e-004	9.2055
Parking Lot	16800	4.0539	2.2000e-004	5.0000e-005	4.0730
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	33149.6	7.9991	4.4000e-004	9.0000e-005	8.0369
Total		**399.8892**	**0.0218**	**4.5100e-003**	**401.7783**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0290	0.0309	2.6863	1.4000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	4.3917	4.3917	4.2300e-003	0.0000	4.4976
Unmitigated	1.0290	0.0309	2.6863	1.4000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	4.3917	4.3917	4.2300e-003	0.0000	4.4976

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	0.0763					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0812	0.0309	2.6863	1.4000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	4.3917	4.3917	4.2300e-003	0.0000	4.4976
Total	**1.0290**	**0.0309**	**2.6863**	**1.4000e-004**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**4.3917**	**4.3917**	**4.2300e-003**	**0.0000**	**4.4976**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0763					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0812	0.0309	2.6863	1.4000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	4.3917	4.3917	4.2300e-003	0.0000	4.4976
Total	**1.0290**	**0.0309**	**2.6863**	**1.4000e-004**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**4.3917**	**4.3917**	**4.2300e-003**	**0.0000**	**4.4976**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	82.9561	0.5559	0.0139	100.9950
Unmitigated	94.8465	0.6110	0.0153	114.6869

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.94 / 10.6796	87.2304	0.5565	0.0140	105.3009
City Park	0 / 0.393189	1.0541	6.0000e-005	1.0000e-005	1.0591
Condo/Townhouse	0.065154 / 0.0410754	0.3355	2.1400e-003	5.0000e-005	0.4050
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.35078 / 0	4.6727	0.0443	1.0900e-003	6.1028
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0 / 0.108747	0.2915	2.0000e-005	0.0000	0.2929
Strip Mall	0.247402 / 0.151634	1.2623	8.1300e-003	2.0000e-004	1.5262
Total		**94.8465**	**0.6111**	**0.0153**	**114.6869**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	15.4154 / 8.54368	76.2303	0.5062	0.0127	92.6596
City Park	0 / 0.314551	0.8433	5.0000e-005	1.0000e-005	0.8473
Condo/Townhouse	0.0592902 / 0.0328603	0.2932	1.9500e-003	5.0000e-005	0.3564
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.22921 / 0	4.2521	0.0403	9.9000e-004	5.5536
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0 / 0.0869977	0.2332	1.0000e-005	0.0000	0.2343
Strip Mall	0.225136 / 0.121307	1.1040	7.3900e-003	1.8000e-004	1.3439
Total		**82.9561**	**0.5559**	**0.0139**	**100.9950**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	25.0897	1.4828	0.0000	62.1586
Unmitigated	25.0897	1.4828	0.0000	62.1586

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	119.6	24.2777	1.4348	0.0000	60.1470
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
Condo/Townhouse	0.46	0.0934	5.5200e-003	0.0000	0.2313
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3.51	0.7125	0.0421	0.0000	1.7652
Total		**25.0897**	**1.4828**	**0.0000**	**62.1586**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	119.6	24.2777	1.4348	0.0000	60.1470
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
Condo/Townhouse	0.46	0.0934	5.5200e-003	0.0000	0.2313
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3.51	0.7125	0.0421	0.0000	1.7652
Total		**25.0897**	**1.4828**	**0.0000**	**62.1586**

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

Construction Activity Energy Calculations
Transportation Fuels Consumption

	Fuel Type	Emissions (MTCO2)	Emissions (kgCO2)	Conversion (kgCO2/gal)	Total Gallons	
Equipment	Diesel	1,666.1	1,666,070.4	10.21	**163,181**	**Diesel**
Hauling + Vendor	Diesel	718.0	717,992.2	10.21	**70,323**	**Diesel**
Worker	Gasoline	867.5	867,478.5	8.78	**98,802**	**Gasoline**
					233,504	**Diesel**

	CALEEMOD		Metric Tons	KG
Year	Phase	Source	CO2	CO2
2022	Demo	E	10.9785	10978.5
2022	Demo	H		0
2022	Demo	V		0
2022	Demo	W	2.1051	2105.1
2022	Grading - East Building	E	45.0454	45045.4
2022	Grading - East Building	H		0
2022	Grading - East Building	V		0
2022	Grading - East Building	W	4.2102	4210.2
2022	Trenching/Utilities - East Building	E	32.3671	32367.1
2022	Trenching/Utilities - East Building	H	105.4147	105414.7
2022	Trenching/Utilities - East Building	V		0
2022	Trenching/Utilities - East Building	W	4.2102	4210.2
2022	Construction - East Building	E	263.5841	263584.1
2022	Construction - East Building	H		0
2022	Construction - East Building	V	93.7047	93704.7
2022	Construction - East Building	W	163.1432	163143.2
2023	Construction - East Building	E	442.1536	442153.6
2023	Construction - East Building	H		0
2023	Construction - East Building	V	152.8593	152859.3
2023	Construction - East Building	W	263.384	263384
2024	Construction - East Building	E	59.5179	59517.9
2024	Construction - East Building	H		0
2024	Construction - East Building	V	20.5543	20554.3
2024	Construction - East Building	W	34.3054	34305.4
2022	Grading - West Building	E	33.7841	33784.1
2022	Grading - West Building	H		0
2022	Grading - West Building	V		0
2022	Grading - West Building	W	3.1576	3157.6
2022	Trenching/Utilities - West Building	E	16.1835	16183.5
2022	Trenching/Utilities - West Building	H	52.7073	52707.3
2022	Trenching/Utilities - West Building	V		0
2022	Trenching/Utilities - West Building	W	2.1051	2105.1
2022	Construction - West Building	E	21.5258	21525.8
2022	Construction - West Building	H		0
2022	Construction - West Building	V	9.0682	9068.2
2022	Construction - West Building	W	15.7881	15788.1
2023	Construction - West Building	E	372.9552	372955.2
2023	Construction - West Building	H		0
2023	Construction - West Building	V	152.8593	152859.3
2023	Construction - West Building	W	263.384	263384
2024	Construction - West Building	E	71.7185	71718.5
2024	Construction - West Building	H		0
2024	Construction - West Building	V	29.3632	29363.2
2024	Construction - West Building	W	49.0077	49007.7
2023	Paving - East Building	E	108.145	108145
2023	Paving - East Building	H		0
2023	Paving - East Building	V	52.9128	52912.8
2023	Paving - East Building	W	18.2343	18234.3
2023	Architectual Coatings - East	E	36.7688	36768.8
2023	Architectual Coatings - East	H		0
2023	Architectual Coatings - East	V		0

Construction Activity Energy Calculations
Transportation Fuels Consumption

2023	Architectual Coatings - East	W	12.1562	12156.2
2023	Paving - West Building	E	96.1288	96128.8
2023	Paving - West Building	H		0
2023	Paving - West Building	V	47.0336	47033.6
2023	Paving - West Building	W	16.2083	16208.3
2023	Architectual Coatings - West	E	36.7688	36768.8
2023	Architectual Coatings - West	H		0
2023	Architectual Coatings - West	V		0
2023	Architectual Coatings - West	W	12.1562	12156.2
2024	Bus Bay - Demo	E	3.6964	3696.4
2024	Bus Bay - Demo	H	0.7062	706.2
2024	Bus Bay - Demo	V		0
2024	Bus Bay - Demo	W	0.8173	817.3
2024	Bus Bay - Site Prep	E	5.4447	5444.7
2024	Bus Bay - Site Prep	H		0
2024	Bus Bay - Site Prep	V		0
2024	Bus Bay - Site Prep	W	1.6345	1634.5
2024	Bus Bay - Construction	E	7.8527	7852.7
2024	Bus Bay - Construction	H		0
2024	Bus Bay - Construction	V	0.7351	735.1
2024	Bus Bay - Construction	W	1.2259	1225.9
2024	Bus Bay - Paving	E	1.4515	1451.5
2024	Bus Bay - Paving	H		0
2024	Bus Bay - Paving	V	0.0735	73.5
2024	Bus Bay - Paving	W	0.2452	245.2

Alta Cuvee Bus Bay

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	471.24	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - SB 100 mandates 44% renewable by end of 2024.
SCE CO2 factor assumes 40% renewables when operations begin.
SCE 2019 power mix = 36% renewables

Land Use - Approximately 850 square feet + buffer.

Construction Phase - Schedule Provided

Off-road Equipment - Other material handling = concrete truck/pump.

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Off-road Equipment - Project Inventory

Trips and VMT - Modeling accounts for 1 haul load/day during demolition.
Assume 10 workers/day throughout.

Demolition -

Grading -

Energy Use -

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 Compliance

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	15.00
tblConstructionPhase	NumDays	5.00	3.00
tblConstructionPhase	NumDays	1.00	20.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	471.24
tblTripsAndVMT	HaulingTripNumber	2.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00

tblTripsAndVMT	WorkerTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00

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					
2024	0.0130	0.1034	0.1492	2.8000e-004	0.0134	4.2200e-003	0.0176	5.6800e-003	3.9700e-003	9.6400e-003	0.0000	23.7542	23.7542	5.1500e-003	0.0000	23.8830
Maximum	**0.0130**	**0.1034**	**0.1492**	**2.8000e-004**	**0.0134**	**4.2200e-003**	**0.0176**	**5.6800e-003**	**3.9700e-003**	**9.6400e-003**	**0.0000**	**23.7542**	**23.7542**	**5.1500e-003**	**0.0000**	**23.8830**

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					
2024	0.0130	0.1034	0.1492	2.8000e-004	8.6600e-003	4.2200e-003	0.0129	3.1300e-003	3.9700e-003	7.1000e-003	0.0000	23.7542	23.7542	5.1500e-003	0.0000	23.8830
Maximum	**0.0130**	**0.1034**	**0.1492**	**2.8000e-004**	**8.6600e-003**	**4.2200e-003**	**0.0129**	**3.1300e-003**	**3.9700e-003**	**7.1000e-003**	**0.0000**	**23.7542**	**23.7542**	**5.1500e-003**	**0.0000**	**23.8830**

	ROG	NOx	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**	**35.28**	**0.00**	**26.82**	**44.89**	**0.00**	**26.35**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-8-2024	4-7-2024	0.1034	0.1034
		Highest	0.1034	0.1034

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	8.0000e-005	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.0000e-005	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

	ROG	NOx	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**

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	1/8/2024	1/19/2024	5	10	
2	Site Preparation	Site Preparation	1/22/2024	2/16/2024	5	20	
3	Building Construction	Building Construction	2/19/2024	3/8/2024	5	15	
4	Paving	Paving	3/11/2024	3/13/2024	5	3	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.02

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

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	1	4.00	78	0.48
Demolition	Concrete/Industrial Saws	1	2.00	81	0.73
Demolition	Signal Boards	2	8.00	6	0.82
Demolition	Skid Steer Loaders	1	6.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Plate Compactors	1	4.00	8	0.43
Site Preparation	Rubber Tired Dozers	1	1.00	247	0.40
Site Preparation	Signal Boards	2	8.00	6	0.82
Site Preparation	Skid Steer Loaders	1	6.00	65	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Other Material Handling Equipment	1	6.00	168	0.40
Building Construction	Rough Terrain Forklifts	1	6.00	100	0.40
Building Construction	Signal Boards	2	8.00	6	0.82
Building Construction	Skid Steer Loaders	1	6.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Signal Boards	2	8.00	6	0.82
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	20.00	0.00	20.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1000e-004	0.0000	2.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3400e-003	0.0192	0.0272	4.0000e-005		8.3000e-004	8.3000e-004		8.0000e-004	8.0000e-004	0.0000	3.6794	3.6794	6.8000e-004	0.0000	3.6964
Total	**2.3400e-003**	**0.0192**	**0.0272**	**4.0000e-005**	**2.1000e-004**	**8.3000e-004**	**1.0400e-003**	**3.0000e-005**	**8.0000e-004**	**8.3000e-004**	**0.0000**	**3.6794**	**3.6794**	**6.8000e-004**	**0.0000**	**3.6964**

3.2 Demolition - 2024

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	4.0000e-005	1.4200e-003	3.2000e-004	1.0000e-005	1.7000e-004	0.0000	1.7000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.7053	0.7053	3.0000e-005	0.0000	0.7062
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.7900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8168	0.8168	2.0000e-005	0.0000	0.8173
Total	**4.2000e-004**	**1.6700e-003**	**3.1100e-003**	**2.0000e-005**	**1.2700e-003**	**1.0000e-005**	**1.2700e-003**	**3.4000e-004**	**1.0000e-005**	**3.5000e-004**	**0.0000**	**1.5221**	**1.5221**	**5.0000e-005**	**0.0000**	**1.5235**

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					8.0000e-005	0.0000	8.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3400e-003	0.0192	0.0272	4.0000e-005		8.3000e-004	8.3000e-004		8.0000e-004	8.0000e-004	0.0000	3.6794	3.6794	6.8000e-004	0.0000	3.6964
Total	**2.3400e-003**	**0.0192**	**0.0272**	**4.0000e-005**	**8.0000e-005**	**8.3000e-004**	**9.1000e-004**	**1.0000e-005**	**8.0000e-004**	**8.1000e-004**	**0.0000**	**3.6794**	**3.6794**	**6.8000e-004**	**0.0000**	**3.6964**

3.2 Demolition - 2024

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	4.0000e-005	1.4200e-003	3.2000e-004	1.0000e-005	1.7000e-004	0.0000	1.7000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.7053	0.7053	3.0000e-005	0.0000	0.7062
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.7900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8168	0.8168	2.0000e-005	0.0000	0.8173
Total	**4.2000e-004**	**1.6700e-003**	**3.1100e-003**	**2.0000e-005**	**1.2700e-003**	**1.0000e-005**	**1.2700e-003**	**3.4000e-004**	**1.0000e-005**	**3.5000e-004**	**0.0000**	**1.5221**	**1.5221**	**5.0000e-005**	**0.0000**	**1.5235**

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5300e-003	0.0000	7.5300e-003	4.1400e-003	0.0000	4.1400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7600e-003	0.0344	0.0381	7.0000e-005		1.4300e-003	1.4300e-003		1.3400e-003	1.3400e-003	0.0000	5.4067	5.4067	1.5200e-003	0.0000	5.4447
Total	**3.7600e-003**	**0.0344**	**0.0381**	**7.0000e-005**	**7.5300e-003**	**1.4300e-003**	**8.9600e-003**	**4.1400e-003**	**1.3400e-003**	**5.4800e-003**	**0.0000**	**5.4067**	**5.4067**	**1.5200e-003**	**0.0000**	**5.4447**

3.3 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	5.1000e-004	5.5800e-003	2.0000e-005	2.1900e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.6336	1.6336	4.0000e-005	0.0000	1.6345
Total	**7.6000e-004**	**5.1000e-004**	**5.5800e-003**	**2.0000e-005**	**2.1900e-003**	**1.0000e-005**	**2.2100e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.6336**	**1.6336**	**4.0000e-005**	**0.0000**	**1.6345**

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					2.9400e-003	0.0000	2.9400e-003	1.6100e-003	0.0000	1.6100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7600e-003	0.0344	0.0381	7.0000e-005		1.4300e-003	1.4300e-003		1.3400e-003	1.3400e-003	0.0000	5.4067	5.4067	1.5200e-003	0.0000	5.4447
Total	**3.7600e-003**	**0.0344**	**0.0381**	**7.0000e-005**	**2.9400e-003**	**1.4300e-003**	**4.3700e-003**	**1.6100e-003**	**1.3400e-003**	**2.9500e-003**	**0.0000**	**5.4067**	**5.4067**	**1.5200e-003**	**0.0000**	**5.4447**

3.3 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	5.1000e-004	5.5800e-003	2.0000e-005	2.1900e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.6336	1.6336	4.0000e-005	0.0000	1.6345
Total	**7.6000e-004**	**5.1000e-004**	**5.5800e-003**	**2.0000e-005**	**2.1900e-003**	**1.0000e-005**	**2.2100e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.6336**	**1.6336**	**4.0000e-005**	**0.0000**	**1.6345**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9900e-003	0.0367	0.0590	9.0000e-005		1.5500e-003	1.5500e-003		1.4400e-003	1.4400e-003	0.0000	7.7934	7.7934	2.3700e-003	0.0000	7.8528
Total	**3.9900e-003**	**0.0367**	**0.0590**	**9.0000e-005**		**1.5500e-003**	**1.5500e-003**		**1.4400e-003**	**1.4400e-003**	**0.0000**	**7.7934**	**7.7934**	**2.3700e-003**	**0.0000**	**7.8528**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.1400e-003	4.6000e-004	1.0000e-005	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.7341	0.7341	4.0000e-005	0.0000	0.7351
Worker	5.7000e-004	3.8000e-004	4.1800e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2252	1.2252	3.0000e-005	0.0000	1.2259
Total	**6.3000e-004**	**2.5200e-003**	**4.6400e-003**	**2.0000e-005**	**1.8300e-003**	**1.0000e-005**	**1.8400e-003**	**4.9000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.9593**	**1.9593**	**7.0000e-005**	**0.0000**	**1.9610**

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	3.9900e-003	0.0367	0.0590	9.0000e-005		1.5500e-003	1.5500e-003		1.4400e-003	1.4400e-003	0.0000	7.7934	7.7934	2.3700e-003	0.0000	7.8527
Total	**3.9900e-003**	**0.0367**	**0.0590**	**9.0000e-005**		**1.5500e-003**	**1.5500e-003**		**1.4400e-003**	**1.4400e-003**	**0.0000**	**7.7934**	**7.7934**	**2.3700e-003**	**0.0000**	**7.8527**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.1400e-003	4.6000e-004	1.0000e-005	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.7341	0.7341	4.0000e-005	0.0000	0.7351
Worker	5.7000e-004	3.8000e-004	4.1800e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2252	1.2252	3.0000e-005	0.0000	1.2259
Total	**6.3000e-004**	**2.5200e-003**	**4.6400e-003**	**2.0000e-005**	**1.8300e-003**	**1.0000e-005**	**1.8400e-003**	**4.9000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.9593**	**1.9593**	**7.0000e-005**	**0.0000**	**1.9610**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.3000e-004	8.0900e-003	0.0108	2.0000e-005		3.7000e-004	3.7000e-004		3.5000e-004	3.5000e-004	0.0000	1.4412	1.4412	4.1000e-004	0.0000	1.4515
Paving	3.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.6000e-004**	**8.0900e-003**	**0.0108**	**2.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.4412**	**1.4412**	**4.1000e-004**	**0.0000**	**1.4515**

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.1000e-004	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0734	0.0734	0.0000	0.0000	0.0735
Worker	1.1000e-004	8.0000e-005	8.4000e-004	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2450	0.2450	1.0000e-005	0.0000	0.2452
Total	**1.2000e-004**	**2.9000e-004**	**8.9000e-004**	**0.0000**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3185**	**0.3185**	**1.0000e-005**	**0.0000**	**0.3187**

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	9.3000e-004	8.0900e-003	0.0108	2.0000e-005		3.7000e-004	3.7000e-004		3.5000e-004	3.5000e-004	0.0000	1.4412	1.4412	4.1000e-004	0.0000	1.4515
Paving	3.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.6000e-004**	**8.0900e-003**	**0.0108**	**2.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.4412**	**1.4412**	**4.1000e-004**	**0.0000**	**1.4515**

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.1000e-004	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0734	0.0734	0.0000	0.0000	0.0735
Worker	1.1000e-004	8.0000e-005	8.4000e-004	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2450	0.2450	1.0000e-005	0.0000	0.2452
Total	**1.2000e-004**	**2.9000e-004**	**8.9000e-004**	**0.0000**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3185**	**0.3185**	**1.0000e-005**	**0.0000**	**0.3187**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.558745	0.035303	0.181800	0.111169	0.014289	0.004794	0.018611	0.065078	0.001365	0.001491	0.005725	0.000799	0.000830

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	8.0000e-005	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	8.0000e-005	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

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	1.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	**7.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

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	1.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	**7.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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