APPENDIX A

Air Quality/Greenhouse Gases Assessment

Audi Fletcher Jones Automotive Center Project

Air Quality & Greenhouse Gas Assessment

Costa Mesa, California

Prepared For:
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1.0 INTRODUCTION

This report documents the results of an assessment of both air quality and greenhouse gas emissions (GHG) completed for the Audi Fletcher Jones Automotive Center Project (Project), which includes the demolition of an existing retail use building in order to make way for the construction of a new vehicle dealership with automobile sales, service, display, and storage. This assessment was prepared using methodologies and assumptions recommended in the rules and regulations of the South Coast Air Quality Management District (SCAQMD). Regional and local existing conditions are presented, along with pertinent emissions standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutants and GHG emissions and to determine the level of impact the Project would have on the environment.

1.1 Project Location and Description

The Project site is located in the City of Costa Mesa (**Figure 1**). The site is approximately 5.14 acres and located on the south side of the juncture of State Route 55 (SR-55) and State Route 73 (SR-73) at 1275 Bristol Street, the previous site of the Costa Mesa Ganahl Lumber Facility. Surrounding land uses include the SR-73 and SR-55 interchange to the north, SR-73 to the east, commercial (storage facility, restaurant) and multi-family residential land uses to the south, and commercial (offices), single-family residential, and recreation (Santa Ana Country Club) land uses to the west (**Figure 2**). The Project site currently contains 55,540 square feet of building/shed area that accommodated the recently closed Ganahl Lumber Facility.

The site is designated as General Commercial in the City of Costa Mesa 2015-2035 General Plan. The General Commercial designation is intended to permit a wide range of commercial uses that serve both local and regional needs. According to the General Plan, General Commercial lands have exposure and access to major transportation routes since significant traffic can be generated. General Commercial areas are insulated from the most sensitive land uses either through buffers of less-sensitive uses or on-site design features. Appropriate uses include markets, drug stores, retail shops, financial institutions, service establishments, support office uses, smaller retail stores, theaters, restaurants, hotels and motels, and automobile sales and service establishments.

The Project proposes to demolish the existing 55,540 square feet of building space on the site and construct a 68,282-square foot automotive center, including a ground-up two (2)-story sales and service center for Audi. The 2-story auto dealership would include an auto display area, service garage with parking bays, and a sales/office and service operation area with a parked roof above the service operation. The sales/office spaces would consist of the following departments: Sales, Finance and Insurance, Delivery, Showroom, Service Write-up, and Administrative offices. The Proposed Project would include service spaces including 36 service bays, 1 alignment bay, a car wash area, employee facilities (lockers and breakroom), and a parts department. The Project proposes 343 parking spaces.

The Project proposes a 14-month construction time frame starting in September/October 2019 through November/December 2020.

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Map Date: 5/6/2019

Service Layer Credits: Sources: Esri, USGS, NOAA

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Figure 1. Project Vicinity

2017-011.002 Audi Fletcher Jones Automotive Center Project

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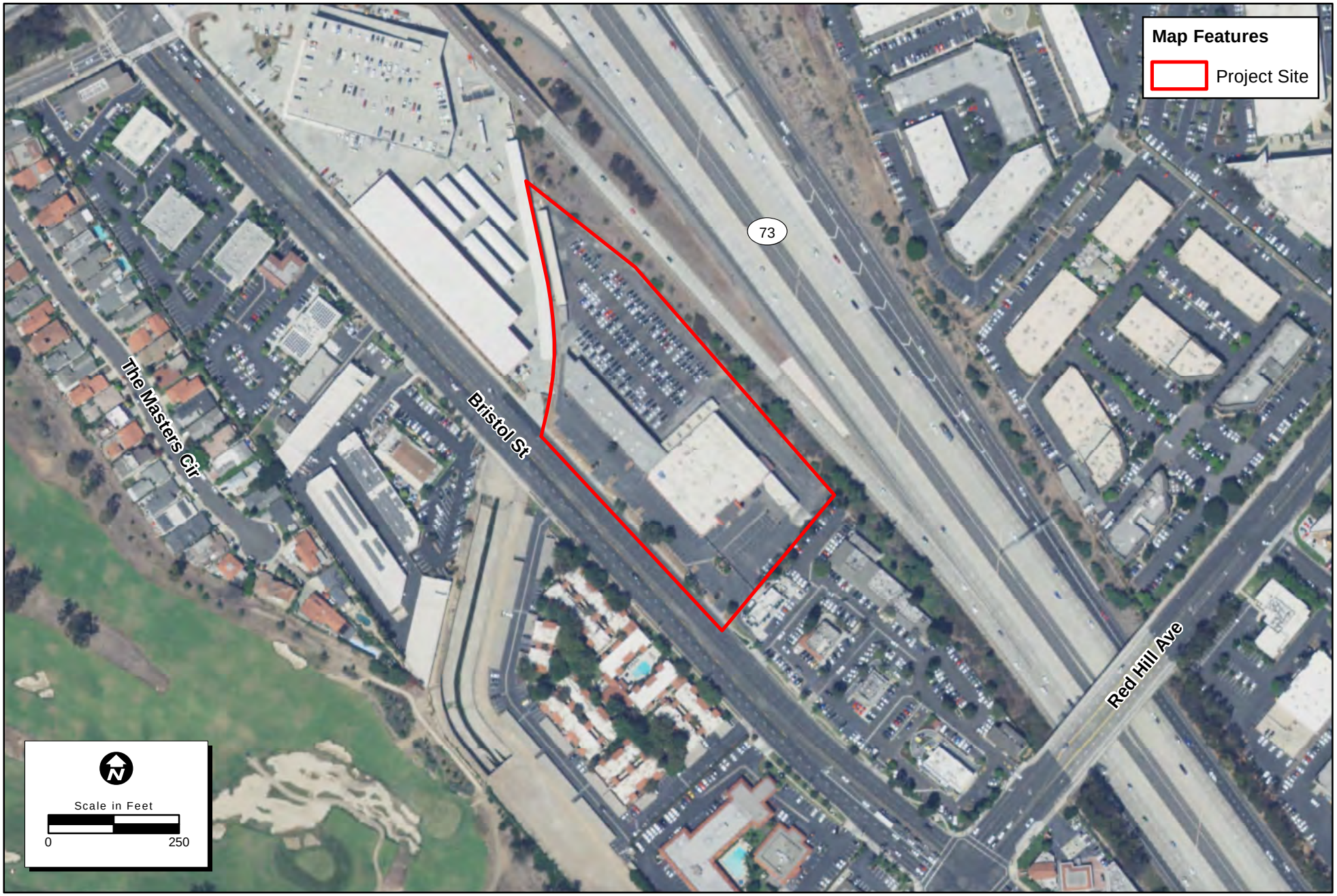

Map Date: 5/6/2019
Photo Source: 2018 NAIP

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Figure 2. Project Location

2017-011.002 Audi Fletcher Jones Automotive Center Project

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2.0 AIR QUALITY

2.1 Air Quality Setting

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the South Coast Air Basin (SoCAB), which encompasses the Project site, pursuant to the regulatory authority of the South Coast Air Quality Management District (SCAQMD).

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that reduce the potential for high levels of regional and local air pollutants. The following section describes the pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project area.

South Coast Air Basin

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The Project area lies in the SoCAB, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter (SCAQMD 1993).

Temperature and Precipitation

The air basin is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The annual average temperature varies little throughout the 6,645-square-mile SoCAB, ranging from the low 60s to the high 80s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas (SCAQMD 1993).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains.

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent, and low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 1993).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is higher during the dry summer months than during the rainy winter.

Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 1993).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in Riverside County (SCAQMD 1993).

Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O_3), coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in **Table 2-1**.

Table 2-1. Criteria Air Pollutants- Summary of Common Sources and Effects		
Pollutant	**Major Man-Made Sources**	**Human Health & Welfare Effects**
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO_2	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O_3	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (NOx) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM_{10} & $PM_{2.5}$	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO_2	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: CAPCOA 2013

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

Ambient Air Quality

Ambient air quality at the Project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains over 60 monitoring stations throughout California. O_3, PM_{10} and $PM_{2.5}$ are the pollutant species most potently affecting the Project region. The Mesa Verde Drive air quality monitoring station in Costa Mesa, located approximately 2.6 miles west of the development site, monitors ambient concentrations of O_3. The Pampas Lane air quality monitoring station in Anaheim, located approximately 11 miles north of the development site, monitors ambient concentrations of PM_{10} and $PM_{2.5}$. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered "generally" representative of ambient concentrations in the development area.

Table 2-2 summarizes the published data concerning O_3, $PM_{2.5}$, and PM_{10} since 2015 for each year that the monitoring data is provided.

Table 2-2. Summary of Ambient Air Quality Data

Pollutant Standards	2015	2016	2017
O_3 (Costa Mesa - Mesa Verde Drive Air Quality Monitoring Station)			
Max 1-hour concentration (ppm)	0.099	0.090	0.088
Max 8-hour concentration (ppm) (state/federal)	0.080 / 0.079	0.069 / 0.069	0.080 / 0.080
Number of days above 1-hour standard (state/federal)	1 / 0	0 / 0	0 / 0
Number of days above 8-hour standard (state/federal)	2 / 2	0 / 0	5 / 4
PM_{10} (Anaheim Pampas Lane Air Quality Monitoring Station)			
Max 24-hour concentration (µg/m3) (state/federal)	59.0 / 59.0	74.0 / 74.0	95.7 / 95.7
Number of days above 24-hour standard (state/federal)	12.1 / 0	18.4 / 0	32.8 / 0
$PM_{2.5}$ (Anaheim – Pampas Lane Air Quality Monitoring Station)			
Max 24-hour concentration (µg/m3) (state/federal)	53.8 / 45.8	45.5 / 44.4	56.2 / 53.9
Number of days above federal 24-hour standard	*	1.1	*

Source: CARB 2018
$\mu g/m^3$ = micrograms per cubic meter; ppm = parts per million
** = Insufficient data available*

The U.S. Environment Protection Agency (EPA) and CARB designate air basins or portions of air basins and counties as being in "attainment" or "nonattainment" for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O_3, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air

Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the SoCAB is included in **Table 2-3.**

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, PM_{10}, and $PM_{2.5}$ (CARB 2017a).

Table 2-3. Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified/Attainment

Source: CARB 2017a

2.2 Regulatory Framework

Federal

Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the EPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide is an air pollutant covered by the CAA; however, no NAAQS have been established for carbon dioxide.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The EPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. **Table 2-3** lists the federal attainment status of the SoCAB for the criteria pollutants.

State

California Clean Air Act

The California Clean Air Act (CCAA) allows states to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

California State Implementation Plan

The federal Clean Air Act (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the national ambient air quality standards revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the Clean Air Act. The EPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the EPA for approval and publication in the Federal Register. The *2016 Air Quality Management Plan* (2016 AQMP) is the SIP for the SoCAB. The 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air in the SoCAB and those portions of the Salton Sea Air Basin (SSAB) that are under SCAQMD's jurisdiction. The 2016 AQMP represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The most effective way to reduce air pollution impacts is to reduce emissions from mobile sources. The AQMP relies on a regional and multi-level partnership of governmental agencies at the federal, state, regional, and local level. These agencies (EPA, CARB, local governments, Southern California Association of Governments [SCAG] and the

SCAQMD) are the primary agencies that implement the AQMP programs. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's latest Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. The 2016 AQMP includes integrated strategies and measures to meet the NAAQS.

Local

South Coast Air Quality Management District

The SCAQMD is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties, including the Project site. The agency's primary responsibility is ensuring that the federal and state ambient air quality standards are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the Proposed Project:

- **Rule 201 & Rule 203 (Permit to Construct & Permit to Operate)** – Rule 201 requires a "Permit to Construct" prior to the installation of any equipment "the use of which may cause the issuance of air contaminants . . ." and Regulation II provides the requirements for the application for a Permit to Construct. Rule 203 similarly requires a Permit to Operate.
- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of 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. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.

    a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.

b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.

c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.

e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce reactive organic gas (ROG) emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.
- **Rule 1401** (**New Source Review of Toxic Air Contaminants**) – This rule requires new source review of any new, relocated, or modified permit units that emit TACs. The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.
- **Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities**) – This rule specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

2.3 Air Quality Emissions Impact Assessment

Thresholds of Significance

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would:

1) Conflict with or obstruct implementation of any applicable air quality plan.

2) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors).

3) Expose sensitive receptors to substantial pollutant concentrations.

4) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

SCAQMD Thresholds

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the Proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects such as that proposed, as shown in **Table 2-4.**

Table 2-4. SCAQMD Regional Significance Thresholds – Pounds per Day

Air Pollutant	Construction Activities	Operations
Reactive Organic Gas	75	55
Carbon Monoxide	550	550
Nitrogen Oxide	100	55
Sulfur Oxide	150	150
Coarse Particulate Matter	150	150
Fine Particulate Matter	55	55

Source: SCAQMD 1993 ($PM_{2.5}$ threshold adopted June 1, 2007)

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Localized Significance Thresholds

In addition to regional significance thresholds, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (off-site mobile source emissions are not included in the LST analysis protocol). LSTs represent the maximum emissions that can be generated at a Project site without expecting to cause or substantially contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb 5 acres or less on a single day. Costa Mesa, including the Project area, is located within SCAQMD SRA 18 (North Coastal Orange County). **Table 2-5** shows the LSTs for a 1-acre, 2-acre, and 5-acre project site in SRA 18 with sensitive receptors located within 25 meters of the Project site.

Table 2-5. Local Significance Thresholds (Construction / Operations)				
Project Size	Pollutant (pounds per day)			
	NO_2 Construction/ Operations	CO Construction/ Operations	PM_{10} Construction/ Operations	$PM_{2.5}$ Construction/ Operations
1 Acre	92 / 92	647 / 647	4 / 1	3 / 1
2 Acres	131 / 131	962 / 9621	7 / 2	5 / 2
5 Acres	197 / 197	1,711 / 1,711	14 / 4	9 / 2

Source: SCAQMD 2009

Toxic Air Contaminant Thresholds

The SCAQMD regulates levels of air toxics through a permitting process that covers both construction and operation. The SCAQMD has adopted Rule 1401 for both new and modified sources that use materials classified as air toxics. The SCAQMD CEQA Guidelines for permit processing consider the following types of projects significant:

- Any project involving the emission of a carcinogenic or toxic air contaminant identified in SCAQMD Rule 1401 that exceeds the maximum individual cancer risk of 10 in one million if the project is constructed with best available control strategy for toxics (T-BACT) using the procedures in SCAQMD Rule 1401.
- Any project that could accidentally release an acutely hazardous material or routinely release a toxic air contaminant posing an acute health hazard.
- Any project that could emit an air contaminant not currently regulated by a SCAQMD rule, but that is on the federal or state air toxics list.

Methodology

Air quality impacts were assessed in accordance with methodologies recommended by CARB and the SCAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using information provided by the Project applicant, such as the anticipated duration of construction, the specific construction equipment to be used including make and model, the anticipated amount of demolition debris to be hauled off site, and the amount of soil material that would need to be hauled off site. Operational air pollutant emissions were based on the Project site plans. Automobile trip rates and distances were calculated by the traffic engineering firm, KOA, which are included in the Traffic Impact Analysis prepared for the Project (KOA 2019).

Impact Analysis

PROJECT CONSTRUCTION-GENERATED CRITERIA AIR QUALITY EMISSIONS

Regional Construction Significance Analysis

Construction-generated emissions are temporary and short term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the Proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive particulate matter emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. Construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities.

Construction-generated emissions associated with the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. As previously described, construction is anticipated to last 14 months. Emissions modeling accounts for the demolition and hauling of 8,233 tons of debris, as well as the movement of 4,509 cubic yards of soil material, 1,759 of which would be hauled off site. See **Attachment A** for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in **Table 2-6**. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Table 2-6. Construction-Related Emissions (Regional Significance Analysis)						
Construction Year	**Pollutant (pounds per day)**					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Construction in 2019	4.70	46.71	82.71	0.15	6.15	3.54
Construction in 2020	54.11	76.09	67.91	0.15	6.57	3.57
SCAQMD Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

*Source: CalEEMod version 2016.3.2. Refer to **Attachment A** for Model Data Outputs.*

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.

Emission estimates account for equipment engine tier provided by Project Applicant.

Emissions estimates account for the site preparation and grading of 5.14 acres, movement of 4,509 cubic yards of soil material, 1,759 of which would be hauled off site, and demolition and hauling of 8,233 tons of building debris.

As shown in **Table 2-6**, emissions generated during Project construction would not exceed the SCAQMD's regional thresholds of significance.

Localized Construction Significance Analysis

The nearest sensitive receptor to the Project site is a multi-family residential building located 130 feet (±40 meters) to the west. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific level proposed projects.

For this Project, the appropriate SRA for the localized significance thresholds is the North Coastal Orange County source receptor area (SRA 18) as this source receptor area includes the Project site. The Proposed Project would disturb approximately 5 acres total during construction. As previously described, the SCAQMD has produced look-up tables for projects that disturb less than or equal to 5 acres daily. The entire Project site is just over 5 acres and thus Project construction can be expected to disturb less than 5 acres daily. Therefore, the LST threshold value for a 5.0-acre site from the LST lookup tables was employed. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The nearest sensitive receptor is approximately 40 meters away; thus, LSTs for receptors located at 25 meters were utilized in order to provide a conservative analysis.

The SCAQMD's methodology clearly states that "off-site mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis,

only emissions included in the CalEEMod "on-site" emissions outputs were considered. **Table 2-7** presents the results of localized emissions during Project demolition, site preparation, and grading. Site preparation and grading activities are anticipated to overlap with building construction and therefore building construction emissions are included.

Table 2-7. Construction-Related Emissions (Localized Significance Analysis)

Activity	Pollutant (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Project Demolition	16.89	37.54	1.78	0.78
Project Site Preparation & Building Construction	42.35	58.59	4.78	3.24
Project Site Grading & Building Construction	66.20	59.81	4.11	2.72
SCAQMD Localized Significance Threshold	*197*	*1,711*	*14*	*9*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**

*Source: CalEEMod version 2016.3.2. Refer to **Attachment A** for Model Data Outputs.*

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.

Emission estimates account for equipment engine tier provided by Project Applicant.

Emissions estimates account for the movement of 4,509 cubic yards of soil material, 1,759 of which would be hauled off site, and demolition and hauling of 8,233 tons of building debris.

Table 2-7 shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities.

PROJECT OPERATIONS CRITERIA AIR QUALITY EMISSIONS

Regional Operational Significance Analysis

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM_{10}, $PM_{2.5}$, CO, and SO_2 as well as ozone precursors such as ROG and NO_X. Project-generated increases in emissions would be predominantly associated with motor vehicle use.

Long-term operational emissions attributable to the Project are identified in **Table 2-8** and compared to the regional operational significance thresholds promulgated by the SCAQMD.

Table 2-8. Operational-Related Emissions (Regional Significance Analysis)						
Emission Source	**Pollutant (pounds per day)**					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer Emissions						
Area	1.20	0.00	0.04	0.00	0.00	0.00
Energy	0.03	0.28	0.24	0.00	0.02	0.02
Mobile	1.93	6.46	17.29	0.05	4.36	1.20
Total	**3.17**	**6.75**	**17.57**	**0.05**	**4.38**	**1.22**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions						
Area	1.20	0.00	0.04	0.00	0.00	0.00
Energy	0.03	0.28	0.24	0.00	0.02	0.02
Mobile	1.91	6.56	17.29	0.05	4.36	1.20
Total	**3.15**	**6.85**	**17.57**	**0.05**	**4.38**	**1.22**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

*Source: CalEEMod version 2016.3.2. Refer to **Attachment A** for Model Data Outputs.*

As shown in **Table 2-8**, the Project's emissions would not exceed any SCAQMD thresholds for any criteria air pollutants.

As identified in **Table 2-3**, the Basin is listed as a nonattainment area for federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, PM_{10}, and $PM_{2.5}$. O_3 is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. Particulate matter can adversely affect the human respiratory system. As shown in **Table 2-8**, the Proposed Project would result in increased emissions of the O_3 precursor pollutants ROG and NO_x, PM_{10}, and $PM_{2.5}$, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the air basin is contained in the SCAQMD 2016 AQMP. The AQMP provides control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development

and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SCAQMD are designed to meet the objectives of the AQMP and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SCAQMD for purposes of reducing air pollution and its deleterious health effects.

Localized Operational Significance Analysis

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operations of a proposed project only if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Proposed Project does not include such uses. Therefore, in the case of the Proposed Project, the operational LST protocol is not applied.

CONFLICT WITH THE 2016 AIR QUALITY MANAGEMENT PLAN

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the California Clean Air Act requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the Project site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 Air Quality Management Plan. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, SCAG, and the US EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The Project is subject to the SCAQMD's Air Quality Management Plan.

According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning two main criteria must be addressed.

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) *Would the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?*

As shown in **Table 2-6**, **Table 2-7**, and **Table 2-8**, the Proposed Project would result in emissions that would be below the SCAQMD regional and localized thresholds during both construction and operations. Therefore, the Proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

b) *Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?*

As shown in **Table 2-6** and **Table 2-8** the Proposed Project would be below the SCAQMD regional thresholds for construction and operations. Because the Project would result in less than significant regional emission impacts, it would not delay the timely attainment of air quality standards or AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining Project consistency focuses on whether or not the Proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) *Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP?*

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in Costa Mesa. Specifically, SCAG's *Growth Management* Chapter of the *Regional Comprehensive Plan and Guide* (*RCPG*) provides regional population forecasts for the region and SCAG's *2016 Regional Transportation Plan/Sustainable Communities Strategy* (*RTP/SCS*) provides socioeconomic forecast projections of regional population growth. The Costa Mesa 2015-2035 General Plan is referenced by SCAG in order to assist forecasting future growth in Costa Mesa.

The Proposed Project is consistent with the land use designation and development density presented in the Costa Mesa 2015-2035 General Plan. The Project site is designated by the Costa Mesa 2015-2035 General Plan as "General Commercial". The General Commercial designation is intended to permit a wide range of commercial uses that serve both local and regional needs. According to the General Plan, General Commercial lands have exposure and access to major transportation routes since significant traffic can be generated. Appropriate uses include markets, drug stores, retail shops, financial institutions, service establishments, support office uses, smaller retail stores, theaters, restaurants, hotels and motels, and automobile sales and service establishments. Thus, the Project proposal to develop an automotive sales and service center is consistent with the 2015-2035 General Plan. Further, the Project does not involve any uses that would increase population beyond what is considered in the General Plan and, therefore, would not affect City-wide plans for population growth at the Project site. Thus, the Proposed Project is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan and RCPG. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by SCAQMD to develop the 2016 AQMP. The City's population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City; and these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the Proposed Project would be consistent with the projections. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) Therefore, the Proposed Project would be considered consistent with the population, housing, and employment growth projections utilized in the preparation of SCAQMD's air quality plans.

b) Would the project implement all feasible air quality mitigation measures?

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, 1113, and 1403. SCAQMD Rule 402 prohibits the discharge from any source whatsoever such quantities of 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. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD Rule 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. As such, the proposed Project meets this consistency criterion. Rule 1403 specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The Proposed Project is consistent with the land use designation and development density presented in the City's General Plan and therefore would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. The Proposed Project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards. The Proposed Project's long-term influence would also be consistent with the goals and policies of the SCAQMD's 2016 AQMP.

EXPOSURE OF SENSITIVE RECEPTORS TO TOXIC AIR CONTAMINANTS

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Project-generated emissions of diesel particulate matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; application of architectural coatings; and other miscellaneous activities. For construction activity, DPM is the primary TAC of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Accordingly, DPM is the focus of this discussion.

Based on the emission modeling conducted, the maximum construction-related annual emissions of $PM_{2.5}$ exhaust, considered a surrogate for DPM, would be 1.94 pounds per day during construction in the year 2019 and 2.79 pounds per day during construction activity occurring in 2020 (see **Attachment A**). ($PM_{2.5}$ is considered a surrogate for DPM because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., $PM_{2.5}$), according to CARB. Most $PM_{2.5}$ derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) Furthermore, even during the most intense month of construction, emissions of DPM would be generated from different locations on the Project site, rather than a single location, because

different types of construction activities (e.g., demolition, site preparation, building construction) would not occur at the same place at the same time.

The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-, 30-, or 9-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Proposed Project. Consequently, an important consideration is the fact that construction of the Proposed Project is anticipated to last approximately 14 months, which is far less than the minimum duration of exposure from which to calculate health risk (9 years), and that on a day-to-day basis construction activity generally spans eight hours as opposed to throughout the entire day.

Therefore, considering the relatively low mass of DPM emissions that would be generated during even the most intense season of construction and the relatively short duration of construction activities (14 months) required to develop the site, construction-related TAC emissions would not expose sensitive receptors to substantial amounts of air toxics.

Furthermore, the Project has been evaluated against the SCAQMD's LSTs for construction. As previously stated, LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4) and can be used to assist lead agencies in analyzing localized impacts associated with Project-specific level of proposed projects. As shown in **Table 2-7,** the emissions of pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors.

Operational Air Contaminants

The Proposed Project involves the construction of an automotive sales and service center. According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project only if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Proposed Project does not include such uses. Therefore, in the case of the Proposed Project, the operational phase LST protocol does not need to be applied.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of

high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Project vicinity have steadily declined.

Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. The analysis prepared for CO attainment in the South Coast Air Quality Management District *1992 Federal Attainment Plan for Carbon Monoxide* (1992 CO Plan) in Los Angeles County can be used to demonstrate the potential for CO exceedances. The SCAQMD CO hot spot analysis was conducted for four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the level of service in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be level of service (LOS) E at peak morning traffic and LOS F at peak afternoon traffic (LOS E and F are the two least efficient traffic LOS ratings). Even with the inefficient LOS and volume of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992).

According to the Traffic Impact Analysis prepared by KOA (2019), the Project is anticipated to generate 1,517 trips per day on average. Because the Proposed Project would not increase traffic volumes at any intersection to more than 100,000 vehicles per day, there is no likelihood of the Project traffic exceeding CO values.

ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor

fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

According to the SCAQMD, land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses identified by the SCAQMD as being associated with odors. No odor-related impact would occur.

CUMULATIVE AIR QUALITY IMPACTS

The cumulative setting for air quality includes Orange County and the SoCAB. The SoCAB is designated as a nonattainment area for state standards of O_3, PM_{10}, and $PM_{2.5}$. The region is also designated as a nonattainment area for federal standards of O_3 and $PM_{2.5}$ (CARB 2017a). Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, the setting for this cumulative analysis consists of the SoCAB and associated growth and development anticipated in the air basin.

The SCAQMD's approach to assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. As discussed earlier, the Proposed Project would be consistent with the 2016 AQMP, which is intended to bring the SoCAB into attainment for all criteria pollutants. In addition, the SCAQMD recommends that any given project's potential contribution to cumulative impacts be assessed using the same significance criteria as for project-specific impacts. Therefore, individual projects that do not generate operational or construction emissions that exceed the SCAQMD's daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the air basin is in nonattainment and therefore would not be considered to have a significant, adverse air quality impact. Alternatively, individual Project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. As previously noted, the Project will not exceed the applicable SCAQMD regional thresholds for construction or operational-source emissions.

3.0 GREENHOUSE GAS EMISSIONS

3.1 Greenhouse Gas Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (IPCC 2014).

Table 3-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps over 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2 (IPCC 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weight each gas by its global warming potential (GWP). Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO_2 emissions, approximately 55 percent is sequestered through ocean and land uptakes every

year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remains stored in the atmosphere (IPCC 2013).

Table 3-1. Greenhouse Gases

Greenhouse Gas	Description
CO_2	Carbon dioxide is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.[1]
CH_4	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about12 years.[2]
N_2O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.[3]

Sources: [1] EPA 2016a, [2] EPA 2016b, [3] EPA 2016c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; suffice it to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

Sources of Greenhouse Gas Emissions

In June 2017, CARB released the 2017 edition of the California GHG inventory covering calendar year 2015 emissions. In 2015, California emitted 440.4 million gross metric tons of CO_2e including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2015, accounting for approximately 37 percent of total GHG emissions in the state. This sector was followed by the industrial sector (21 percent) and the electric power sector (including both in-state and out-of-state sources) (19 percent) (CARB 2017b).

Emissions of CO_2 are by-products of fossil fuel combustion. CH_4, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. N_2O is also largely attributable to agricultural practices and soil management. Carbon dioxide sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution (CO_2 dissolving into the water), respectively, two of the most common processes for removing carbon dioxide from the atmosphere.

3.2 Regulatory Framework

State

Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the executive order established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

While dated, this executive order remains relevant because a more recent California Appellate Court decision, *Cleveland National Forest Foundation v. San Diego Association of Governments* (November 24, 2014) 231 Cal.App.4th 1056, examined whether it should be viewed as having the equivalent force of a legislative mandate for specific emissions reductions. While the California Supreme Court ruled that the San Diego Association of Governments did not abuse its discretion by declining "to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal, the decision also recognized that the goal of a 40 percent reduction in 1990 GHG levels by 2030 is "widely acknowledged" as a "necessary interim target to ensure that California meets its longer-range goal of reducing greenhouse gas emissions 80 percent below 1990 levels by the year 2050.

Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed Assembly Bill 32 (Health and Safety Code §38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. CARB has identified a GHG reduction target of 15 percent from current levels for local governments and notes that successful implementation relies on local governments' land use planning and urban growth decisions.

Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which was re-approved by CARB on August 24, 2011, that outlines measures to meet the 2020 GHG reduction goals. To meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. The Scoping Plan recommends measures for further study and possible State implementation, such as new fuel regulations. It estimates that a reduction of 174 million metric tons of CO_2e (about 191 million U.S. tons) from the transportation, energy, agriculture, and forestry sectors and other sources could be achieved should the State implement all of the measures in the Scoping Plan.

The Scoping Plan is required by AB 32 to be updated at least every five years. The first update to the AB 32 Scoping Plan was approved on May 22, 2014 by CARB. The 2017 Scoping Plan Update was adopted on December 14, 2017. The Scoping Plan Update addresses the 2030 target established by Senate Bill 32 (SB

32) as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include: increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

Executive Order B-30-15

On April 20, 2015 Governor Brown signed Executive Order B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently-owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California.

In October 2015, SB 350 was signed by Governor Brown, which requires retail sellers and publicly-owned utilities to procure 50 percent of their electricity from renewable resources by 2030. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 RPS.

Local

South Coast Air Quality Management District

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff is convening an ongoing GHG CEQA Significance Threshold Working Group. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. On October 8, 2008, the SCAQMD released the Draft AQMD Staff CEQA GHG Significance Thresholds. These thresholds have not been finalized and continue to be developed through the working group.

On September 28, 2010, SCAQMD Working Group Meeting #15 provided further guidance, including an interim screening level numeric "bright-line" threshold of 3,000 metric tons of CO2e annually and an efficiency-based threshold of 4.8 metric tons of CO_2e per service population (defined as the people that work, study, live, patronize and/or congregate on the Project site) per year in 2020 and 3.0 metric tons of CO_2e per service population per year in 2035. The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the governing board. The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG reductions; however, these rules are currently applicable only to boilers and process heaters, forestry, and manure management projects.

Southern California Association of Governments

On April 7, 2016, the SCAG Regional Council adopted the *2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy* (2016 RTP/SCS). The 2016 RTP/SCS charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

3.3 Greenhouse Gas Emissions Impact Assessment

Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to greenhouse gas emissions if it would:

1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Thresholds

On September 28, 2010, the SCAQMD recommended an interim screening level numeric, bright-line threshold of 3,000 metric tons of CO_2e annually and an efficiency-based threshold of 4.8 metric tons of CO_2e per service population (Project employees + patrons + residents) per year in 2020 and 3.0 metric tons of CO_2e per service population per year in 2035. These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. The working group was formed to assist the SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the state Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the basin, industry groups, and environmental and professional organizations. The numeric bright line and efficiency-based thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provide guidance to CEQA practitioners and lead agencies with regard to determining whether GHG emissions from a proposed project are significant.

For the purposes of this evaluation, the Proposed Project will first be compared to the SCAQMD interim screening level numeric bright-line threshold of 3,000 metric tons of CO_2e annually. If it is determined that the Proposed Project is estimated to exceed this screening threshold, it will then be compared to the SCAQMD-recommended efficiency-based threshold of 4.8 metric tons of CO_2e per service population per year in 2020, and 3.0 metric tons of CO_2e per service population per year in 2035.

Methodology

GHG impacts were assessed in accordance with methodologies recommended by CARB and the SCAQMD. Where quantification was required, GHG emissions were modeled using CalEEMod, version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using information provided by the Project applicant, such as the anticipated duration of construction, the specific construction equipment to be used including make and model, the anticipated amount of demolition debris to be hauled off site, and the amount of soil material that would need to be hauled off site. Operational air pollutant emissions were based on the Project site plans. Automobile trip rates and distances were calculated by the traffic engineering firm, KOA, which are included in the Traffic Impact Analysis prepared for the Project (KOA 2019).

Impact Analysis

CONTRIBUTION OF GREENHOUSE GAS EMISSIONS

Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Construction-generated emissions associated with the Proposed

Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. As previously described, construction is anticipated to last 14 months. Emissions modeling accounts for the demolition and hauling of 8,233 tons of debris, as well as the movement of 4,509 cubic yards of soil material, 1,759 of which would be hauled off site. See **Attachment B** for more information regarding the construction assumptions, including construction equipment and duration used in this analysis.

Table 3-2 illustrates the specific construction-generated GHG emissions that would result from construction of the Project.

Table 3-2. Construction-Related Greenhouse Gas Emissions

Emissions Source	CO_2e (Metric Tons/ Year)
Construction in 2019	352
Construction in 2020	897
Total	**1,249**

*Source: CalEEMod version 2016.3.2. Refer to **Attachment B** for Model Data Outputs.*

Notes: Emission estimates account for equipment engine tier provided by Project Applicant.
Emissions estimates account for the site preparation and grading of 5.14 acres, movement of 4,509 cubic yards of soil material, 1,759 of which would be hauled off site, and demolition and hauling of 8,233 tons of building debris.

As shown in **Table 3-2**, Project construction would result in the generation of approximately 1,249 metric tons of CO_2e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. The amortized construction emissions are added to the annual average operational emissions (see **Table 3-3**).

Operations

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. Long-term operational GHG emissions attributable to the Project are identified in **Table 3-3** and compared to SCAQMD's interim screening level numeric bright-line threshold of 3,000 metric tons of CO_2e annually.

Table 3-3. Operational-Related Greenhouse Gas Emissions	
Emissions Source	**CO_2e (Metric Tons/ Year)**
Construction Emissions (amortized over the 30-year life of the Project)	42
Area Source Emissions	0
Energy Source Emissions	168
Mobile Source Emissions	862
Solid Waste Emissions	99
Water Emissions	28
Total Emissions	**1,199**
SCAQMD Screening Threshold	*3,000*
Exceed SCAQMD Threshold?	**No**

*Source: CalEEMod version 2016.3.2. Refer to **Attachment B** for Model Data Outputs.*

As shown in **Table 3-3**, operational-generated emissions would not exceed the SCAQMD's interim screening level numeric bright-line threshold of 3,000 metric tons of CO_2e annually. SCAQMD thresholds were developed based on substantial evidence that such thresholds represent quantitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions will normally not be cumulatively considerable under CEQA. These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. The working group was formed to assist the SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the state OPR, CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the basin, industry groups, and environmental and professional organizations.

CONFLICT WITH ANY APPLICABLE PLAN, POLICY, OR REGULATION OF AN AGENCY ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES

The City of Costa Mesa does not promulgate an adopted GHG-reduction plan. However, State policies and standards adopted for the purpose of reducing GHG emissions include Executive Order (EO) S-3-05, AB 32, and SB 375. The quantitative goal of these regulations is to reduce GHG emissions to 1990 levels by 2020, to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Statewide plans and regulations (such as GHG emissions standards for vehicles, the Low Carbon Fuel Standard, Cap-and-Trade, and renewable energy) are being implemented at the statewide level, and compliance at a project level is not addressed. Therefore, the Proposed Project does not conflict with these plans and regulations. Additional State regulations, plans, and polices adopted for the purpose of reducing GHG emissions that are directly applicable to the Proposed Project include California Title 24 Energy Efficiency Standards for Nonresidential Buildings and the Title 24 California Green Building Standards Code (CALGreen Code). New construction associated with the Proposed Project would be executed in compliance with the requirements of these regulations, thereby supporting and not conflicting with these

regulations. The Proposed Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases.

CUMULATIVE GHG IMPACTS

Climate change is a global problem. And GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe.

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the Proposed Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As previously discussed, the Proposed Project would not exceed the SCAQMD significance threshold. Therefore, the Project's cumulative contribution of GHG emissions would be less than significant and the Project's cumulative GHG impacts would also be less than cumulatively considerable.

4.0 REFERENCES

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ATTACHMENT A

CalEEMod Output Files – Criteria Air Pollutants

Audi Fletcher Jones

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	51.30	1000sqft	1.18	51,299.00	0
Parking Lot	343.00	Space	3.96	137,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	502.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SCE CO2 Intensity Factor

Land Use - Site = 5.14 acres

Construction Phase - Construction schedule per Project Applicant

Off-road Equipment - Equipment per Project applicant

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Grading -

Demolition -

Trips and VMT - 60 On-Highway trucks

Vehicle Trips - Trip generation per Traffic Impact Analysis

Construction Off-road Equipment Mitigation - Engine Tier per Equipment list provided by applicant. SCAQMD Rule 403

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstructionPhase	NumDays	230.00	274.00
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	118.00
tblConstructionPhase	PhaseEndDate	8/5/2020	12/23/2020
tblConstructionPhase	PhaseEndDate	6/10/2020	12/18/2020
tblConstructionPhase	PhaseEndDate	6/12/2019	11/22/2019
tblConstructionPhase	PhaseEndDate	7/24/2019	6/2/2020
tblConstructionPhase	PhaseEndDate	7/8/2020	10/23/2020
tblConstructionPhase	PhaseEndDate	6/26/2019	5/5/2020
tblConstructionPhase	PhaseStartDate	7/9/2020	12/10/2020
tblConstructionPhase	PhaseStartDate	7/25/2019	12/3/2019
tblConstructionPhase	PhaseStartDate	5/16/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	6/27/2019	5/6/2020
tblConstructionPhase	PhaseStartDate	6/11/2020	10/11/2020

Audi Fletcher Jones - Orange County, Summer

tblConstructionPhase	PhaseStartDate	6/13/2019	11/22/2019
tblGrading	MaterialExported	0.00	1,759.00
tblLandUse	LotAcreage	3.09	3.96
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.43	0.43
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tblOffRoadEquipment	LoadFactor	0.36	0.36
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tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.30	0.30
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders

tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	502.65
tblTripsAndVMT	VendorTripNumber	0.00	60.00
tblTripsAndVMT	WorkerTripNumber	33.00	23.00
tblTripsAndVMT	WorkerTripNumber	33.00	74.00
tblVehicleTrips	ST_TR	23.72	29.57
tblVehicleTrips	SU_TR	11.88	29.57
tblVehicleTrips	WD_TR	23.72	29.57

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	11.5379	113.6369	78.3875	0.1566	11.0168	5.5700	16.5868	4.1345	5.2970	9.4315	0.0000	15,418.2110	15,418.2110	3.1750	0.0000	15,497.5866
2020	54.3259	95.9680	63.9316	0.1538	8.4850	3.9381	12.2636	3.8011	3.6633	7.3744	0.0000	15,152.7708	15,152.7708	3.3850	0.0000	15,237.3946
Maximum	**54.3259**	**113.6369**	**78.3875**	**0.1566**	**11.0168**	**5.5700**	**16.5868**	**4.1345**	**5.2970**	**9.4315**	**0.0000**	**15,418.2110**	**15,418.2110**	**3.3850**	**0.0000**	**15,497.5866**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.7031	46.7174	82.3934	0.1566	4.5655	2.0566	6.1556	1.6909	1.9417	3.5478	0.0000	15,418.2110	15,418.2110	3.1750	0.0000	15,497.5866
2020	54.1155	76.0964	67.9105	0.1538	3.6898	2.9419	6.5746	1.5955	2.7939	3.5774	0.0000	15,152.7708	15,152.7708	3.3850	0.0000	15,237.3945
Maximum	**54.1155**	**76.0964**	**82.3934**	**0.1566**	**4.5655**	**2.9419**	**6.5746**	**1.6909**	**2.7939**	**3.5774**	**0.0000**	**15,418.2110**	**15,418.2110**	**3.3850**	**0.0000**	**15,497.5866**

	ROG	NOx	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	**10.70**	**41.41**	**-5.61**	**0.00**	**57.67**	**47.43**	**55.88**	**58.59**	**47.15**	**57.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2089	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921
Energy	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294
Mobile	1.9352	6.4634	17.2941	0.0531	4.3099	0.0543	4.3642	1.1525	0.0509	1.2034		5,389.3092	5,389.3092	0.2571		5,395.7370
Total	**3.1758**	**6.7518**	**17.5766**	**0.0548**	**4.3099**	**0.0763**	**4.3863**	**1.1525**	**0.0729**	**1.2254**		**5,734.9714**	**5,734.9714**	**0.2640**	**6.3400e-003**	**5,743.4585**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2089	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921
Energy	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294
Mobile	1.9352	6.4634	17.2941	0.0531	4.3099	0.0543	4.3642	1.1525	0.0509	1.2034		5,389.3092	5,389.3092	0.2571		5,395.7370
Total	**3.1758**	**6.7518**	**17.5766**	**0.0548**	**4.3099**	**0.0763**	**4.3863**	**1.1525**	**0.0729**	**1.2254**		**5,734.9714**	**5,734.9714**	**0.2640**	**6.3400e-003**	**5,743.4585**

	ROG	NOx	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	9/1/2019	11/22/2019	5	60	
2	Site Preparation	Site Preparation	11/22/2019	5/5/2020	5	118	
3	Building Construction	Building Construction	12/3/2019	12/18/2020	5	274	
4	Grading	Grading	5/6/2020	6/2/2020	5	20	
5	Paving	Paving	10/11/2020	10/23/2020	5	10	
6	Architectural Coating	Architectural Coating	12/10/2020	12/23/2020	5	10	

Acres of Grading (Site Preparation Phase): 118

Acres of Grading (Grading Phase): 60

Acres of Paving: 3.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 76,949; Non-Residential Outdoor: 25,650; Striped Parking Area: 8,232 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	2	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38

Grading	Cranes	3	7.00	231	0.29
Grading	Forklifts	0	8.00	89	0.20
Grading	Generator Sets	0	8.00	84	0.74
Paving	Pavers	0	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Welders	0	8.00	46	0.45
Demolition	Crawler Tractors	2	8.00	212	0.43
Demolition	Crushing/Proc. Equipment	3	8.00	85	0.78
Demolition	Skid Steer Loaders	2	8.00	65	0.37
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Crawler Tractors	2	8.00	212	0.43
Site Preparation	Crushing/Proc. Equipment	3	8.00	85	0.78
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Other Construction Equipment	1	8.00	172	0.42
Site Preparation	Skid Steer Loaders	2	8.00	65	0.37
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Scrapers	2	8.00	367	0.48
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Rollers	1	8.00	80	0.38

Grading	Crawler Tractors	1	8.00	212	0.43
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Other Construction Equipment	1	8.00	172	0.42
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Surfacing Equipment	1	6.00	263	0.30
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	11	28.00	0.00	814.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	12	30.00	0.00	220.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	74.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	74.00	31.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9363	0.0000	2.9363	0.4446	0.0000	0.4446			0.0000			0.0000
Off-Road	5.3244	51.6465	35.5430	0.0659		2.6263	2.6263		2.5022	2.5022		6,411.7296	6,411.7296	1.4134		6,447.0651
Total	**5.3244**	**51.6465**	**35.5430**	**0.0659**	**2.9363**	**2.6263**	**5.5626**	**0.4446**	**2.5022**	**2.9468**		**6,411.7296**	**6,411.7296**	**1.4134**		**6,447.0651**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1128	4.0214	0.9641	0.0105	0.2362	0.0154	0.2517	0.0647	0.0148	0.0794		1,170.2235	1,170.2235	0.1222		1,173.2776
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
Worker	0.1154	0.0757	0.9989	3.1600e-003	0.3130	2.0900e-003	0.3151	0.0830	1.9300e-003	0.0849		315.3193	315.3193	7.7500e-003		315.5131
Total	**0.2282**	**4.0970**	**1.9629**	**0.0137**	**0.5492**	**0.0175**	**0.5667**	**0.1477**	**0.0167**	**0.1644**		**1,485.5428**	**1,485.5428**	**0.1299**		**1,488.7907**

3.2 Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1452	0.0000	1.1452	0.1734	0.0000	0.1734			0.0000			0.0000
Off-Road	1.4759	16.9879	37.5427	0.0659		0.6369	0.6369		0.6081	0.6081	0.0000	6,411.7296	6,411.7296	1.4134		6,447.0651
Total	**1.4759**	**16.9879**	**37.5427**	**0.0659**	**1.1452**	**0.6369**	**1.7821**	**0.1734**	**0.6081**	**0.7815**	**0.0000**	**6,411.7296**	**6,411.7296**	**1.4134**		**6,447.0651**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1128	4.0214	0.9641	0.0105	0.1645	0.0154	0.1799	0.0471	0.0148	0.0618		1,170.2235	1,170.2235	0.1222		1,173.2776
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
Worker	0.1154	0.0757	0.9989	3.1600e-003	0.2041	2.0900e-003	0.2062	0.0563	1.9300e-003	0.0582		315.3193	315.3193	7.7500e-003		315.5131
Total	**0.2282**	**4.0970**	**1.9629**	**0.0137**	**0.3686**	**0.0175**	**0.3862**	**0.1034**	**0.0167**	**0.1200**		**1,485.5428**	**1,485.5428**	**0.1299**		**1,488.7907**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0843	0.0000	7.0843	3.4250	0.0000	3.4250			0.0000			0.0000
Off-Road	5.8462	57.2597	39.6789	0.0721		2.9218	2.9218		2.7740	2.7740		7,022.2779	7,022.2779	1.6066		7,062.4427
Total	**5.8462**	**57.2597**	**39.6789**	**0.0721**	**7.0843**	**2.9218**	**10.0061**	**3.4250**	**2.7740**	**6.1990**		**7,022.2779**	**7,022.2779**	**1.6066**		**7,062.4427**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0155	0.5526	0.1325	1.4500e-003	0.1117	2.1200e-003	0.1138	0.0283	2.0300e-003	0.0304		160.8186	160.8186	0.0168		161.2383
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
Worker	0.1236	0.0811	1.0702	3.3900e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		337.8421	337.8421	8.3100e-003		338.0497
Total	**0.1391**	**0.6337**	**1.2027**	**4.8400e-003**	**0.4470**	**4.3600e-003**	**0.4514**	**0.1173**	**4.0900e-003**	**0.1214**		**498.6607**	**498.6607**	**0.0251**		**499.2881**

3.3 Site Preparation - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7629	0.0000	2.7629	1.3358	0.0000	1.3358			0.0000			0.0000
Off-Road	1.9958	22.5770	41.6851	0.0721		0.9312	0.9312		0.8788	0.8788	0.0000	7,022.2779	7,022.2779	1.6066		7,062.4427
Total	**1.9958**	**22.5770**	**41.6851**	**0.0721**	**2.7629**	**0.9312**	**3.6941**	**1.3358**	**0.8788**	**2.2146**	**0.0000**	**7,022.2779**	**7,022.2779**	**1.6066**		**7,062.4427**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0155	0.5526	0.1325	1.4500e-003	0.0701	2.1200e-003	0.0723	0.0181	2.0300e-003	0.0202		160.8186	160.8186	0.0168		161.2383
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
Worker	0.1236	0.0811	1.0702	3.3900e-003	0.2187	2.2400e-003	0.2210	0.0603	2.0600e-003	0.0624		337.8421	337.8421	8.3100e-003		338.0497
Total	**0.1391**	**0.6337**	**1.2027**	**4.8400e-003**	**0.2889**	**4.3600e-003**	**0.2932**	**0.0785**	**4.0900e-003**	**0.0825**		**498.6607**	**498.6607**	**0.0251**		**499.2881**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0843	0.0000	7.0843	3.4250	0.0000	3.4250			0.0000			0.0000
Off-Road	5.4516	53.0294	39.2750	0.0721		2.6354	2.6354		2.4983	2.4983		6,926.3285	6,926.3285	1.5886		6,966.0422
Total	**5.4516**	**53.0294**	**39.2750**	**0.0721**	**7.0843**	**2.6354**	**9.7197**	**3.4250**	**2.4983**	**5.9232**		**6,926.3285**	**6,926.3285**	**1.5886**		**6,966.0422**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0141	0.5127	0.1295	1.4300e-003	0.0401	1.6600e-003	0.0418	0.0108	1.5900e-003	0.0124		159.0447	159.0447	0.0165		159.4569
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
Worker	0.1153	0.0726	0.9820	3.2800e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		327.0131	327.0131	7.4500e-003		327.1995
Total	**0.1294**	**0.5853**	**1.1115**	**4.7100e-003**	**0.3755**	**3.8800e-003**	**0.3793**	**0.0997**	**3.6300e-003**	**0.1033**		**486.0578**	**486.0578**	**0.0239**		**486.6563**

3.3 Site Preparation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7629	0.0000	2.7629	1.3358	0.0000	1.3358			0.0000			0.0000
Off-Road	1.9275	21.5185	41.5635	0.0721		0.8855	0.8855		0.8368	0.8368	0.0000	6,926.3285	6,926.3285	1.5886		6,966.0422
Total	**1.9275**	**21.5185**	**41.5635**	**0.0721**	**2.7629**	**0.8855**	**3.6484**	**1.3358**	**0.8368**	**2.1726**	**0.0000**	**6,926.3285**	**6,926.3285**	**1.5886**		**6,966.0422**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0141	0.5127	0.1295	1.4300e-003	0.0272	1.6600e-003	0.0289	7.6000e-003	1.5900e-003	9.1800e-003		159.0447	159.0447	0.0165		159.4569
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
Worker	0.1153	0.0726	0.9820	3.2800e-003	0.2187	2.2200e-003	0.2209	0.0603	2.0400e-003	0.0624		327.0131	327.0131	7.4500e-003		327.1995
Total	**0.1294**	**0.5853**	**1.1115**	**4.7100e-003**	**0.2459**	**3.8800e-003**	**0.2498**	**0.0679**	**3.6300e-003**	**0.0715**		**486.0578**	**486.0578**	**0.0239**		**486.6563**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1162	3.5179	0.9299	7.7900e-003	0.1981	0.0238	0.2218	0.0570	0.0227	0.0797		846.2035	846.2035	0.0714		847.9894
Worker	0.3050	0.2000	2.6399	8.3600e-003	0.8272	5.5300e-003	0.8327	0.2194	5.0900e-003	0.2245		833.3438	833.3438	0.0205		833.8560
Total	**0.4212**	**3.7178**	**3.5698**	**0.0162**	**1.0252**	**0.0293**	**1.0545**	**0.2764**	**0.0278**	**0.3042**		**1,679.5473**	**1,679.5473**	**0.0919**		**1,681.8454**

3.4 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1470	19.7889	17.2155	0.0269		1.0917	1.0917		1.0309	1.0309	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.1470**	**19.7889**	**17.2155**	**0.0269**		**1.0917**	**1.0917**		**1.0309**	**1.0309**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1162	3.5179	0.9299	7.7900e-003	0.1415	0.0238	0.1653	0.0431	0.0227	0.0659		846.2035	846.2035	0.0714		847.9894
Worker	0.3050	0.2000	2.6399	8.3600e-003	0.5395	5.5300e-003	0.5450	0.1488	5.0900e-003	0.1539		833.3438	833.3438	0.0205		833.8560
Total	**0.4212**	**3.7178**	**3.5698**	**0.0162**	**0.6810**	**0.0293**	**0.7103**	**0.1919**	**0.0278**	**0.2197**		**1,679.5473**	**1,679.5473**	**0.0919**		**1,681.8454**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0990	3.2295	0.8524	7.7200e-003	0.1981	0.0169	0.2149	0.0570	0.0161	0.0731		840.4997	840.4997	0.0680		842.1992
Worker	0.2844	0.1792	2.4222	8.0900e-003	0.8272	5.4700e-003	0.8326	0.2194	5.0400e-003	0.2244		806.6323	806.6323	0.0184		807.0920
Total	**0.3834**	**3.4087**	**3.2746**	**0.0158**	**1.0252**	**0.0223**	**1.0475**	**0.2764**	**0.0212**	**0.2975**		**1,647.1320**	**1,647.1320**	**0.0864**		**1,649.2911**

3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9363	18.2010	16.9304	0.0269		0.9490	0.9490		0.8962	0.8962	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**1.9363**	**18.2010**	**16.9304**	**0.0269**		**0.9490**	**0.9490**		**0.8962**	**0.8962**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0990	3.2295	0.8524	7.7200e-003	0.1415	0.0169	0.1584	0.0431	0.0161	0.0592		840.4997	840.4997	0.0680		842.1992
Worker	0.2844	0.1792	2.4222	8.0900e-003	0.5395	5.4700e-003	0.5450	0.1488	5.0400e-003	0.1538		806.6323	806.6323	0.0184		807.0920
Total	**0.3834**	**3.4087**	**3.2746**	**0.0158**	**0.6810**	**0.0223**	**0.7033**	**0.1919**	**0.0212**	**0.2130**		**1,647.1320**	**1,647.1320**	**0.0864**		**1,649.2911**

3.5 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1815	0.0000	3.1815	0.3435	0.0000	0.3435			0.0000			0.0000
Off-Road	5.7727	66.8878	38.9836	0.0855		2.7589	2.7589		2.5541	2.5541		8,268.4599	8,268.4599	2.5201		8,331.4612
Total	**5.7727**	**66.8878**	**38.9836**	**0.0855**	**3.1815**	**2.7589**	**5.9404**	**0.3435**	**2.5541**	**2.8976**		**8,268.4599**	**8,268.4599**	**2.5201**		**8,331.4612**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1917	6.2507	1.6498	0.0150	0.6570	0.0326	0.6897	0.1775	0.0312	0.2087		1,626.7736	1,626.7736	0.1316		1,630.0629
Worker	0.3728	0.2348	3.1751	0.0106	2.0268	7.1700e-003	2.0340	0.5189	6.6000e-003	0.5255		1,057.3423	1,057.3423	0.0241		1,057.9449
Total	**0.5644**	**6.4855**	**4.8249**	**0.0256**	**2.6839**	**0.0398**	**2.7237**	**0.6964**	**0.0378**	**0.7342**		**2,684.1159**	**2,684.1159**	**0.1557**		**2,688.0077**

3.5 Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2408	0.0000	1.2408	0.1340	0.0000	0.1340			0.0000			0.0000
Off-Road	3.4624	48.0012	42.8807	0.0855		1.9308	1.9308		1.8387	1.8387	0.0000	8,268.4599	8,268.4599	2.5201		8,331.4612
Total	**3.4624**	**48.0012**	**42.8807**	**0.0855**	**1.2408**	**1.9308**	**3.1716**	**0.1340**	**1.8387**	**1.9727**	**0.0000**	**8,268.4599**	**8,268.4599**	**2.5201**		**8,331.4612**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1917	6.2507	1.6498	0.0150	0.4381	0.0326	0.4707	0.1238	0.0312	0.1550		1,626.7736	1,626.7736	0.1316		1,630.0629
Worker	0.3728	0.2348	3.1751	0.0106	1.2728	7.1700e-003	1.2799	0.3338	6.6000e-003	0.3404		1,057.3423	1,057.3423	0.0241		1,057.9449
Total	**0.5644**	**6.4855**	**4.8249**	**0.0256**	**1.7108**	**0.0398**	**1.7506**	**0.4576**	**0.0378**	**0.4954**		**2,684.1159**	**2,684.1159**	**0.1557**		**2,688.0077**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5297	15.6786	14.9390	0.0216		0.9110	0.9110		0.8382	0.8382		2,094.0052	2,094.0052	0.6772		2,110.9363
Paving	1.0375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5672**	**15.6786**	**14.9390**	**0.0216**		**0.9110**	**0.9110**		**0.8382**	**0.8382**		**2,094.0052**	**2,094.0052**	**0.6772**		**2,110.9363**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0576	0.0363	0.4910	1.6400e-003	0.1677	1.1100e-003	0.1688	0.0445	1.0200e-003	0.0455		163.5065	163.5065	3.7300e-003		163.5997
Total	**0.0576**	**0.0363**	**0.4910**	**1.6400e-003**	**0.1677**	**1.1100e-003**	**0.1688**	**0.0445**	**1.0200e-003**	**0.0455**		**163.5065**	**163.5065**	**3.7300e-003**		**163.5997**

3.6 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3904	14.9311	15.0011	0.0216		0.7835	0.7835		0.7212	0.7212	0.0000	2,094.0052	2,094.0052	0.6772		2,110.9363
Paving	1.0375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4279**	**14.9311**	**15.0011**	**0.0216**		**0.7835**	**0.7835**		**0.7212**	**0.7212**	**0.0000**	**2,094.0052**	**2,094.0052**	**0.6772**		**2,110.9363**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0576	0.0363	0.4910	1.6400e-003	0.1094	1.1100e-003	0.1105	0.0302	1.0200e-003	0.0312		163.5065	163.5065	3.7300e-003		163.5997
Total	**0.0576**	**0.0363**	**0.4910**	**1.6400e-003**	**0.1094**	**1.1100e-003**	**0.1105**	**0.0302**	**1.0200e-003**	**0.0312**		**163.5065**	**163.5065**	**3.7300e-003**		**163.5997**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	51.3702					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3948	3.6112	3.1100	8.0800e-003		0.1811	0.1811		0.1755	0.1755		776.1378	776.1378	0.1818		780.6824
Total	**51.7650**	**3.6112**	**3.1100**	**8.0800e-003**		**0.1811**	**0.1811**		**0.1755**	**0.1755**		**776.1378**	**776.1378**	**0.1818**		**780.6824**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0576	0.0363	0.4910	1.6400e-003	0.1677	1.1100e-003	0.1688	0.0445	1.0200e-003	0.0455		163.5065	163.5065	3.7300e-003		163.5997
Total	**0.0576**	**0.0363**	**0.4910**	**1.6400e-003**	**0.1677**	**1.1100e-003**	**0.1688**	**0.0445**	**1.0200e-003**	**0.0455**		**163.5065**	**163.5065**	**3.7300e-003**		**163.5997**

3.7 Architectural Coating - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	51.3702					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3680	4.1173	4.5585	8.0800e-003		0.2032	0.2032		0.2032	0.2032	0.0000	776.1378	776.1378	0.1818		780.6824
Total	**51.7382**	**4.1173**	**4.5585**	**8.0800e-003**		**0.2032**	**0.2032**		**0.2032**	**0.2032**	**0.0000**	**776.1378**	**776.1378**	**0.1818**		**780.6824**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0576	0.0363	0.4910	1.6400e-003	0.1094	1.1100e-003	0.1105	0.0302	1.0200e-003	0.0312		163.5065	163.5065	3.7300e-003		163.5997
Total	**0.0576**	**0.0363**	**0.4910**	**1.6400e-003**	**0.1094**	**1.1100e-003**	**0.1105**	**0.0302**	**1.0200e-003**	**0.0312**		**163.5065**	**163.5065**	**3.7300e-003**		**163.5997**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9352	6.4634	17.2941	0.0531	4.3099	0.0543	4.3642	1.1525	0.0509	1.2034		5,389.3092	5,389.3092	0.2571		5,395.7370
Unmitigated	1.9352	6.4634	17.2941	0.0531	4.3099	0.0543	4.3642	1.1525	0.0509	1.2034		5,389.3092	5,389.3092	0.2571		5,395.7370

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	1,516.91	1,516.91	1516.91	2,031,982	2,031,982
Parking Lot	0.00	0.00	0.00		
Total	1,516.91	1,516.91	1,516.91	2,031,982	2,031,982

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
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Parking Lot	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
Automobile Care Center	0.555968	0.043848	0.210359	0.116378	0.016765	0.005795	0.025008	0.016160	0.001677	0.001586	0.004867	0.000586	0.001002
Parking Lot	0.555968	0.043848	0.210359	0.116378	0.016765	0.005795	0.025008	0.016160	0.001677	0.001586	0.004867	0.000586	0.001002

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294
NaturalGas Unmitigated	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	2937.39	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294
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
Total		**0.0317**	**0.2880**	**0.2419**	**1.7300e-003**		**0.0219**	**0.0219**		**0.0219**	**0.0219**		**345.5759**	**345.5759**	**6.6200e-003**	**6.3400e-003**	**347.6294**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	2.93739	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294
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
Total		**0.0317**	**0.2880**	**0.2419**	**1.7300e-003**		**0.0219**	**0.0219**		**0.0219**	**0.0219**		**345.5759**	**345.5759**	**6.6200e-003**	**6.3400e-003**	**347.6294**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2089	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921
Unmitigated	1.2089	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0643					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8100e-003	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921
Total	**1.2089**	**3.7000e-004**	**0.0405**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0863**	**0.0863**	**2.3000e-004**		**0.0921**

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	lb/day										lb/day					
Architectural Coating	0.1407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0643					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8100e-003	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921
Total	**1.2089**	**3.7000e-004**	**0.0405**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0863**	**0.0863**	**2.3000e-004**		**0.0921**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

Audi Fletcher Jones

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	51.30	1000sqft	1.18	51,299.00	0
Parking Lot	343.00	Space	3.96	137,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	502.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SCE CO2 Intensity Factor

Land Use - Site = 5.14 acres

Construction Phase - Construction schedule per Project Applicant

Off-road Equipment - Equipment per Project applicant

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Grading -

Demolition -

Trips and VMT - 60 On-Highway trucks

Vehicle Trips - Trip generation per Traffic Impact Analysis

Construction Off-road Equipment Mitigation - Engine Tier per Equipment list provided by applicant. SCAQMD Rule 403

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	230.00	274.00
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	118.00
tblConstructionPhase	PhaseEndDate	8/5/2020	12/23/2020
tblConstructionPhase	PhaseEndDate	6/10/2020	12/18/2020
tblConstructionPhase	PhaseEndDate	6/12/2019	11/22/2019
tblConstructionPhase	PhaseEndDate	7/24/2019	6/2/2020
tblConstructionPhase	PhaseEndDate	7/8/2020	10/23/2020
tblConstructionPhase	PhaseEndDate	6/26/2019	5/5/2020
tblConstructionPhase	PhaseStartDate	7/9/2020	12/10/2020
tblConstructionPhase	PhaseStartDate	7/25/2019	12/3/2019
tblConstructionPhase	PhaseStartDate	5/16/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	6/27/2019	5/6/2020
tblConstructionPhase	PhaseStartDate	6/11/2020	10/11/2020

Audi Fletcher Jones - Orange County, Winter

tblConstructionPhase	PhaseStartDate	6/13/2019	11/22/2019
tblGrading	MaterialExported	0.00	1,759.00
tblLandUse	LotAcreage	3.09	3.96
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.30	0.30
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders

tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	502.65
tblTripsAndVMT	VendorTripNumber	0.00	60.00
tblTripsAndVMT	WorkerTripNumber	33.00	23.00
tblTripsAndVMT	WorkerTripNumber	33.00	74.00
tblVehicleTrips	ST_TR	23.72	29.57
tblVehicleTrips	SU_TR	11.88	29.57
tblVehicleTrips	WD_TR	23.72	29.57

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	11.5719	113.7126	78.2984	0.1560	11.0168	5.5704	16.5872	4.1345	5.2974	9.4319	0.0000	15,363.4741	15,363.4741	3.1778	0.0000	15,442.9184
2020	54.3748	96.0058	63.7481	0.1523	8.4850	3.9389	12.2639	3.8011	3.6642	7.3747	0.0000	14,992.2361	14,992.2361	3.3928	0.0000	15,077.0555
Maximum	**54.3748**	**113.7126**	**78.2984**	**0.1560**	**11.0168**	**5.5704**	**16.5872**	**4.1345**	**5.2974**	**9.4319**	**0.0000**	**15,363.4741**	**15,363.4741**	**3.3928**	**0.0000**	**15,442.9184**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.7634	46.7563	82.3043	0.1560	4.5655	2.0571	6.1560	1.6909	1.9422	3.5482	0.0000	15,363.4741	15,363.4741	3.1778	0.0000	15,442.9184
2020	54.1644	76.1342	67.7270	0.1523	3.6898	2.9428	6.5754	1.5955	2.7947	3.5782	0.0000	14,992.2361	14,992.2361	3.3928	0.0000	15,077.0555
Maximum	**54.1644**	**76.1342**	**82.3043**	**0.1560**	**4.5655**	**2.9428**	**6.5754**	**1.6909**	**2.7947**	**3.5782**	**0.0000**	**15,363.4741**	**15,363.4741**	**3.3928**	**0.0000**	**15,442.9184**

	ROG	NOx	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	**10.64**	**41.40**	**-5.62**	**0.00**	**57.67**	**47.42**	**55.87**	**58.59**	**47.14**	**57.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2089	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921
Energy	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294
Mobile	1.9101	6.5648	17.2900	0.0507	4.3099	0.0548	4.3647	1.1525	0.0514	1.2039		5,141.4779	5,141.4779	0.2615		5,148.0156
Total	**3.1506**	**6.8531**	**17.5724**	**0.0524**	**4.3099**	**0.0768**	**4.3868**	**1.1525**	**0.0734**	**1.2259**		**5,487.1401**	**5,487.1401**	**0.2684**	**6.3400e-003**	**5,495.7372**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2089	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921
Energy	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294
Mobile	1.9101	6.5648	17.2900	0.0507	4.3099	0.0548	4.3647	1.1525	0.0514	1.2039		5,141.4779	5,141.4779	0.2615		5,148.0156
Total	**3.1506**	**6.8531**	**17.5724**	**0.0524**	**4.3099**	**0.0768**	**4.3868**	**1.1525**	**0.0734**	**1.2259**		**5,487.1401**	**5,487.1401**	**0.2684**	**6.3400e-003**	**5,495.7372**

	ROG	NOx	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	9/1/2019	11/22/2019	5	60	
2	Site Preparation	Site Preparation	11/22/2019	5/5/2020	5	118	
3	Building Construction	Building Construction	12/3/2019	12/18/2020	5	274	
4	Grading	Grading	5/6/2020	6/2/2020	5	20	
5	Paving	Paving	10/11/2020	10/23/2020	5	10	
6	Architectural Coating	Architectural Coating	12/10/2020	12/23/2020	5	10	

Acres of Grading (Site Preparation Phase): 118

Acres of Grading (Grading Phase): 60

Acres of Paving: 3.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 76,949; Non-Residential Outdoor: 25,650; Striped Parking Area: 8,232 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	2	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38

Grading	Cranes	3	7.00	231	0.29
Grading	Forklifts	0	8.00	89	0.20
Grading	Generator Sets	0	8.00	84	0.74
Paving	Pavers	0	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Welders	0	8.00	46	0.45
Demolition	Crawler Tractors	2	8.00	212	0.43
Demolition	Crushing/Proc. Equipment	3	8.00	85	0.78
Demolition	Skid Steer Loaders	2	8.00	65	0.37
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Crawler Tractors	2	8.00	212	0.43
Site Preparation	Crushing/Proc. Equipment	3	8.00	85	0.78
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Other Construction Equipment	1	8.00	172	0.42
Site Preparation	Skid Steer Loaders	2	8.00	65	0.37
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Scrapers	2	8.00	367	0.48
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Rollers	1	8.00	80	0.38

Grading	Crawler Tractors	1	8.00	212	0.43
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Other Construction Equipment	1	8.00	172	0.42
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Surfacing Equipment	1	6.00	263	0.30
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	11	28.00	0.00	814.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	12	30.00	0.00	220.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	74.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	74.00	31.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9363	0.0000	2.9363	0.4446	0.0000	0.4446			0.0000			0.0000
Off-Road	5.3244	51.6465	35.5430	0.0659		2.6263	2.6263		2.5022	2.5022		6,411.7296	6,411.7296	1.4134		6,447.0651
Total	**5.3244**	**51.6465**	**35.5430**	**0.0659**	**2.9363**	**2.6263**	**5.5626**	**0.4446**	**2.5022**	**2.9468**		**6,411.7296**	**6,411.7296**	**1.4134**		**6,447.0651**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1157	4.0742	1.0206	0.0104	0.2362	0.0158	0.2520	0.0647	0.0151	0.0798		1,152.8824	1,152.8824	0.1253		1,156.0151
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
Worker	0.1302	0.0832	0.9248	2.9900e-003	0.3130	2.0900e-003	0.3151	0.0830	1.9300e-003	0.0849		298.4166	298.4166	7.3500e-003		298.6004
Total	**0.2459**	**4.1574**	**1.9454**	**0.0134**	**0.5492**	**0.0179**	**0.5671**	**0.1477**	**0.0170**	**0.1647**		**1,451.2990**	**1,451.2990**	**0.1327**		**1,454.6155**

3.2 Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1452	0.0000	1.1452	0.1734	0.0000	0.1734			0.0000			0.0000
Off-Road	1.4759	16.9879	37.5427	0.0659		0.6369	0.6369		0.6081	0.6081	0.0000	6,411.7296	6,411.7296	1.4134		6,447.0651
Total	**1.4759**	**16.9879**	**37.5427**	**0.0659**	**1.1452**	**0.6369**	**1.7821**	**0.1734**	**0.6081**	**0.7815**	**0.0000**	**6,411.7296**	**6,411.7296**	**1.4134**		**6,447.0651**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1157	4.0742	1.0206	0.0104	0.1645	0.0158	0.1803	0.0471	0.0151	0.0622		1,152.8824	1,152.8824	0.1253		1,156.0151
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
Worker	0.1302	0.0832	0.9248	2.9900e-003	0.2041	2.0900e-003	0.2062	0.0563	1.9300e-003	0.0582		298.4166	298.4166	7.3500e-003		298.6004
Total	**0.2459**	**4.1574**	**1.9454**	**0.0134**	**0.3686**	**0.0179**	**0.3865**	**0.1034**	**0.0170**	**0.1204**		**1,451.2990**	**1,451.2990**	**0.1327**		**1,454.6155**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0843	0.0000	7.0843	3.4250	0.0000	3.4250			0.0000			0.0000
Off-Road	5.8462	57.2597	39.6789	0.0721		2.9218	2.9218		2.7740	2.7740		7,022.2779	7,022.2779	1.6066		7,062.4427
Total	**5.8462**	**57.2597**	**39.6789**	**0.0721**	**7.0843**	**2.9218**	**10.0061**	**3.4250**	**2.7740**	**6.1990**		**7,022.2779**	**7,022.2779**	**1.6066**		**7,062.4427**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0159	0.5599	0.1403	1.4300e-003	0.1117	2.1700e-003	0.1139	0.0283	2.0800e-003	0.0304		158.4355	158.4355	0.0172		158.8660
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
Worker	0.1395	0.0891	0.9908	3.2100e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		319.7321	319.7321	7.8800e-003		319.9290
Total	**0.1554**	**0.6490**	**1.1311**	**4.6400e-003**	**0.4470**	**4.4100e-003**	**0.4514**	**0.1173**	**4.1400e-003**	**0.1214**		**478.1676**	**478.1676**	**0.0251**		**478.7951**

3.3 Site Preparation - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7629	0.0000	2.7629	1.3358	0.0000	1.3358			0.0000			0.0000
Off-Road	1.9958	22.5770	41.6851	0.0721		0.9312	0.9312		0.8788	0.8788	0.0000	7,022.2779	7,022.2779	1.6066		7,062.4427
Total	**1.9958**	**22.5770**	**41.6851**	**0.0721**	**2.7629**	**0.9312**	**3.6941**	**1.3358**	**0.8788**	**2.2146**	**0.0000**	**7,022.2779**	**7,022.2779**	**1.6066**		**7,062.4427**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0159	0.5599	0.1403	1.4300e-003	0.0701	2.1700e-003	0.0723	0.0181	2.0800e-003	0.0202		158.4355	158.4355	0.0172		158.8660
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
Worker	0.1395	0.0891	0.9908	3.2100e-003	0.2187	2.2400e-003	0.2210	0.0603	2.0600e-003	0.0624		319.7321	319.7321	7.8800e-003		319.9290
Total	**0.1554**	**0.6490**	**1.1311**	**4.6400e-003**	**0.2889**	**4.4100e-003**	**0.2933**	**0.0785**	**4.1400e-003**	**0.0826**		**478.1676**	**478.1676**	**0.0251**		**478.7951**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0843	0.0000	7.0843	3.4250	0.0000	3.4250			0.0000			0.0000
Off-Road	5.4516	53.0294	39.2750	0.0721		2.6354	2.6354		2.4983	2.4983		6,926.3285	6,926.3285	1.5886		6,966.0422
Total	**5.4516**	**53.0294**	**39.2750**	**0.0721**	**7.0843**	**2.6354**	**9.7197**	**3.4250**	**2.4983**	**5.9232**		**6,926.3285**	**6,926.3285**	**1.5886**		**6,966.0422**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0144	0.5191	0.1364	1.4100e-003	0.0401	1.6900e-003	0.0418	0.0108	1.6200e-003	0.0124		156.6437	156.6437	0.0169		157.0657
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
Worker	0.1303	0.0798	0.9076	3.1000e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		309.4863	309.4863	7.0600e-003		309.6629
Total	**0.1447**	**0.5989**	**1.0440**	**4.5100e-003**	**0.3755**	**3.9100e-003**	**0.3794**	**0.0997**	**3.6600e-003**	**0.1034**		**466.1301**	**466.1301**	**0.0239**		**466.7285**

3.3 Site Preparation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7629	0.0000	2.7629	1.3358	0.0000	1.3358			0.0000			0.0000
Off-Road	1.9275	21.5185	41.5635	0.0721		0.8855	0.8855		0.8368	0.8368	0.0000	6,926.3285	6,926.3285	1.5886		6,966.0422
Total	**1.9275**	**21.5185**	**41.5635**	**0.0721**	**2.7629**	**0.8855**	**3.6484**	**1.3358**	**0.8368**	**2.1726**	**0.0000**	**6,926.3285**	**6,926.3285**	**1.5886**		**6,966.0422**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0144	0.5191	0.1364	1.4100e-003	0.0272	1.6900e-003	0.0289	7.6000e-003	1.6200e-003	9.2100e-003		156.6437	156.6437	0.0169		157.0657
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
Worker	0.1303	0.0798	0.9076	3.1000e-003	0.2187	2.2200e-003	0.2209	0.0603	2.0400e-003	0.0624		309.4863	309.4863	7.0600e-003		309.6629
Total	**0.1447**	**0.5989**	**1.0440**	**4.5100e-003**	**0.2459**	**3.9100e-003**	**0.2498**	**0.0679**	**3.6600e-003**	**0.0716**		**466.1301**	**466.1301**	**0.0239**		**466.7285**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1212	3.5216	1.0210	7.6000e-003	0.1981	0.0242	0.2223	0.0570	0.0232	0.0802		825.7009	825.7009	0.0752		827.5810
Worker	0.3441	0.2198	2.4441	7.9100e-003	0.8272	5.5300e-003	0.8327	0.2194	5.0900e-003	0.2245		788.6725	788.6725	0.0194		789.1583
Total	**0.4653**	**3.7414**	**3.4651**	**0.0155**	**1.0252**	**0.0297**	**1.0550**	**0.2764**	**0.0283**	**0.3046**		**1,614.3734**	**1,614.3734**	**0.0946**		**1,616.7393**

3.4 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1470	19.7889	17.2155	0.0269		1.0917	1.0917		1.0309	1.0309	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.1470**	**19.7889**	**17.2155**	**0.0269**		**1.0917**	**1.0917**		**1.0309**	**1.0309**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1212	3.5216	1.0210	7.6000e-003	0.1415	0.0242	0.1657	0.0431	0.0232	0.0663		825.7009	825.7009	0.0752		827.5810
Worker	0.3441	0.2198	2.4441	7.9100e-003	0.5395	5.5300e-003	0.5450	0.1488	5.0900e-003	0.1539		788.6725	788.6725	0.0194		789.1583
Total	**0.4653**	**3.7414**	**3.4651**	**0.0155**	**0.6810**	**0.0297**	**0.7108**	**0.1919**	**0.0283**	**0.2201**		**1,614.3734**	**1,614.3734**	**0.0946**		**1,616.7393**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1034	3.2284	0.9343	7.5400e-003	0.1981	0.0171	0.2152	0.0570	0.0164	0.0734		819.8447	819.8447	0.0714		821.6299
Worker	0.3214	0.1969	2.2388	7.6600e-003	0.8272	5.4700e-003	0.8326	0.2194	5.0400e-003	0.2244		763.3997	763.3997	0.0174		763.8351
Total	**0.4248**	**3.4253**	**3.1731**	**0.0152**	**1.0252**	**0.0226**	**1.0478**	**0.2764**	**0.0214**	**0.2978**		**1,583.2444**	**1,583.2444**	**0.0888**		**1,585.4650**

3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9363	18.2010	16.9304	0.0269		0.9490	0.9490		0.8962	0.8962	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**1.9363**	**18.2010**	**16.9304**	**0.0269**		**0.9490**	**0.9490**		**0.8962**	**0.8962**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1034	3.2284	0.9343	7.5400e-003	0.1415	0.0171	0.1587	0.0431	0.0164	0.0595		819.8447	819.8447	0.0714		821.6299
Worker	0.3214	0.1969	2.2388	7.6600e-003	0.5395	5.4700e-003	0.5450	0.1488	5.0400e-003	0.1538		763.3997	763.3997	0.0174		763.8351
Total	**0.4248**	**3.4253**	**3.1731**	**0.0152**	**0.6810**	**0.0226**	**0.7036**	**0.1919**	**0.0214**	**0.2133**		**1,583.2444**	**1,583.2444**	**0.0888**		**1,585.4650**

3.5 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1815	0.0000	3.1815	0.3435	0.0000	0.3435			0.0000			0.0000
Off-Road	5.7727	66.8878	38.9836	0.0855		2.7589	2.7589		2.5541	2.5541		8,268.4599	8,268.4599	2.5201		8,331.4612
Total	**5.7727**	**66.8878**	**38.9836**	**0.0855**	**3.1815**	**2.7589**	**5.9404**	**0.3435**	**2.5541**	**2.8976**		**8,268.4599**	**8,268.4599**	**2.5201**		**8,331.4612**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2002	6.2486	1.8083	0.0146	0.6570	0.0332	0.6902	0.1775	0.0317	0.2092		1,586.7962	1,586.7962	0.1382		1,590.2515
Worker	0.4213	0.2581	2.9346	0.0100	2.0268	7.1700e-003	2.0340	0.5189	6.6000e-003	0.5255		1,000.6725	1,000.6725	0.0228		1,001.2433
Total	**0.6214**	**6.5067**	**4.7429**	**0.0246**	**2.6839**	**0.0403**	**2.7242**	**0.6964**	**0.0383**	**0.7347**		**2,587.4688**	**2,587.4688**	**0.1610**		**2,591.4948**

3.5 Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2408	0.0000	1.2408	0.1340	0.0000	0.1340			0.0000			0.0000
Off-Road	3.4624	48.0012	42.8807	0.0855		1.9308	1.9308		1.8387	1.8387	0.0000	8,268.4599	8,268.4599	2.5201		8,331.4612
Total	**3.4624**	**48.0012**	**42.8807**	**0.0855**	**1.2408**	**1.9308**	**3.1716**	**0.1340**	**1.8387**	**1.9727**	**0.0000**	**8,268.4599**	**8,268.4599**	**2.5201**		**8,331.4612**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2002	6.2486	1.8083	0.0146	0.4381	0.0332	0.4713	0.1238	0.0317	0.1555		1,586.7962	1,586.7962	0.1382		1,590.2515
Worker	0.4213	0.2581	2.9346	0.0100	1.2728	7.1700e-003	1.2799	0.3338	6.6000e-003	0.3404		1,000.6725	1,000.6725	0.0228		1,001.2433
Total	**0.6214**	**6.5067**	**4.7429**	**0.0246**	**1.7108**	**0.0403**	**1.7512**	**0.4576**	**0.0383**	**0.4959**		**2,587.4688**	**2,587.4688**	**0.1610**		**2,591.4948**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5297	15.6786	14.9390	0.0216		0.9110	0.9110		0.8382	0.8382		2,094.0052	2,094.0052	0.6772		2,110.9363
Paving	1.0375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5672**	**15.6786**	**14.9390**	**0.0216**		**0.9110**	**0.9110**		**0.8382**	**0.8382**		**2,094.0052**	**2,094.0052**	**0.6772**		**2,110.9363**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0651	0.0399	0.4538	1.5500e-003	0.1677	1.1100e-003	0.1688	0.0445	1.0200e-003	0.0455		154.7432	154.7432	3.5300e-003		154.8314
Total	**0.0651**	**0.0399**	**0.4538**	**1.5500e-003**	**0.1677**	**1.1100e-003**	**0.1688**	**0.0445**	**1.0200e-003**	**0.0455**		**154.7432**	**154.7432**	**3.5300e-003**		**154.8314**

3.6 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3904	14.9311	15.0011	0.0216		0.7835	0.7835		0.7212	0.7212	0.0000	2,094.0052	2,094.0052	0.6772		2,110.9363
Paving	1.0375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4279**	**14.9311**	**15.0011**	**0.0216**		**0.7835**	**0.7835**		**0.7212**	**0.7212**	**0.0000**	**2,094.0052**	**2,094.0052**	**0.6772**		**2,110.9363**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0651	0.0399	0.4538	1.5500e-003	0.1094	1.1100e-003	0.1105	0.0302	1.0200e-003	0.0312		154.7432	154.7432	3.5300e-003		154.8314
Total	**0.0651**	**0.0399**	**0.4538**	**1.5500e-003**	**0.1094**	**1.1100e-003**	**0.1105**	**0.0302**	**1.0200e-003**	**0.0312**		**154.7432**	**154.7432**	**3.5300e-003**		**154.8314**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	51.3702					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3948	3.6112	3.1100	8.0800e-003		0.1811	0.1811		0.1755	0.1755		776.1378	776.1378	0.1818		780.6824
Total	**51.7650**	**3.6112**	**3.1100**	**8.0800e-003**		**0.1811**	**0.1811**		**0.1755**	**0.1755**		**776.1378**	**776.1378**	**0.1818**		**780.6824**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0651	0.0399	0.4538	1.5500e-003	0.1677	1.1100e-003	0.1688	0.0445	1.0200e-003	0.0455		154.7432	154.7432	3.5300e-003		154.8314
Total	**0.0651**	**0.0399**	**0.4538**	**1.5500e-003**	**0.1677**	**1.1100e-003**	**0.1688**	**0.0445**	**1.0200e-003**	**0.0455**		**154.7432**	**154.7432**	**3.5300e-003**		**154.8314**

3.7 Architectural Coating - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	51.3702					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3680	4.1173	4.5585	8.0800e-003		0.2032	0.2032		0.2032	0.2032	0.0000	776.1378	776.1378	0.1818		780.6824
Total	**51.7382**	**4.1173**	**4.5585**	**8.0800e-003**		**0.2032**	**0.2032**		**0.2032**	**0.2032**	**0.0000**	**776.1378**	**776.1378**	**0.1818**		**780.6824**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0651	0.0399	0.4538	1.5500e-003	0.1094	1.1100e-003	0.1105	0.0302	1.0200e-003	0.0312		154.7432	154.7432	3.5300e-003		154.8314
Total	**0.0651**	**0.0399**	**0.4538**	**1.5500e-003**	**0.1094**	**1.1100e-003**	**0.1105**	**0.0302**	**1.0200e-003**	**0.0312**		**154.7432**	**154.7432**	**3.5300e-003**		**154.8314**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9101	6.5648	17.2900	0.0507	4.3099	0.0548	4.3647	1.1525	0.0514	1.2039		5,141.4779	5,141.4779	0.2615		5,148.0156
Unmitigated	1.9101	6.5648	17.2900	0.0507	4.3099	0.0548	4.3647	1.1525	0.0514	1.2039		5,141.4779	5,141.4779	0.2615		5,148.0156

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	1,516.91	1,516.91	1516.91	2,031,982	2,031,982
Parking Lot	0.00	0.00	0.00		
Total	1,516.91	1,516.91	1,516.91	2,031,982	2,031,982

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
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Parking Lot	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
Automobile Care Center	0.555968	0.043848	0.210359	0.116378	0.016765	0.005795	0.025008	0.016160	0.001677	0.001586	0.004867	0.000586	0.001002
Parking Lot	0.555968	0.043848	0.210359	0.116378	0.016765	0.005795	0.025008	0.016160	0.001677	0.001586	0.004867	0.000586	0.001002

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294
NaturalGas Unmitigated	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	2937.39	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294
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
Total		**0.0317**	**0.2880**	**0.2419**	**1.7300e-003**		**0.0219**	**0.0219**		**0.0219**	**0.0219**		**345.5759**	**345.5759**	**6.6200e-003**	**6.3400e-003**	**347.6294**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	2.93739	0.0317	0.2880	0.2419	1.7300e-003		0.0219	0.0219		0.0219	0.0219		345.5759	345.5759	6.6200e-003	6.3400e-003	347.6294
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
Total		**0.0317**	**0.2880**	**0.2419**	**1.7300e-003**		**0.0219**	**0.0219**		**0.0219**	**0.0219**		**345.5759**	**345.5759**	**6.6200e-003**	**6.3400e-003**	**347.6294**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2089	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921
Unmitigated	1.2089	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0643					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8100e-003	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921
Total	**1.2089**	**3.7000e-004**	**0.0405**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0863**	**0.0863**	**2.3000e-004**		**0.0921**

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	lb/day										lb/day					
Architectural Coating	0.1407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0643					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8100e-003	3.7000e-004	0.0405	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0863	0.0863	2.3000e-004		0.0921
Total	**1.2089**	**3.7000e-004**	**0.0405**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0863**	**0.0863**	**2.3000e-004**		**0.0921**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

ATTACHMENT B

CalEEMod Output Files – Greenhouse Gas Emissions

Audi Fletcher Jones

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	51.30	1000sqft	1.18	51,299.00	0
Parking Lot	343.00	Space	3.96	137,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	502.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SCE CO2 Intensity Factor

Land Use - Site = 5.14 acres

Construction Phase - Construction schedule per Project Applicant

Off-road Equipment - Equipment per Project applicant

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Grading -

Demolition -

Trips and VMT - 60 On-Highway trucks

Vehicle Trips - Trip generation per Traffic Impact Analysis

Construction Off-road Equipment Mitigation - Engine Tier per Equipment list provided by applicant. SCAQMD Rule 403

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	230.00	274.00
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	118.00
tblConstructionPhase	PhaseEndDate	8/5/2020	12/23/2020
tblConstructionPhase	PhaseEndDate	6/10/2020	12/18/2020
tblConstructionPhase	PhaseEndDate	6/12/2019	11/22/2019
tblConstructionPhase	PhaseEndDate	7/24/2019	6/2/2020
tblConstructionPhase	PhaseEndDate	7/8/2020	10/23/2020
tblConstructionPhase	PhaseEndDate	6/26/2019	5/5/2020
tblConstructionPhase	PhaseStartDate	7/9/2020	12/10/2020
tblConstructionPhase	PhaseStartDate	7/25/2019	12/3/2019
tblConstructionPhase	PhaseStartDate	5/16/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	6/27/2019	5/6/2020
tblConstructionPhase	PhaseStartDate	6/11/2020	10/11/2020

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tblConstructionPhase	PhaseStartDate	6/13/2019	11/22/2019
tblGrading	MaterialExported	0.00	1,759.00
tblLandUse	LotAcreage	3.09	3.96
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.30	0.30
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders

tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	502.65
tblTripsAndVMT	VendorTripNumber	0.00	60.00
tblTripsAndVMT	WorkerTripNumber	33.00	23.00
tblTripsAndVMT	WorkerTripNumber	33.00	74.00
tblVehicleTrips	ST_TR	23.72	29.57
tblVehicleTrips	SU_TR	11.88	29.57
tblVehicleTrips	WD_TR	23.72	29.57

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2798	2.7488	1.9128	3.9100e-003	0.2680	0.1341	0.4021	0.0753	0.1275	0.2028	0.0000	350.0255	350.0255	0.0697	0.0000	351.7668
2020	0.9044	6.1143	4.8819	0.0101	0.5375	0.2964	0.8339	0.2053	0.2791	0.4844	0.0000	892.7011	892.7011	0.1755	0.0000	897.0893
Maximum	**0.9044**	**6.1143**	**4.8819**	**0.0101**	**0.5375**	**0.2964**	**0.8339**	**0.2053**	**0.2791**	**0.4844**	**0.0000**	**892.7011**	**892.7011**	**0.1755**	**0.0000**	**897.0893**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1082	1.2100	2.0014	3.9100e-003	0.1136	0.0445	0.1581	0.0320	0.0422	0.0743	0.0000	350.0252	350.0252	0.0697	0.0000	351.7665
2020	0.6986	4.3817	5.0418	0.0101	0.2561	0.1876	0.4437	0.0938	0.1773	0.2711	0.0000	892.7003	892.7003	0.1755	0.0000	897.0885
Maximum	**0.6986**	**4.3817**	**5.0418**	**0.0101**	**0.2561**	**0.1876**	**0.4437**	**0.0938**	**0.1773**	**0.2711**	**0.0000**	**892.7003**	**892.7003**	**0.1755**	**0.0000**	**897.0885**

	ROG	NOx	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	**31.87**	**36.91**	**-3.66**	**0.00**	**54.10**	**46.10**	**51.31**	**55.13**	**46.02**	**49.74**	**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)
2	8-16-2019	11-15-2019	1.6650	0.6198
3	11-16-2019	2-15-2020	2.7390	1.4819
4	2-16-2020	5-15-2020	2.7841	1.6698
5	5-16-2020	8-15-2020	1.3371	1.1624
6	8-16-2020	9-30-2020	0.4123	0.3931
		Highest	2.7841	1.6698

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2204	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104
Energy	5.7800e-003	0.0526	0.0442	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003	0.0000	166.9943	166.9943	7.4300e-003	2.3600e-003	167.8832
Mobile	0.3337	1.2134	3.1550	9.3500e-003	0.7706	9.9100e-003	0.7805	0.2064	9.2800e-003	0.2157	0.0000	860.6246	860.6246	0.0427	0.0000	861.6929
Waste						0.0000	0.0000		0.0000	0.0000	39.7801	0.0000	39.7801	2.3509	0.0000	98.5536
Water						0.0000	0.0000		0.0000	0.0000	1.5312	21.8214	23.3525	0.1585	3.9700e-003	28.4999
Total	**0.5599**	**1.2660**	**3.2042**	**9.6700e-003**	**0.7706**	**0.0139**	**0.7845**	**0.2064**	**0.0133**	**0.2197**	**41.3113**	**1,049.4501**	**1,090.7614**	**2.5597**	**6.3300e-003**	**1,156.6400**

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	0.2204	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104
Energy	5.7800e-003	0.0526	0.0442	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003	0.0000	166.9943	166.9943	7.4300e-003	2.3600e-003	167.8832
Mobile	0.3337	1.2134	3.1550	9.3500e-003	0.7706	9.9100e-003	0.7805	0.2064	9.2800e-003	0.2157	0.0000	860.6246	860.6246	0.0427	0.0000	861.6929
Waste						0.0000	0.0000		0.0000	0.0000	39.7801	0.0000	39.7801	2.3509	0.0000	98.5536
Water						0.0000	0.0000		0.0000	0.0000	1.5312	21.8214	23.3525	0.1585	3.9700e-003	28.4999
Total	**0.5599**	**1.2660**	**3.2042**	**9.6700e-003**	**0.7706**	**0.0139**	**0.7845**	**0.2064**	**0.0133**	**0.2197**	**41.3113**	**1,049.4501**	**1,090.7614**	**2.5597**	**6.3300e-003**	**1,156.6400**

	ROG	NOx	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	9/1/2019	11/22/2019	5	60	
2	Site Preparation	Site Preparation	11/22/2019	5/5/2020	5	118	
3	Building Construction	Building Construction	12/3/2019	12/18/2020	5	274	
4	Grading	Grading	5/6/2020	6/2/2020	5	20	
5	Paving	Paving	10/11/2020	10/23/2020	5	10	
6	Architectural Coating	Architectural Coating	12/10/2020	12/23/2020	5	10	

Acres of Grading (Site Preparation Phase): 118

Acres of Grading (Grading Phase): 60

Acres of Paving: 3.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 76,949; Non-Residential Outdoor: 25,650; Striped Parking Area: 8,232 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	2	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Grading	Cranes	3	7.00	231	0.29
Grading	Forklifts	0	8.00	89	0.20
Grading	Generator Sets	0	8.00	84	0.74
Paving	Pavers	0	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40

Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Welders	0	8.00	46	0.45
Demolition	Crawler Tractors	2	8.00	212	0.43
Demolition	Crushing/Proc. Equipment	3	8.00	85	0.78
Demolition	Skid Steer Loaders	2	8.00	65	0.37
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Crawler Tractors	2	8.00	212	0.43
Site Preparation	Crushing/Proc. Equipment	3	8.00	85	0.78
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Other Construction Equipment	1	8.00	172	0.42
Site Preparation	Skid Steer Loaders	2	8.00	65	0.37
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Scrapers	2	8.00	367	0.48
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Rollers	1	8.00	80	0.38
Grading	Crawler Tractors	1	8.00	212	0.43
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Other Construction Equipment	1	8.00	172	0.42
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Surfacing Equipment	1	6.00	263	0.30
Building Construction	Cranes	1	7.00	231	0.29

Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	11	28.00	0.00	814.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	12	30.00	0.00	220.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	74.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	74.00	31.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0881	0.0000	0.0881	0.0133	0.0000	0.0133	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1597	1.5494	1.0663	1.9800e-003		0.0788	0.0788		0.0751	0.0751	0.0000	174.4987	174.4987	0.0385	0.0000	175.4604
Total	**0.1597**	**1.5494**	**1.0663**	**1.9800e-003**	**0.0881**	**0.0788**	**0.1669**	**0.0133**	**0.0751**	**0.0884**	**0.0000**	**174.4987**	**174.4987**	**0.0385**	**0.0000**	**175.4604**

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	3.4200e-003	0.1246	0.0297	3.1000e-004	6.9800e-003	4.7000e-004	7.4400e-003	1.9100e-003	4.5000e-004	2.3600e-003	0.0000	31.6501	31.6501	3.3600e-003	0.0000	31.7341
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	3.5100e-003	2.5600e-003	0.0284	9.0000e-005	9.2200e-003	6.0000e-005	9.2800e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	8.2456	8.2456	2.0000e-004	0.0000	8.2507
Total	**6.9300e-003**	**0.1272**	**0.0581**	**4.0000e-004**	**0.0162**	**5.3000e-004**	**0.0167**	**4.3600e-003**	**5.1000e-004**	**4.8700e-003**	**0.0000**	**39.8957**	**39.8957**	**3.5600e-003**	**0.0000**	**39.9848**

3.2 Demolition - 2019

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					0.0344	0.0000	0.0344	5.2000e-003	0.0000	5.2000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0443	0.5096	1.1263	1.9800e-003		0.0191	0.0191		0.0182	0.0182	0.0000	174.4985	174.4985	0.0385	0.0000	175.4602
Total	**0.0443**	**0.5096**	**1.1263**	**1.9800e-003**	**0.0344**	**0.0191**	**0.0535**	**5.2000e-003**	**0.0182**	**0.0234**	**0.0000**	**174.4985**	**174.4985**	**0.0385**	**0.0000**	**175.4602**

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	3.4200e-003	0.1246	0.0297	3.1000e-004	4.8700e-003	4.7000e-004	5.3400e-003	1.4000e-003	4.5000e-004	1.8400e-003	0.0000	31.6501	31.6501	3.3600e-003	0.0000	31.7341
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	3.5100e-003	2.5600e-003	0.0284	9.0000e-005	6.0200e-003	6.0000e-005	6.0900e-003	1.6600e-003	6.0000e-005	1.7200e-003	0.0000	8.2456	8.2456	2.0000e-004	0.0000	8.2507
Total	**6.9300e-003**	**0.1272**	**0.0581**	**4.0000e-004**	**0.0109**	**5.3000e-004**	**0.0114**	**3.0600e-003**	**5.1000e-004**	**3.5600e-003**	**0.0000**	**39.8957**	**39.8957**	**3.5600e-003**	**0.0000**	**39.9848**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1470	0.0000	0.1470	0.0531	0.0000	0.0531	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0819	0.8016	0.5555	1.0100e-003		0.0409	0.0409		0.0388	0.0388	0.0000	89.1871	89.1871	0.0204	0.0000	89.6972
Total	**0.0819**	**0.8016**	**0.5555**	**1.0100e-003**	**0.1470**	**0.0409**	**0.1879**	**0.0531**	**0.0388**	**0.0920**	**0.0000**	**89.1871**	**89.1871**	**0.0204**	**0.0000**	**89.6972**

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	2.2000e-004	7.9900e-003	1.9000e-003	2.0000e-005	1.5300e-003	3.0000e-005	1.5600e-003	3.9000e-004	3.0000e-005	4.2000e-004	0.0000	2.0298	2.0298	2.2000e-004	0.0000	2.0352
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	1.7500e-003	1.2800e-003	0.0142	5.0000e-005	4.6100e-003	3.0000e-005	4.6400e-003	1.2200e-003	3.0000e-005	1.2500e-003	0.0000	4.1228	4.1228	1.0000e-004	0.0000	4.1253
Total	**1.9700e-003**	**9.2700e-003**	**0.0161**	**7.0000e-005**	**6.1400e-003**	**6.0000e-005**	**6.2000e-003**	**1.6100e-003**	**6.0000e-005**	**1.6700e-003**	**0.0000**	**6.1526**	**6.1526**	**3.2000e-004**	**0.0000**	**6.1605**

3.3 Site Preparation - 2019

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					0.0573	0.0000	0.0573	0.0207	0.0000	0.0207	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.3161	0.5836	1.0100e-003		0.0130	0.0130		0.0123	0.0123	0.0000	89.1869	89.1869	0.0204	0.0000	89.6971
Total	**0.0279**	**0.3161**	**0.5836**	**1.0100e-003**	**0.0573**	**0.0130**	**0.0704**	**0.0207**	**0.0123**	**0.0330**	**0.0000**	**89.1869**	**89.1869**	**0.0204**	**0.0000**	**89.6971**

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	2.2000e-004	7.9900e-003	1.9000e-003	2.0000e-005	9.6000e-004	3.0000e-005	9.9000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	2.0298	2.0298	2.2000e-004	0.0000	2.0352
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	1.7500e-003	1.2800e-003	0.0142	5.0000e-005	3.0100e-003	3.0000e-005	3.0400e-003	8.3000e-004	3.0000e-005	8.6000e-004	0.0000	4.1228	4.1228	1.0000e-004	0.0000	4.1253
Total	**1.9700e-003**	**9.2700e-003**	**0.0161**	**7.0000e-005**	**3.9700e-003**	**6.0000e-005**	**4.0300e-003**	**1.0800e-003**	**6.0000e-005**	**1.1400e-003**	**0.0000**	**6.1526**	**6.1526**	**3.2000e-004**	**0.0000**	**6.1605**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3337	0.0000	0.3337	0.1557	0.0000	0.1557	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2453	2.3863	1.7674	3.2400e-003		0.1186	0.1186		0.1124	0.1124	0.0000	282.7557	282.7557	0.0649	0.0000	284.3769
Total	**0.2453**	**2.3863**	**1.7674**	**3.2400e-003**	**0.3337**	**0.1186**	**0.4523**	**0.1557**	**0.1124**	**0.2682**	**0.0000**	**282.7557**	**282.7557**	**0.0649**	**0.0000**	**284.3769**

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	6.4000e-004	0.0238	5.9600e-003	6.0000e-005	1.7800e-003	8.0000e-005	1.8500e-003	4.8000e-004	7.0000e-005	5.5000e-004	0.0000	6.4516	6.4516	6.8000e-004	0.0000	6.4686
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	5.2600e-003	3.6900e-003	0.0419	1.4000e-004	0.0148	1.0000e-004	0.0149	3.9400e-003	9.0000e-005	4.0300e-003	0.0000	12.8272	12.8272	2.9000e-004	0.0000	12.8345
Total	**5.9000e-003**	**0.0275**	**0.0478**	**2.0000e-004**	**0.0166**	**1.8000e-004**	**0.0168**	**4.4200e-003**	**1.6000e-004**	**4.5800e-003**	**0.0000**	**19.2787**	**19.2787**	**9.7000e-004**	**0.0000**	**19.3030**

3.3 Site Preparation - 2020

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					0.1301	0.0000	0.1301	0.0607	0.0000	0.0607	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0867	0.9683	1.8704	3.2400e-003		0.0399	0.0399		0.0377	0.0377	0.0000	282.7553	282.7553	0.0649	0.0000	284.3766
Total	**0.0867**	**0.9683**	**1.8704**	**3.2400e-003**	**0.1301**	**0.0399**	**0.1700**	**0.0607**	**0.0377**	**0.0984**	**0.0000**	**282.7553**	**282.7553**	**0.0649**	**0.0000**	**284.3766**

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	6.4000e-004	0.0238	5.9600e-003	6.0000e-005	1.2100e-003	8.0000e-005	1.2800e-003	3.4000e-004	7.0000e-005	4.1000e-004	0.0000	6.4516	6.4516	6.8000e-004	0.0000	6.4686
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	5.2600e-003	3.6900e-003	0.0419	1.4000e-004	9.6800e-003	1.0000e-004	9.7800e-003	2.6700e-003	9.0000e-005	2.7700e-003	0.0000	12.8272	12.8272	2.9000e-004	0.0000	12.8345
Total	**5.9000e-003**	**0.0275**	**0.0478**	**2.0000e-004**	**0.0109**	**1.8000e-004**	**0.0111**	**3.0100e-003**	**1.6000e-004**	**3.1800e-003**	**0.0000**	**19.2787**	**19.2787**	**9.7000e-004**	**0.0000**	**19.3030**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0248	0.2213	0.1802	2.8000e-004		0.0135	0.0135		0.0127	0.0127	0.0000	24.6859	24.6859	6.0100e-003	0.0000	24.8363
Total	**0.0248**	**0.2213**	**0.1802**	**2.8000e-004**		**0.0135**	**0.0135**		**0.0127**	**0.0127**	**0.0000**	**24.6859**	**24.6859**	**6.0100e-003**	**0.0000**	**24.8363**

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	1.2400e-003	0.0377	0.0103	8.0000e-005	2.0500e-003	2.5000e-004	2.3000e-003	5.9000e-004	2.4000e-004	8.3000e-004	0.0000	7.9784	7.9784	7.0000e-004	0.0000	7.9959
Worker	3.2500e-003	2.3700e-003	0.0263	8.0000e-005	8.5300e-003	6.0000e-005	8.5900e-003	2.2700e-003	5.0000e-005	2.3200e-003	0.0000	7.6272	7.6272	1.9000e-004	0.0000	7.6319
Total	**4.4900e-003**	**0.0400**	**0.0365**	**1.6000e-004**	**0.0106**	**3.1000e-004**	**0.0109**	**2.8600e-003**	**2.9000e-004**	**3.1500e-003**	**0.0000**	**15.6056**	**15.6056**	**8.9000e-004**	**0.0000**	**15.6277**

3.4 Building Construction - 2019

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	0.0225	0.2078	0.1808	2.8000e-004		0.0115	0.0115		0.0108	0.0108	0.0000	24.6859	24.6859	6.0100e-003	0.0000	24.8363
Total	**0.0225**	**0.2078**	**0.1808**	**2.8000e-004**		**0.0115**	**0.0115**		**0.0108**	**0.0108**	**0.0000**	**24.6859**	**24.6859**	**6.0100e-003**	**0.0000**	**24.8363**

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	1.2400e-003	0.0377	0.0103	8.0000e-005	1.4700e-003	2.5000e-004	1.7200e-003	4.5000e-004	2.4000e-004	6.9000e-004	0.0000	7.9784	7.9784	7.0000e-004	0.0000	7.9959
Worker	3.2500e-003	2.3700e-003	0.0263	8.0000e-005	5.5700e-003	6.0000e-005	5.6300e-003	1.5400e-003	5.0000e-005	1.5900e-003	0.0000	7.6272	7.6272	1.9000e-004	0.0000	7.6319
Total	**4.4900e-003**	**0.0400**	**0.0365**	**1.6000e-004**	**7.0400e-003**	**3.1000e-004**	**7.3500e-003**	**1.9900e-003**	**2.9000e-004**	**2.2800e-003**	**0.0000**	**15.6056**	**15.6056**	**8.9000e-004**	**0.0000**	**15.6277**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2682	2.4270	2.1313	3.4000e-003		0.1413	0.1413		0.1329	0.1329	0.0000	292.9866	292.9866	0.0715	0.0000	294.7736
Total	**0.2682**	**2.4270**	**2.1313**	**3.4000e-003**		**0.1413**	**0.1413**		**0.1329**	**0.1329**	**0.0000**	**292.9866**	**292.9866**	**0.0715**	**0.0000**	**294.7736**

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	0.0128	0.4159	0.1131	9.7000e-004	0.0247	2.1500e-003	0.0268	7.1200e-003	2.0500e-003	9.1700e-003	0.0000	95.4593	95.4593	7.9800e-003	0.0000	95.6587
Worker	0.0365	0.0256	0.2902	9.8000e-004	0.1028	6.9000e-004	0.1035	0.0273	6.4000e-004	0.0279	0.0000	88.9445	88.9445	2.0300e-003	0.0000	88.9953
Total	**0.0493**	**0.4415**	**0.4033**	**1.9500e-003**	**0.1275**	**2.8400e-003**	**0.1303**	**0.0344**	**2.6900e-003**	**0.0371**	**0.0000**	**184.4038**	**184.4038**	**0.0100**	**0.0000**	**184.6539**

3.4 Building Construction - 2020

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	0.2449	2.3024	2.1417	3.4000e-003		0.1201	0.1201		0.1134	0.1134	0.0000	292.9863	292.9863	0.0715	0.0000	294.7732
Total	**0.2449**	**2.3024**	**2.1417**	**3.4000e-003**		**0.1201**	**0.1201**		**0.1134**	**0.1134**	**0.0000**	**292.9863**	**292.9863**	**0.0715**	**0.0000**	**294.7732**

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	0.0128	0.4159	0.1131	9.7000e-004	0.0177	2.1500e-003	0.0198	5.4000e-003	2.0500e-003	7.4500e-003	0.0000	95.4593	95.4593	7.9800e-003	0.0000	95.6587
Worker	0.0365	0.0256	0.2902	9.8000e-004	0.0671	6.9000e-004	0.0678	0.0185	6.4000e-004	0.0192	0.0000	88.9445	88.9445	2.0300e-003	0.0000	88.9953
Total	**0.0493**	**0.4415**	**0.4033**	**1.9500e-003**	**0.0848**	**2.8400e-003**	**0.0877**	**0.0239**	**2.6900e-003**	**0.0266**	**0.0000**	**184.4038**	**184.4038**	**0.0100**	**0.0000**	**184.6539**

3.5 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
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	0.0577	0.6689	0.3898	8.6000e-004		0.0276	0.0276		0.0255	0.0255	0.0000	75.0102	75.0102	0.0229	0.0000	75.5817
Total	**0.0577**	**0.6689**	**0.3898**	**8.6000e-004**	**0.0318**	**0.0276**	**0.0594**	**3.4400e-003**	**0.0255**	**0.0290**	**0.0000**	**75.0102**	**75.0102**	**0.0229**	**0.0000**	**75.5817**

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	1.9500e-003	0.0636	0.0173	1.5000e-004	6.4600e-003	3.3000e-004	6.7900e-003	1.7500e-003	3.1000e-004	2.0600e-003	0.0000	14.6055	14.6055	1.2200e-003	0.0000	14.6360
Worker	3.7800e-003	2.6500e-003	0.0301	1.0000e-004	0.0199	7.0000e-005	0.0200	5.0900e-003	7.0000e-005	5.1600e-003	0.0000	9.2166	9.2166	2.1000e-004	0.0000	9.2218
Total	**5.7300e-003**	**0.0663**	**0.0474**	**2.5000e-004**	**0.0263**	**4.0000e-004**	**0.0267**	**6.8400e-003**	**3.8000e-004**	**7.2200e-003**	**0.0000**	**23.8221**	**23.8221**	**1.4300e-003**	**0.0000**	**23.8578**

3.5 Grading - 2020

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	0.0346	0.4800	0.4288	8.6000e-004		0.0193	0.0193		0.0184	0.0184	0.0000	75.0101	75.0101	0.0229	0.0000	75.5817
Total	**0.0346**	**0.4800**	**0.4288**	**8.6000e-004**	**0.0124**	**0.0193**	**0.0317**	**1.3400e-003**	**0.0184**	**0.0197**	**0.0000**	**75.0101**	**75.0101**	**0.0229**	**0.0000**	**75.5817**

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	1.9500e-003	0.0636	0.0173	1.5000e-004	4.3100e-003	3.3000e-004	4.6400e-003	1.2200e-003	3.1000e-004	1.5400e-003	0.0000	14.6055	14.6055	1.2200e-003	0.0000	14.6360
Worker	3.7800e-003	2.6500e-003	0.0301	1.0000e-004	0.0125	7.0000e-005	0.0126	3.2800e-003	7.0000e-005	3.3500e-003	0.0000	9.2166	9.2166	2.1000e-004	0.0000	9.2218
Total	**5.7300e-003**	**0.0663**	**0.0474**	**2.5000e-004**	**0.0168**	**4.0000e-004**	**0.0172**	**4.5000e-003**	**3.8000e-004**	**4.8900e-003**	**0.0000**	**23.8221**	**23.8221**	**1.4300e-003**	**0.0000**	**23.8578**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.6500e-003	0.0784	0.0747	1.1000e-004		4.5600e-003	4.5600e-003		4.1900e-003	4.1900e-003	0.0000	9.4983	9.4983	3.0700e-003	0.0000	9.5751
Paving	5.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0128**	**0.0784**	**0.0747**	**1.1000e-004**		**4.5600e-003**	**4.5600e-003**		**4.1900e-003**	**4.1900e-003**	**0.0000**	**9.4983**	**9.4983**	**3.0700e-003**	**0.0000**	**9.5751**

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	2.9000e-004	2.0000e-004	2.3200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7126	0.7126	2.0000e-005	0.0000	0.7130
Total	**2.9000e-004**	**2.0000e-004**	**2.3200e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7126**	**0.7126**	**2.0000e-005**	**0.0000**	**0.7130**

3.6 Paving - 2020

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	6.9500e-003	0.0747	0.0750	1.1000e-004		3.9200e-003	3.9200e-003		3.6100e-003	3.6100e-003	0.0000	9.4982	9.4982	3.0700e-003	0.0000	9.5750
Paving	5.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0121**	**0.0747**	**0.0750**	**1.1000e-004**		**3.9200e-003**	**3.9200e-003**		**3.6100e-003**	**3.6100e-003**	**0.0000**	**9.4982**	**9.4982**	**3.0700e-003**	**0.0000**	**9.5750**

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	2.9000e-004	2.0000e-004	2.3200e-003	1.0000e-005	5.4000e-004	1.0000e-005	5.4000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.7126	0.7126	2.0000e-005	0.0000	0.7130
Total	**2.9000e-004**	**2.0000e-004**	**2.3200e-003**	**1.0000e-005**	**5.4000e-004**	**1.0000e-005**	**5.4000e-004**	**1.5000e-004**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**0.7126**	**0.7126**	**2.0000e-005**	**0.0000**	**0.7130**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2569					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0181	0.0156	4.0000e-005		9.1000e-004	9.1000e-004		8.8000e-004	8.8000e-004	0.0000	3.5205	3.5205	8.2000e-004	0.0000	3.5411
Total	**0.2588**	**0.0181**	**0.0156**	**4.0000e-005**		**9.1000e-004**	**9.1000e-004**		**8.8000e-004**	**8.8000e-004**	**0.0000**	**3.5205**	**3.5205**	**8.2000e-004**	**0.0000**	**3.5411**

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	2.9000e-004	2.0000e-004	2.3200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7126	0.7126	2.0000e-005	0.0000	0.7130
Total	**2.9000e-004**	**2.0000e-004**	**2.3200e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7126**	**0.7126**	**2.0000e-005**	**0.0000**	**0.7130**

3.7 Architectural Coating - 2020

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	0.2569					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0206	0.0228	4.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	3.5205	3.5205	8.2000e-004	0.0000	3.5411
Total	**0.2587**	**0.0206**	**0.0228**	**4.0000e-005**		**1.0200e-003**	**1.0200e-003**		**1.0200e-003**	**1.0200e-003**	**0.0000**	**3.5205**	**3.5205**	**8.2000e-004**	**0.0000**	**3.5411**

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	2.9000e-004	2.0000e-004	2.3200e-003	1.0000e-005	5.4000e-004	1.0000e-005	5.4000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.7126	0.7126	2.0000e-005	0.0000	0.7130
Total	**2.9000e-004**	**2.0000e-004**	**2.3200e-003**	**1.0000e-005**	**5.4000e-004**	**1.0000e-005**	**5.4000e-004**	**1.5000e-004**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**0.7126**	**0.7126**	**2.0000e-005**	**0.0000**	**0.7130**

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	0.3337	1.2134	3.1550	9.3500e-003	0.7706	9.9100e-003	0.7805	0.2064	9.2800e-003	0.2157	0.0000	860.6246	860.6246	0.0427	0.0000	861.6929
Unmitigated	0.3337	1.2134	3.1550	9.3500e-003	0.7706	9.9100e-003	0.7805	0.2064	9.2800e-003	0.2157	0.0000	860.6246	860.6246	0.0427	0.0000	861.6929

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	1,516.91	1,516.91	1516.91	2,031,982	2,031,982
Parking Lot	0.00	0.00	0.00		
Total	1,516.91	1,516.91	1,516.91	2,031,982	2,031,982

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
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Parking Lot	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
Automobile Care Center	0.555968	0.043848	0.210359	0.116378	0.016765	0.005795	0.025008	0.016160	0.001677	0.001586	0.004867	0.000586	0.001002
Parking Lot	0.555968	0.043848	0.210359	0.116378	0.016765	0.005795	0.025008	0.016160	0.001677	0.001586	0.004867	0.000586	0.001002

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	109.7804	109.7804	6.3300e-003	1.3100e-003	110.3292
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	109.7804	109.7804	6.3300e-003	1.3100e-003	110.3292
NaturalGas Mitigated	5.7800e-003	0.0526	0.0442	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003	0.0000	57.2140	57.2140	1.1000e-003	1.0500e-003	57.5540
NaturalGas Unmitigated	5.7800e-003	0.0526	0.0442	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003	0.0000	57.2140	57.2140	1.1000e-003	1.0500e-003	57.5540

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					
Automobile Care Center	1.07215e+006	5.7800e-003	0.0526	0.0442	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003	0.0000	57.2140	57.2140	1.1000e-003	1.0500e-003	57.5540
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.7800e-003**	**0.0526**	**0.0442**	**3.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.9900e-003**	**3.9900e-003**	**0.0000**	**57.2140**	**57.2140**	**1.1000e-003**	**1.0500e-003**	**57.5540**

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					
Automobile Care Center	1.07215e+006	5.7800e-003	0.0526	0.0442	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003	0.0000	57.2140	57.2140	1.1000e-003	1.0500e-003	57.5540
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.7800e-003**	**0.0526**	**0.0442**	**3.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.9900e-003**	**3.9900e-003**	**0.0000**	**57.2140**	**57.2140**	**1.1000e-003**	**1.0500e-003**	**57.5540**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	433477	98.8319	5.7000e-003	1.1800e-003	99.3260
Parking Lot	48020	10.9485	6.3000e-004	1.3000e-004	11.0032
Total		**109.7804**	**6.3300e-003**	**1.3100e-003**	**110.3292**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	433477	98.8319	5.7000e-003	1.1800e-003	99.3260
Parking Lot	48020	10.9485	6.3000e-004	1.3000e-004	11.0032
Total		**109.7804**	**6.3300e-003**	**1.3100e-003**	**110.3292**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2204	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104
Unmitigated	0.2204	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104

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	0.0257					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1942					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104
Total	**0.2204**	**5.0000e-005**	**5.0600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.7900e-003**	**9.7900e-003**	**3.0000e-005**	**0.0000**	**0.0104**

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	0.0257					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1942					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104
Total	**0.2204**	**5.0000e-005**	**5.0600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.7900e-003**	**9.7900e-003**	**3.0000e-005**	**0.0000**	**0.0104**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	23.3525	0.1585	3.9700e-003	28.4999
Unmitigated	23.3525	0.1585	3.9700e-003	28.4999

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	4.82636 / 2.95809	23.3525	0.1585	3.9700e-003	28.4999
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**23.3525**	**0.1585**	**3.9700e-003**	**28.4999**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	4.82636 / 2.95809	23.3525	0.1585	3.9700e-003	28.4999
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**23.3525**	**0.1585**	**3.9700e-003**	**28.4999**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	39.7801	2.3509	0.0000	98.5536
Unmitigated	39.7801	2.3509	0.0000	98.5536

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	195.97	39.7801	2.3509	0.0000	98.5536
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**39.7801**	**2.3509**	**0.0000**	**98.5536**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	195.97	39.7801	2.3509	0.0000	98.5536
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**39.7801**	**2.3509**	**0.0000**	**98.5536**

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