

APPENDIX A

AIR QUALITY ASSESSMENT

Air Quality Assessment
for the
Chick-fil-A Carlsbad Restaurant

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1.0 INTRODUCTION

This report presents an assessment of potential air quality impacts associated with the proposed Chick-fil-A Carlsbad Restaurant. The Project is proposing to construct a 3,427-square foot Chick-fil-A Restaurant on a site at 5850 Avenida Encinas in the City of Carlsbad. The project site is located near the intersection of Interstate 5 and Palomar Airport Road. The site is currently occupied by a 10,977-square foot office building.

Air quality impacts will be attributable to emissions associated with construction and operational emissions associated with traffic and energy use. This report presents an evaluation of existing conditions at the site, thresholds of significance, and potential air quality impacts associated with construction and operation of the project.

2.0 EXISTING CONDITIONS

2.1 Current Development

The project site is currently occupied by a 10,977-square foot commercial office building. The building will be demolished prior to construction of the Chick-fil-A restaurant. As it currently exists, the office building is a source of air emissions.

2.2 Regulatory Setting

Air quality is defined by ambient air concentrations of specific pollutants identified by the United States Environmental Protection Agency (EPA) to be of concern with respect to health and welfare of the general public. The EPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the EPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the EPA established both primary and secondary standards for several pollutants (called “criteria” pollutants). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere.

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. The California Air Resources Board (ARB) has established the more stringent California Ambient Air Quality Standards (CAAQS) for the six criteria pollutants through the California Clean Air Act of 1988, and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles.

Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant. In September 1997, the EPA promulgated 8-hour O₃ and 24-hour and annual PM_{2.5} national standards. As a result, this action has initiated a new planning process to monitor and evaluate emission control measures for these pollutants. The SDAB is

considered a moderate nonattainment area for the 8-hour NAAQS for O₃. The SDAB is in attainment for the NAAQS for all other criteria pollutants.

The ARB is the state regulatory agency with authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The ARB is responsible for the development, adoption, and enforcement of the state's motor vehicle emissions program, as well as the adoption of the CAAQS. The ARB also reviews operations and programs of the local air districts, and requires each air district with jurisdiction over a nonattainment area to develop its own strategy for achieving the NAAQS and CAAQS. The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The San Diego APCD is the local agency responsible for the administration and enforcement of air quality regulations for San Diego County.

The APCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The San Diego County Regional Air Quality Strategy (RAQS) was initially adopted in 1991, and is updated on a triennial basis. The RAQS was updated in 1995, 1998, 2001, 2004, 2009, and most recently in 2016 (APCD 2016). The RAQS outlines APCD's plans and control measures designed to attain the state air quality standards for O₃. The RAQS does not address the state air quality standards for PM₁₀ or PM_{2.5}. The APCD has also developed the air basin's input to the State Implementation Plan (SIP), which is required under the Federal Clean Air Act for areas that are out of attainment of air quality standards. The SIP includes the APCD's plans and control measures for attaining the O₃ NAAQS. The SIP is also updated on a triennial basis. The Attainment Plan forms the basis for the SIP update, as it contains documentation on emission inventories and trends, the APCD's emission control strategy, and an attainment demonstration that shows that the SDAB will meet the NAAQS for O₃. Emission inventories, projections, and trends in the Attainment Plan are based on the latest O₃ SIP planning emission projections compiled and maintained by ARB. Supporting data were developed jointly by stakeholder agencies, including ARB, the APCD, the South Coast Air Quality Management

District (SCAQMD), the Southern California Association of Governments (SCAG), and SANDAG. Each agency plays a role in collecting and reviewing data as necessary to generate comprehensive emission inventories. The supporting data include socio-economic projections, industrial and travel activity levels, emission factors, and emission speciation profiles. These projections are based on data submitted by stakeholder agencies including projections in municipal General Plans.

The following specific descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on EPA (EPA 2007) and the ARB (ARB 2005).

Ozone. O₃ is considered a photochemical oxidant, which is a chemical that is formed when volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), both by-products of combustion, react in the presence of ultraviolet light. O₃ is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from exposure to O₃.

Carbon Monoxide. CO is a product of combustion, and the main source of CO in the SDAB is from motor vehicle exhaust. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. CO can cause health effects to those with cardiovascular disease, and can also affect mental alertness and vision.

Nitrogen Dioxide. NO₂ is also a by-product of fuel combustion, and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitrogen oxide (NO) with oxygen. NO₂ is a respiratory irritant and may affect those with existing respiratory illness, including asthma. NO₂ can also increase the risk of respiratory illness.

Respirable Particulate Matter and Fine Particulate Matter. Respirable particulate matter, or PM₁₀, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or PM_{2.5}, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in this size range has been determined to have the potential to

lodge in the lungs and contribute to respiratory problems. PM_{10} and $PM_{2.5}$ arise from a variety of sources, including road dust, diesel exhaust, combustion, tire and brake wear, construction operations and windblown dust. PM_{10} and $PM_{2.5}$ can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. $PM_{2.5}$ is considered to have the potential to lodge deeper in the lungs.

Sulfur dioxide. SO_2 is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil, and by other industrial processes. Generally, the highest concentrations of SO_2 are found near large industrial sources. SO_2 is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO_2 can cause respiratory illness and aggravate existing cardiovascular disease.

Lead. Pb in the atmosphere occurs as particulate matter. Pb has historically been emitted from vehicles combusting leaded gasoline, as well as from industrial sources. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of lead emissions. Pb has the potential to cause gastrointestinal, central nervous system, kidney and blood diseases upon prolonged exposure. Pb is also classified as a probable human carcinogen.

Volatile Organic Compounds. While the EPA has not set ambient air quality standards for VOCs, VOCs are considered ozone precursors as they react in the atmosphere to form O_3 . Accordingly, VOCs are regulated through limitations on VOC emissions from solvents, paints, processes, and other sources.

Hazardous Air Pollutants. Also referred to as toxic air contaminants (TACs), HAPs are pollutants that are known or suspected to result in adverse health effects upon exposure through inhalation or other exposure routes. HAPs from stationary sources are regulated through the federal National Emission Standards for Hazardous Air Pollutants (NESHAPS) program. HAPs from mobile sources such as vehicles and off-road equipment are regulated through emission standards implemented by the EPA and/or state regulatory agencies.

Sulfates. Sulfates are the fully oxidized ionic form of sulfur. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to sulfur dioxide (SO₂) during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO₂ to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. The ARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and due to fact that they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide. H₂S is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation. Breathing H₂S at levels above the standard would result in exposure to a very disagreeable odor. In 1984, an ARB committee concluded that the ambient standard for H₂S is adequate to protect public health and to significantly reduce odor annoyance.

Vinyl Chloride. Vinyl chloride, a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants and hazardous waste sites, due to microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air causes central nervous system effects, such as dizziness, drowsiness and headaches. Long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage. Cancer is a major concern from exposure to vinyl chloride via inhalation. Vinyl chloride exposure has been shown to increase the risk of angiosarcoma, a rare form of liver cancer, in humans.

Visibility Reducing Particles. Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores

with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt. The CAAQS is intended to limit the frequency and severity of visibility impairment due to regional haze. A separate standard for visibility-reducing particles that is applicable only in the Lake Tahoe Air Basin is based on reduction in scenic quality.

Table 1 presents a summary of the ambient air quality standards adopted by the federal and California Clean Air Acts.

Table 1 Ambient Air Quality Standards						
POLLUTANT	AVERAGE TIME	CALIFORNIA STANDARDS		NATIONAL STANDARDS		
		Concentration	Method	Primary	Secondary	Method
Ozone (O ₃)	1 hour	0.09 ppm (176 µg/m ³)	Ultraviolet Photometry	--	--	Ethylene Chemiluminescence
	8 hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	
Carbon Monoxide (CO)	8 hours	9.0 ppm (10 mg/m ³)	Non-Dispersive Infrared Spectroscopy (NDIR)	9 ppm (10 mg/m ³)	--	Non-Dispersive Infrared Spectroscopy (NDIR)
	1 hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
Nitrogen Dioxide (NO ₂)	Annual Average	0.030 ppm (57 µg/m ³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³)	0.053 ppm (100 µg/m ³)	Gas Phase Chemiluminescence
	1 hour	0.18 ppm (339 µg/m ³)		0.100 ppm (188 µg/m ³)	--	
Sulfur Dioxide (SO ₂)	24 hours	0.04 ppm (105 µg/m ³)	Ultraviolet Fluorescence	--	--	Pararosaniline
	3 hours	--		--	0.5 ppm (1300 µg/m ³)	
	1 hour	0.25 ppm (655 µg/m ³)		0.075 ppm (196 µg/m ³)	--	
Respirable Particulate Matter (PM ₁₀)	24 hours	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	150 µg/m ³	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		--	--	
Fine Particulate Matter (PM _{2.5})	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12 µg/m ³	15 µg/m ³	Inertial Separation and Gravimetric Analysis
	24 hours	--		35 µg/m ³	35 µg/m ³	
Sulfates	24 hours	25 µg/m ³	Ion Chromatography	--	--	--
Lead	30-day Average	1.5 µg/m ³	Atomic Absorption	--	--	Atomic Absorption
	Calendar Quarter	--		1.5 µg/m ³	1.5 µg/m ³	
	3-Month Rolling Average	--		0.15 µg/m ³	0.15 µg/m ³	
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence	--	--	--
Vinyl Chloride	24 hours	0.010 ppm (26 µg/m ³)	Gas Chromatography	--	--	--

ppm= parts per million; µg/m³ = micrograms per cubic meter ; mg/m³= milligrams per cubic meter

Source: California Air Resources Board, www.arb.ca.gov, 2019

2.3 Background Air Quality

The APCD operates a network of ambient air monitoring stations throughout San Diego County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The nearest ambient monitoring station to the project site is the Camp Pendleton monitoring station located north of Carlsbad, which measures O₃, PM_{2.5}, and NO₂.

The 2015 federal 8-hour ozone standard (0.070 ppm) was exceeded twice in 2015, and four times in both 2016 and 2017. The Camp Pendleton monitoring station recorded an individual exceedance of the federal PM_{2.5} standard in 2015; however, the standard is not defined by a single exceedance and the SDAB remains unclassified/attainment for PM_{2.5}. The data from the monitoring stations indicate that air quality is in attainment of all other NAAQS and CAAQS.

Table 2 Ambient Background Concentrations (ppm unless otherwise indicated)							
Pollutant	Averaging Time	2015	2016	2017	CAAQS	NAAQS	Monitoring Station
Ozone	8 hour	0.076	0.073	0.081	0.070	0.070	Camp Pendleton
	1 hour	0.093	0.083	0.094	0.09	--	Camp Pendleton
PM _{2.5}	Annual	NA	NA	NA	12 µg/m ³	15 µg/m ³	Camp Pendleton
	24 hour	41.2	28.8	26.0	--	35 µg/m ³	Camp Pendleton
NO ₂	Annual	0.013	0.011	0.010	0.030	0.053	Camp Pendleton
	1 hour	0.061	0.063	0.048	0.18	0.100	Camp Pendleton

¹Secondary NAAQS

NA – Data not available

3.0 THRESHOLDS OF SIGNIFICANCE

The State of California has developed guidelines to address the significance of air quality impacts based on Appendix G of the State CEQA Guidelines which provides guidance that a project would have a significant environmental impact if it would:

1. Conflict or obstruct the implementation of the San Diego Regional Air Quality Strategy (RAQS) or applicable portions of the State Implementation Plan (SIP);
2. Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation;
3. Result in a cumulatively considerable net increase of PM_{10} or exceed quantitative thresholds for O_3 precursors, oxides of nitrogen (NO_x) and volatile organic compounds (VOCs);
4. Expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations; or
5. Create objectionable odors affecting a substantial number of people.

To determine whether a project would (a) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation; or (b) result in a cumulatively considerable net increase of PM_{10} or exceed quantitative thresholds for O_3 precursors NO_x and VOCs, project emissions may be evaluated based on the quantitative emission thresholds established by the San Diego APCD. As part of its air quality permitting process, the APCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIA).

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. Since APCD does not have AQIA thresholds for emissions of VOCs, for conservative purposes the SCAQMD's quantitative significance thresholds were used to evaluate potential significance of impacts. The screening thresholds are included in the table below.

Table 3 SCREENING-LEVEL CRITERIA FOR AIR QUALITY IMPACTS	
Pollutant	Total Emissions
Construction Emissions	
	Lb. per Day
Respirable Particulate Matter (PM ₁₀)	150
Fine Particulate Matter (PM _{2.5})	55
Oxides of Nitrogen (NO _x)	100
Oxides of Sulfur (SO _x)	150
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	75
Operational Emissions	
	Lb. per Day
Respirable Particulate Matter (PM ₁₀)	150
Fine Particulate Matter (PM _{2.5}) ¹	55
Oxides of Nitrogen (NO _x)	55
Oxides of Sulfur (SO _x)	150
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3
Volatile Organic Compounds (VOC) ²	55

Source: SCAQMD CEQA Significance Thresholds, www.aqmd.gov

The thresholds listed in Table 3 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. In the event that emissions exceed these thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the State and Federal Ambient Air Quality Standards, including appropriate background levels. For nonattainment pollutants (ozone, with ozone precursors NO_x and VOCs, and PM₁₀), if emissions exceed the thresholds shown in Table 3, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or Hazardous Air Pollutants (HAPs). In San Diego County, APCD Regulation XII establishes acceptable risk levels and emission control requirements for new and modified facilities that may emit additional TACs. Under Rule 1210, emissions of TACs that result in a cancer risk of 10 in 1 million or less and a health hazard index of one or less would not be required to notify the public of potential health risks. If a project has the potential to result in emissions of any TAC or HAP which result in a cancer risk of greater than 10 in 1 million, the project would be deemed to have a potentially significant impact.

With regard to evaluating whether a project would have a significant impact on sensitive receptors, air quality regulators typically define sensitive receptors as schools (Preschool-12th Grade), hospitals, resident care facilities, or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Any project which has the potential to directly impact a sensitive receptor located within 1 mile and results in a health risk greater than 10 in 1 million would be deemed to have a potentially significant impact.

APCD Rule 51 (Public Nuisance) also prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health or safety of any person. A project that proposes a use which would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of offsite receptors.

The impacts associated with construction and operation of the project were evaluated for significance based on these significance criteria.

4.0 IMPACTS

The proposed Chick-fil-A Carlsbad Project includes both construction and operational impacts. Construction impacts include emissions associated with site grading/preparation, utilities installation, construction of buildings, and paving. Operational impacts include emissions associated with the project, including traffic, at full buildout.

4.1 Existing Conditions

As discussed in Section 1.0, the project site is currently occupied by an office building. As it exists, the office building is a source of air emissions from vehicles and building operations. Emissions from the existing office building were calculated with the CalEEMod Model, Version 2016.3.2. Table 4 presents a summary of the existing emissions.

Table 4						
Estimated Existing Operational Emissions						
Emission Source	ROG	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
Summer, lbs/day						
Area Sources	0.25	0.00	0.001	0.00	0.00	0.00
Energy Use	0.008	0.07	0.06	0.00	0.005	0.005
Vehicular Emissions	0.35	1.42	4.00	0.01	1.23	0.34
TOTAL	0.61	1.49	4.06	0.01	1.24	0.35
Significance Criteria	55	55	550	150	150	55
Winter, lbs/day						
Area Sources	0.25	0.00	0.001	0.00	0.00	0.00
Energy Use	0.008	0.07	0.06	0.00	0.005	0.005
Vehicular Emissions	0.34	1.46	3.93	0.01	1.23	0.34
TOTAL	0.60	1.53	3.99	0.01	1.24	0.34
Significance Criteria	55	55	550	150	150	55

4.2 Construction

Emissions of pollutants such as fugitive dust that are generated during construction are generally highest near the construction site. Emissions from the construction phase of the project were estimated through the use of the CalEEMod Model (SCAQMD 2017). Construction is anticipated to be carried out in three main phases. The first phase of construction involves demolition of the existing office building. The second phase of construction involves site preparation/grading.

Grading will occur over the entire site (33,964 square feet), and will include 2,360 cubic yards of cut and 20 cubic yard of fill, with approximately 2,290 cubic yards of export. The third phase of construction involves construction of the building, along with paving and architectural coatings application. It was assumed that the entire construction project would be completed within 6 months, starting in the summer of 2021 and ending at the end of 2021. It was assumed that heavy construction equipment would be operating at the site for eight hours per day, five days per week during project construction. It was assumed that fugitive dust controls would be utilized during construction, including watering of active sites three times daily.

For the purpose of estimating emissions from the application of architectural coatings, it was assumed that water-based coatings that would be compliant with SDAPCD Regulations would be used for both exterior and interior surfaces. Within the CalEEMod Model, this assumption was included by assuming that the architectural coating emissions would have a VOC content of 50 grams per liter for interior coatings and 100 grams per liter for exterior coatings

Table 5 provides a summary of the emission estimates for construction of the proposed project, assuming standard measures are implemented to reduce emissions, as calculated with the CalEEMod Model, in comparison with the regional and localized significance thresholds. As shown in Table 5, emissions associated with construction are below the significance thresholds for all construction phases and pollutants. Construction of the project would be short-term and temporary. Thus the emissions associated with construction would not result in a significant impact on the ambient air quality. Because emissions are less than the significance levels, they would not conflict or obstruct the implementation of the AQMP or applicable portions of the SIP.

Project construction would also not result in emission of any odor compounds that would cause a nuisance or significant impact to nearby receptors. The impacts associated with Project construction are therefore not considered significant.

Table 5
Estimated Construction Emissions

Emission Source	ROG	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
lbs/day						
Demolition						
Fugitive Dust	-	-	-	-	0.36	0.05
Offroad Diesel	0.80	7.25	7.57	0.01	0.41	0.39
Onroad Diesel	0.03	1.07	0.26	0.003	0.08	0.02
Worker Travel	0.03	0.02	0.27	0.0008	0.08	0.02
TOTAL	0.86	8.34	8.10	0.01	0.93	0.48
Significance Criteria	75	100	550	150	150	55
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Grading						
Fugitive Dust	-	-	-	-	0.31	0.16
Offroad Diesel	0.80	7.25	7.57	0.01	0.41	0.39
Onroad Diesel	0.07	2.29	0.56	0.01	0.16	0.05
Worker Travel	0.03	0.02	0.27	0.0008	0.08	0.02
TOTAL	0.90	9.56	8.40	0.02	0.96	0.52
Significance Criteria	75	100	550	150	150	55
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Building Construction						
Building Offroad Diesel	0.78	7.99	7.26	0.01	0.45	0.41
Building Vendor Travel	0.01	0.31	0.08	0.0008	0.02	0.006
Building Worker Travel	0.003	0.002	0.03	0.0001	0.008	0.002
TOTAL	0.79	8.30	7.34	0.01	0.47	0.42
Significance Criteria	75	100	550	150	150	55
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Paving						
Asphalt Offgassing	0.02	-	-	-	-	-
Offroad Diesel	0.72	6.72	7.09	0.01	0.35	0.33
Worker Travel	0.06	0.04	0.48	0.001	0.15	0.04
TOTAL	0.80	6.76	7.57	0.01	0.50	0.37
Significance Criteria	75	100	550	150	150	55
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Architectural Coatings						
Architectural Coatings Offgassing	1.30	-	-	-	-	-
Architectural Coatings Offroad Diesel	0.22	1.53	1.82	0.003	0.09	0.09
Worker Travel	0.003	0.002	0.03	0.0001	0.008	0.002
TOTAL	1.52	1.53	1.85	0.003	0.10	0.09
Significance Criteria	75	100	550	150	150	55
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
MAXIMUM SIMULTANEOUS CONSTRUCTION EMISSIONS	3.13	16.59	16.94	0.03	1.13	0.90
Significance Criteria	75	100	550	150	150	55
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

4.2 Operational Impacts

The main operational impacts associated with the Project would be impacts associated with traffic. Minor impacts would be associated with energy use and area sources.

To address whether the Project would result in emissions that would violate any air quality standard or contribute substantially to an existing or proposed air quality violation, the emissions associated with Project-generated traffic and area sources were compared with the significance criteria. Trip generation rates from the Transportation Impact Analysis (Linscott, Law and Greenspan 2020) were used to estimate emissions from vehicles. Project-related traffic was assumed to be comprised of a mixture of vehicles in accordance with the CalEEMod Model default outputs for traffic. This assumption includes light duty autos and light duty trucks (i.e., small trucks, SUVs, and vans) as well as medium- and heavy-duty vehicles that may be traveling to the facility to make deliveries. For conservative purposes, emission factors representing the vehicle mix for 2022 were used to estimate emissions as 2022 was assumed to be the first year of full operation; based on the results of the EMFAC model for subsequent years, emissions would decrease on an annual basis from 2022 onward due to phase-out of higher polluting vehicles and implementation of more stringent emission standards that are taken into account in the EMFAC model. Emissions associated with area sources (energy use and landscaping activities) were also estimated using the default assumptions in the CalEEMod Model.

Table 6 presents the results of the emission calculations in lbs/day, considering the project's design features listed above, along with a comparison with the significance criteria. The calculation assumed that the project would be constructed to 2016 Title 24 buildings standards, and would use low-flow plumbing fixtures.

Table 6 also presents a summary of the net emissions, accounting for the demolition of the existing office building.

Table 6						
Estimated Operational Emissions						
Emission Source	ROG	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
Summer, lbs/day						
Area Sources	0.08	0.00	0.00	0.00	0.00	0.00
Energy Use	0.02	0.16	0.13	0.00	0.01	0.01
Vehicular Emissions	2.88	10.17	21.50	0.06	4.95	1.36
TOTAL	2.98	10.33	21.63	0.06	4.96	1.37
TOTAL EXISTING EMISSIONS	0.61	1.49	4.06	0.01	1.24	0.35
NET EMISSIONS	2.37	8.84	17.57	0.05	3.72	1.02
Significance Criteria	55	55	550	150	150	55
Winter, lbs/day						
Area Sources	0.08	0.00	0.00	0.00	0.00	0.00
Energy Use	0.02	0.16	0.13	0.00	0.01	0.01
Vehicular Emissions	2.78	10.24	22.79	0.06	4.95	1.36
TOTAL	2.88	10.40	22.92	0.06	4.96	1.37
TOTAL EXISTING EMISSIONS	0.60	1.53	3.99	0.01	1.24	0.34
NET EMISSIONS	2.28	8.87	18.93	0.04	3.72	1.03
Significance Criteria	55	55	550	150	150	55

Based on the estimates of the emissions associated with project operations, the emissions are below the significance criteria for all pollutants. As shown in Table 6, the reduction in emissions due to removal of the existing office building would reduce emissions further. Because emissions are less than the significance levels, they would not conflict or obstruct the implementation of the RAQS or applicable portions of the SIP. It should be noted that the emissions from vehicles are projected to decrease with time due to phase-out of older, more polluting vehicles and increasingly stringent emissions standards.

Projects involving traffic impacts may result in the formation of locally high concentrations of CO, known as CO “hot spots.” According to the Transportation Impact Analysis (Linscott, Law and Greenspan 2019), the project would result in an unacceptable level of service (LOS) at the intersection of Avenida Encinas and the project driveway. The Traffic Impact Analysis recommends signalization of this intersection and a dedicated left-turn lane exiting the project driveway. The proposed signal would provide a protected pedestrian crossing connecting office/business uses to the Chick-fil-A restaurant. With implementation of the traffic mitigation, the intersection would operate at LOS A and would not result in a CO “hot spot”.

4.3 Odors

During construction, diesel equipment operating at the site may generate some nuisance odors; however, due to the distance of sensitive receptors to the project site and the temporary nature of construction, odors associated with project construction would not be significant.

Land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. These land uses are not proposed for the Chick-fil-A Carlsbad Project. Cooking odors are not considered to be objectionable odors. Odor impacts would not be significant.

5.0 CONCLUSIONS

The air quality analysis for the Chick-fil-A Carlsbad project evaluated emissions associated with both the construction and operation of the project. Emissions associated with construction and operation were compared with significance thresholds developed by the SCAQMD, which provide a conservative means of evaluating whether project emissions would cause a significant impact on the ambient air quality or whether further evaluation is warranted. Emissions associated with construction and operation are below the significance thresholds for all phases and pollutants. Thus the emissions associated with construction and operation of the project would not result in a significant impact on the ambient air quality.

6.0 REFERENCES

- California Air Resources Board. 2005. *ARB Fact Sheet: Air Pollution and Health*. December 27.
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Appendix A

CalEEMod Model Outputs

Chick fil A Carlsbad Existing - San Diego Air Basin, Summer

Chick fil A Carlsbad Existing
San Diego Air Basin, Summer**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	10.98	1000sqft	0.25	10,977.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	517.31	CH4 Intensity (lb/MWhr)	0.021	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS

Land Use -

Vehicle Trips - SANDAG trip lengths

Area Coating - Rule 67.0.1 coatings

Energy Use - Building constructed in 1972

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100

tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	517.31
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	CC_TL	7.30	8.80
tblVehicleTrips	CNW_TL	7.30	8.80
tblVehicleTrips	CW_TL	9.50	8.80
tblVehicleTrips	WD_TR	11.03	20.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	51.1266	9.0877	7.9060	0.0128	0.8349	0.5237	1.3027	0.4356	0.4819	0.8818	0.0000	1,231.5099	1,231.5099	0.3621	0.0000	1,236.9954
Maximum	51.1266	9.0877	7.9060	0.0128	0.8349	0.5237	1.3027	0.4356	0.4819	0.8818	0.0000	1,231.5099	1,231.5099	0.3621	0.0000	1,236.9954

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					

2020	51.1266	9.0877	7.9060	0.0128	0.8349	0.5237	1.3027	0.4356	0.4819	0.8818	0.0000	1,231.509 9	1,231.5099	0.3621	0.0000	1,236.995 4
Maximum	51.1266	9.0877	7.9060	0.0128	0.8349	0.5237	1.3027	0.4356	0.4819	0.8818	0.0000	1,231.509 9	1,231.5099	0.3621	0.0000	1,236.995 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	0.2524	1.0000e- 005	1.1200e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e- 003	2.4000e- 003	1.0000e- 005		2.5600e- 003
Energy	7.6400e- 003	0.0695	0.0584	4.2000e- 004		5.2800e- 003	5.2800e- 003		5.2800e- 003	5.2800e- 003		83.3580	83.3580	1.6000e- 003	1.5300e- 003	83.8533
Mobile	0.3508	1.4230	3.9977	0.0141	1.2197	0.0113	1.2310	0.3260	0.0106	0.3365		1,435.234 3	1,435.2343	0.0726		1,437.049 4
Total	0.6108	1.4924	4.0572	0.0145	1.2197	0.0166	1.2363	0.3260	0.0159	0.3418		1,518.594 7	1,518.5947	0.0742	1.5300e- 003	1,520.905 3

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	0.2524	1.0000e- 005	1.1200e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e- 003	2.4000e- 003	1.0000e- 005		2.5600e- 003

Energy	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533
Mobile	0.3508	1.4230	3.9977	0.0141	1.2197	0.0113	1.2310	0.3260	0.0106	0.3365		1,435.2343	1,435.2343	0.0726		1,437.0494
Total	0.6108	1.4924	4.0572	0.0145	1.2197	0.0166	1.2363	0.3260	0.0159	0.3418		1,518.5947	1,518.5947	0.0742	1.5300e-003	1,520.9053

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/12/2020	4/24/2020	5	10	
2	Site Preparation	Site Preparation	4/25/2020	4/27/2020	5	1	
3	Grading	Grading	4/28/2020	4/29/2020	5	2	
4	Building Construction	Building Construction	4/30/2020	9/16/2020	5	100	
5	Paving	Paving	9/17/2020	9/23/2020	5	5	
6	Architectural Coating	Architectural Coating	9/24/2020	9/30/2020	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,466; Non-Residential Outdoor: 5,489; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73

Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	4.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578

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	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578

Total	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
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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	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085		943.4872	943.4872	0.3051		951.1158
Total	0.6853	8.4307	4.0942	9.7400e-003	0.5303	0.3353	0.8656	0.0573	0.3085	0.3658		943.4872	943.4872	0.3051		951.1158

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	0.0184	0.0124	0.1417	4.2000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		42.1374	42.1374	1.2600e-003		42.1688
Total	0.0184	0.0124	0.1417	4.2000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		42.1374	42.1374	1.2600e-003		42.1688

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085	0.0000	943.4872	943.4872	0.3051		951.1158
Total	0.6853	8.4307	4.0942	9.7400e-003	0.5303	0.3353	0.8656	0.0573	0.3085	0.3658	0.0000	943.4872	943.4872	0.3051		951.1158

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
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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	0.0184	0.0124	0.1417	4.2000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		42.1374	42.1374	1.2600e-003		42.1688
Total	0.0184	0.0124	0.1417	4.2000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		42.1374	42.1374	1.2600e-003		42.1688

3.4 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					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	0.8674	7.8729	7.6226	0.0120	0.7528	0.4672	1.2200	0.4138	0.4457	0.8595		1,147.2352	1,147.2352	0.2169		1,152.6578

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	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
Total	0.8674	7.8729	7.6226	0.0120	0.7528	0.4672	1.2200	0.4138	0.4457	0.8595	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578

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	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962
Total	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962

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	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0147	9.8900e-003	0.1134	3.4000e-004	0.0329	2.3000e-004	0.0331	8.7200e-003	2.1000e-004	8.9300e-003		33.7099	33.7099	1.0100e-003		33.7351
Total	0.0222	0.2354	0.1708	8.9000e-004	0.0464	1.3300e-003	0.0477	0.0126	1.2700e-003	0.0139		92.5179	92.5179	5.3500e-003		92.6515

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
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Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962
Total	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962

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	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0147	9.8900e-003	0.1134	3.4000e-004	0.0329	2.3000e-004	0.0331	8.7200e-003	2.1000e-004	8.9300e-003		33.7099	33.7099	1.0100e-003		33.7351
Total	0.0222	0.2354	0.1708	8.9000e-004	0.0464	1.3300e-003	0.0477	0.0126	1.2700e-003	0.0139		92.5179	92.5179	5.3500e-003		92.6515

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	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669		1,035.3926	1,035.3926	0.3016		1,042.9323
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Total	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669		1,035.3926	1,035.3926	0.3016		1,042.9323
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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	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669	0.0000	1,035.3926	1,035.3926	0.3016		1,042.9323
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669	0.0000	1,035.3926	1,035.3926	0.3016		1,042.9323

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	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

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	50.8807					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	51.1229	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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	3.6700e-003	2.4700e-003	0.0284	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.4275	8.4275	2.5000e-004		8.4338
Total	3.6700e-003	2.4700e-003	0.0284	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.4275	8.4275	2.5000e-004		8.4338

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	50.8807					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	51.1229	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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	3.6700e-003	2.4700e-003	0.0284	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.4275	8.4275	2.5000e-004		8.4338

Total	3.6700e-003	2.4700e-003	0.0284	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.4275	8.4275	2.5000e-004		8.4338
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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3508	1.4230	3.9977	0.0141	1.2197	0.0113	1.2310	0.3260	0.0106	0.3365		1,435.2343	1,435.2343	0.0726		1,437.0494
Unmitigated	0.3508	1.4230	3.9977	0.0141	1.2197	0.0113	1.2310	0.3260	0.0106	0.3365		1,435.2343	1,435.2343	0.0726		1,437.0494

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	219.54	27.00	11.53	425,286	425,286
Total	219.54	27.00	11.53	425,286	425,286

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	8.80	8.80	8.80	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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General Office Building	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
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5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533
NaturalGas Unmitigated	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533

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					
General Office Building	708.543	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533
Total		7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533

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					
General Office Building	0.708543	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533
Total		7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533

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	0.2524	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003
Unmitigated	0.2524	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0174					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2349					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003
Total	0.2524	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003

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	0.0174					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2349					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003
Total	0.2524	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chick fil A Carlsbad Existing - San Diego Air Basin, Winter

Chick fil A Carlsbad Existing

San Diego Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	10.98	1000sqft	0.25	10,977.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	517.31	CH4 Intensity (lb/MWhr)	0.021	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS

Land Use -

Vehicle Trips - SANDAG trip lengths

Area Coating - Rule 67.0.1 coatings

Energy Use - Building constructed in 1972

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100

tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	517.31
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	CC_TL	7.30	8.80
tblVehicleTrips	CNW_TL	7.30	8.80
tblVehicleTrips	CW_TL	9.50	8.80
tblVehicleTrips	WD_TR	11.03	20.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	51.1271	9.0887	7.8898	0.0128	0.8349	0.5237	1.3027	0.4356	0.4819	0.8818	0.0000	1,226.3484	1,226.3484	0.3623	0.0000	1,231.8305
Maximum	51.1271	9.0887	7.8898	0.0128	0.8349	0.5237	1.3027	0.4356	0.4819	0.8818	0.0000	1,226.3484	1,226.3484	0.3623	0.0000	1,231.8305

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					

2020	51.1271	9.0887	7.8898	0.0128	0.8349	0.5237	1.3027	0.4356	0.4819	0.8818	0.0000	1,226.3484	1,226.3484	0.3623	0.0000	1,231.8305
Maximum	51.1271	9.0887	7.8898	0.0128	0.8349	0.5237	1.3027	0.4356	0.4819	0.8818	0.0000	1,226.3484	1,226.3484	0.3623	0.0000	1,231.8305

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	0.2524	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003
Energy	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533
Mobile	0.3401	1.4600	3.9354	0.0134	1.2197	0.0114	1.2311	0.3260	0.0107	0.3366		1,361.3051	1,361.3051	0.0730		1,363.1306
Total	0.6001	1.5294	3.9948	0.0138	1.2197	0.0167	1.2363	0.3260	0.0159	0.3419		1,444.6655	1,444.6655	0.0746	1.5300e-003	1,446.9865

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	0.2524	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003

Energy	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533
Mobile	0.3401	1.4600	3.9354	0.0134	1.2197	0.0114	1.2311	0.3260	0.0107	0.3366		1,361.3051	1,361.3051	0.0730		1,363.1306
Total	0.6001	1.5294	3.9948	0.0138	1.2197	0.0167	1.2363	0.3260	0.0159	0.3419		1,444.6655	1,444.6655	0.0746	1.5300e-003	1,446.9865

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/12/2020	4/24/2020	5	10	
2	Site Preparation	Site Preparation	4/25/2020	4/27/2020	5	1	
3	Grading	Grading	4/28/2020	4/29/2020	5	2	
4	Building Construction	Building Construction	4/30/2020	9/16/2020	5	100	
5	Paving	Paving	9/17/2020	9/23/2020	5	5	
6	Architectural Coating	Architectural Coating	9/24/2020	9/30/2020	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,466; Non-Residential Outdoor: 5,489; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73

Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	4.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578

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	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578

Total	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
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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	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085		943.4872	943.4872	0.3051		951.1158
Total	0.6853	8.4307	4.0942	9.7400e-003	0.5303	0.3353	0.8656	0.0573	0.3085	0.3658		943.4872	943.4872	0.3051		951.1158

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	0.0208	0.0139	0.1336	4.0000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		39.5566	39.5566	1.1900e-003		39.5864
Total	0.0208	0.0139	0.1336	4.0000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		39.5566	39.5566	1.1900e-003		39.5864

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085	0.0000	943.4872	943.4872	0.3051		951.1158
Total	0.6853	8.4307	4.0942	9.7400e-003	0.5303	0.3353	0.8656	0.0573	0.3085	0.3658	0.0000	943.4872	943.4872	0.3051		951.1158

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
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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	0.0208	0.0139	0.1336	4.0000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		39.5566	39.5566	1.1900e-003		39.5864
Total	0.0208	0.0139	0.1336	4.0000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		39.5566	39.5566	1.1900e-003		39.5864

3.4 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					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	0.8674	7.8729	7.6226	0.0120	0.7528	0.4672	1.2200	0.4138	0.4457	0.8595		1,147.2352	1,147.2352	0.2169		1,152.6578

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	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
Total	0.8674	7.8729	7.6226	0.0120	0.7528	0.4672	1.2200	0.4138	0.4457	0.8595	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578

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	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962
Total	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962

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	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0166	0.0111	0.1069	3.2000e-004	0.0329	2.3000e-004	0.0331	8.7200e-003	2.1000e-004	8.9300e-003		31.6453	31.6453	9.5000e-004		31.6691
Total	0.0245	0.2364	0.1707	8.5000e-004	0.0464	1.3500e-003	0.0478	0.0126	1.2900e-003	0.0139		88.9377	88.9377	5.5600e-003		89.0768

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
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Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962
Total	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962

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	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0166	0.0111	0.1069	3.2000e-004	0.0329	2.3000e-004	0.0331	8.7200e-003	2.1000e-004	8.9300e-003		31.6453	31.6453	9.5000e-004		31.6691
Total	0.0245	0.2364	0.1707	8.5000e-004	0.0464	1.3500e-003	0.0478	0.0126	1.2900e-003	0.0139		88.9377	88.9377	5.5600e-003		89.0768

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	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669		1,035.3926	1,035.3926	0.3016		1,042.9323
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Total	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669		1,035.3926	1,035.3926	0.3016		1,042.9323
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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	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669	0.0000	1,035.3926	1,035.3926	0.3016		1,042.9323
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669	0.0000	1,035.3926	1,035.3926	0.3016		1,042.9323

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	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

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	50.8807					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	51.1229	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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	4.1600e-003	2.7800e-003	0.0267	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.9113	7.9113	2.4000e-004		7.9173
Total	4.1600e-003	2.7800e-003	0.0267	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.9113	7.9113	2.4000e-004		7.9173

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	50.8807					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	51.1229	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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	4.1600e-003	2.7800e-003	0.0267	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.9113	7.9113	2.4000e-004		7.9173

Total	4.1600e-003	2.7800e-003	0.0267	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.9113	7.9113	2.4000e-004		7.9173
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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3401	1.4600	3.9354	0.0134	1.2197	0.0114	1.2311	0.3260	0.0107	0.3366		1,361.3051	1,361.3051	0.0730		1,363.1306
Unmitigated	0.3401	1.4600	3.9354	0.0134	1.2197	0.0114	1.2311	0.3260	0.0107	0.3366		1,361.3051	1,361.3051	0.0730		1,363.1306

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	219.54	27.00	11.53	425,286	425,286
Total	219.54	27.00	11.53	425,286	425,286

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	8.80	8.80	8.80	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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General Office Building	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
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5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533
NaturalGas Unmitigated	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533

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					
General Office Building	708.543	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533
Total		7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533

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					
General Office Building	0.708543	7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533
Total		7.6400e-003	0.0695	0.0584	4.2000e-004		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003		83.3580	83.3580	1.6000e-003	1.5300e-003	83.8533

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	0.2524	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003
Unmitigated	0.2524	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0174					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2349					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003
Total	0.2524	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003

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	0.0174					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2349					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003
Total	0.2524	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-003	2.4000e-003	1.0000e-005		2.5600e-003

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chick fil A Carlsbad - San Diego Air Basin, Summer

Chick fil A Carlsbad
San Diego Air Basin, Summer

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	36.00	Space	0.32	14,400.00	0
Fast Food Restaurant w/o Drive Thru	3.43	1000sqft	0.08	3,427.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	517.31	CH4 Intensity (lb/MWhr)	0.021	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS

Land Use -

Construction Phase - 6 month construction schedule

Grading - Net export

Demolition -

Architectural Coating - Rule 67.0.1 coatings

Vehicle Trips - Based on SANDAG trip lengths and traffic analysis

Area Coating - Rule 67.0.1 coatings

Energy Use - Title 24 as of 2019

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	23.00
tblConstructionPhase	NumDays	100.00	88.00
tblConstructionPhase	NumDays	10.00	12.00
tblConstructionPhase	NumDays	2.00	32.00
tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	PhaseEndDate	12/20/2021	12/31/2021
tblConstructionPhase	PhaseEndDate	12/6/2021	12/31/2021
tblConstructionPhase	PhaseEndDate	7/14/2021	7/16/2021
tblConstructionPhase	PhaseEndDate	7/19/2021	8/31/2021
tblConstructionPhase	PhaseEndDate	12/13/2021	12/31/2021
tblConstructionPhase	PhaseStartDate	12/14/2021	12/1/2021
tblConstructionPhase	PhaseStartDate	7/20/2021	9/1/2021
tblConstructionPhase	PhaseStartDate	7/16/2021	7/17/2021
tblConstructionPhase	PhaseStartDate	12/7/2021	11/1/2021
tblEnergyUse	T24E	8.23	7.35
tblEnergyUse	T24NG	35.92	35.56
tblGrading	AcresOfGrading	0.00	0.89
tblGrading	MaterialExported	0.00	2,290.00

tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	517.31
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	CC_TL	7.30	4.70
tblVehicleTrips	CC_TL	7.30	4.70
tblVehicleTrips	CNW_TL	7.30	4.70
tblVehicleTrips	CNW_TL	7.30	4.70
tblVehicleTrips	CW_TL	9.50	4.70
tblVehicleTrips	CW_TL	9.50	4.70
tblVehicleTrips	DV_TP	37.00	25.00
tblVehicleTrips	PB_TP	12.00	25.00
tblVehicleTrips	PR_TP	51.00	50.00
tblVehicleTrips	ST_TR	696.00	700.00
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	WD_TR	716.00	700.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.1316	16.5935	16.9386	0.0286	1.0666	0.8972	1.4778	0.4831	0.8364	0.8989	0.0000	2,719.1666	2,719.1666	0.6900	0.0000	2,736.4160
Maximum	3.1316	16.5935	16.9386	0.0286	1.0666	0.8972	1.4778	0.4831	0.8364	0.8989	0.0000	2,719.1666	2,719.1666	0.6900	0.0000	2,736.4160

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.1316	16.5935	16.9386	0.0286	0.5473	0.8972	1.1311	0.2278	0.8364	0.8989	0.0000	2,719.1666	2,719.1666	0.6900	0.0000	2,736.4160
Maximum	3.1316	16.5935	16.9386	0.0286	0.5473	0.8972	1.1311	0.2278	0.8364	0.8989	0.0000	2,719.1666	2,719.1666	0.6900	0.0000	2,736.4160

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	48.69	0.00	23.46	52.84	0.00	0.00	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	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003
Energy	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
Mobile	2.8808	10.1982	21.6339	0.0632	4.9412	0.0547	4.9959	1.3206	0.0510	1.3716		6,438.1495	6,438.1495	0.3904		6,447.9100
Total	2.9854	10.3585	21.7725	0.0641	4.9412	0.0668	5.0080	1.3206	0.0631	1.3837		6,630.3794	6,630.3794	0.3941	3.5200e-003	6,641.2827

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	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003
Energy	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
Mobile	2.8752	10.1667	21.5040	0.0626	4.8918	0.0543	4.9461	1.3074	0.0506	1.3580		6,383.6781	6,383.6781	0.3881		6,393.3793
Total	2.9798	10.3269	21.6426	0.0636	4.8918	0.0664	4.9582	1.3074	0.0628	1.3701		6,575.9080	6,575.9080	0.3918	3.5200e-003	6,586.7520

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.19	0.30	0.60	0.83	1.00	0.60	0.99	1.00	0.60	0.98	0.00	0.82	0.82	0.60	0.00	0.82

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	7/1/2021	7/16/2021	5	12	
2	Grading	Grading	7/17/2021	8/31/2021	5	32	
3	Building Construction	Building Construction	9/1/2021	12/31/2021	5	88	
4	Paving	Paving	11/1/2021	12/31/2021	5	45	
5	Architectural Coating	Architectural Coating	12/1/2021	12/31/2021	5	23	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.89

Acres of Paving: 0.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,141; Non-Residential Outdoor: 1,714; Striped Parking Area: 864

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	50.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	286.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	7.00	3.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9117	0.0000	0.9117	0.1381	0.0000	0.1381			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886		1,147.4338	1,147.4338	0.2138		1,152.7797
Total	0.7965	7.2530	7.5691	0.0120	0.9117	0.4073	1.3190	0.1381	0.3886	0.5267		1,147.4338	1,147.4338	0.2138		1,152.7797

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	0.0309	1.0681	0.2613	3.2100e-003	0.0728	3.2600e-003	0.0761	0.0200	3.1200e-003	0.0231		352.3668	352.3668	0.0311		353.1450
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	0.0346	0.0225	0.2652	8.2000e-004	0.0822	5.7000e-004	0.0827	0.0218	5.2000e-004	0.0223		81.4441	81.4441	2.3200e-003		81.5022
Total	0.0655	1.0905	0.5265	4.0300e-003	0.1550	3.8300e-003	0.1588	0.0417	3.6400e-003	0.0454		433.8109	433.8109	0.0335		434.6472

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3556	0.0000	0.3556	0.0538	0.0000	0.0538			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797
Total	0.7965	7.2530	7.5691	0.0120	0.3556	0.4073	0.7629	0.0538	0.3886	0.4424	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797

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	0.0309	1.0681	0.2613	3.2100e-003	0.0728	3.2600e-003	0.0761	0.0200	3.1200e-003	0.0231		352.3668	352.3668	0.0311		353.1450
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	0.0346	0.0225	0.2652	8.2000e-004	0.0822	5.7000e-004	0.0827	0.0218	5.2000e-004	0.0223		81.4441	81.4441	2.3200e-003		81.5022
Total	0.0655	1.0905	0.5265	4.0300e-003	0.1550	3.8300e-003	0.1588	0.0417	3.6400e-003	0.0454		433.8109	433.8109	0.0335		434.6472

3.3 Grading - 2021

Unmitigated Construction On-Site

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

Fugitive Dust					0.7923	0.0000	0.7923	0.4185	0.0000	0.4185			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886		1,147.4338	1,147.4338	0.2138		1,152.7797
Total	0.7965	7.2530	7.5691	0.0120	0.7923	0.4073	1.1997	0.4185	0.3886	0.8071		1,147.4338	1,147.4338	0.2138		1,152.7797

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	0.0663	2.2910	0.5605	6.8900e-003	0.1562	6.9900e-003	0.1632	0.0428	6.6900e-003	0.0495		755.8268	755.8268	0.0668		757.4959
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	0.0346	0.0225	0.2652	8.2000e-004	0.0822	5.7000e-004	0.0827	0.0218	5.2000e-004	0.0223		81.4441	81.4441	2.3200e-003		81.5022
Total	0.1009	2.3135	0.8257	7.7100e-003	0.2383	7.5600e-003	0.2459	0.0646	7.2100e-003	0.0718		837.2709	837.2709	0.0691		838.9981

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3090	0.0000	0.3090	0.1632	0.0000	0.1632			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797
Total	0.7965	7.2530	7.5691	0.0120	0.3090	0.4073	0.7163	0.1632	0.3886	0.5518	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797

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	0.0663	2.2910	0.5605	6.8900e-003	0.1562	6.9900e-003	0.1632	0.0428	6.6900e-003	0.0495		755.8268	755.8268	0.0668		757.4959
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	0.0346	0.0225	0.2652	8.2000e-004	0.0822	5.7000e-004	0.0827	0.0218	5.2000e-004	0.0223		81.4441	81.4441	2.3200e-003		81.5022
Total	0.1009	2.3135	0.8257	7.7100e-003	0.2383	7.5600e-003	0.2459	0.0646	7.2100e-003	0.0718		837.2709	837.2709	0.0691		838.9981

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358

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	9.0700e-003	0.3055	0.0779	8.1000e-004	0.0203	6.4000e-004	0.0210	5.8500e-003	6.1000e-004	6.4600e-003		87.4056	87.4056	6.2500e-003		87.5617
Worker	0.0242	0.0157	0.1857	5.7000e-004	0.0575	4.0000e-004	0.0579	0.0153	3.7000e-004	0.0156		57.0109	57.0109	1.6300e-003		57.0515
Total	0.0333	0.3212	0.2635	1.3800e-003	0.0778	1.0400e-003	0.0789	0.0211	9.8000e-004	0.0221		144.4164	144.4164	7.8800e-003		144.6133

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358

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	9.0700e-003	0.3055	0.0779	8.1000e-004	0.0203	6.4000e-004	0.0210	5.8500e-003	6.1000e-004	6.4600e-003		87.4056	87.4056	6.2500e-003		87.5617
Worker	0.0242	0.0157	0.1857	5.7000e-004	0.0575	4.0000e-004	0.0579	0.0153	3.7000e-004	0.0156		57.0109	57.0109	1.6300e-003		57.0515
Total	0.0333	0.3212	0.2635	1.3800e-003	0.0778	1.0400e-003	0.0789	0.0211	9.8000e-004	0.0221		144.4164	144.4164	7.8800e-003		144.6133

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7400	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818

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	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040
Total	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7400	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818

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	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040
Total	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.2987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	1.5176	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	3.4600e-003	2.2500e-003	0.0265	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.1444	8.1444	2.3000e-004		8.1502
Total	3.4600e-003	2.2500e-003	0.0265	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.1444	8.1444	2.3000e-004		8.1502

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	1.2987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	1.5176	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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	3.4600e-003	2.2500e-003	0.0265	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.1444	8.1444	2.3000e-004		8.1502
Total	3.4600e-003	2.2500e-003	0.0265	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.1444	8.1444	2.3000e-004		8.1502

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.8752	10.1667	21.5040	0.0626	4.8918	0.0543	4.9461	1.3074	0.0506	1.3580		6,383.6781	6,383.6781	0.3881		6,393.3793

Unmitigated	2.8808	10.1982	21.6339	0.0632	4.9412	0.0547	4.9959	1.3206	0.0510	1.3716		6,438.1495	6,438.1495	0.3904		6,447.9100
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	2,398.90	2,398.90	0.00	1,997,444	1,977,470
Parking Lot	0.00	0.00	0.00		
Total	2,398.90	2,398.90	0.00	1,997,444	1,977,470

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive Thru	4.70	4.70	4.70	1.50	79.50	19.00	50	25	25
Parking Lot	4.70	4.70	4.70	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
Fast Food Restaurant w/o Drive Thru	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Parking Lot	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
NaturalGas Unmitigated	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636

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					
Fast Food Restaurant w/o Drive-Thru	1633.88	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
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		0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636

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					
Fast Food Restaurant w/o Drive-Thru	1.63388	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
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		0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
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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	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003
Unmitigated	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.1800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0784					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7000e-004	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003
Total	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003

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	8.1800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0784					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7000e-004	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003
Total	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chick fil A Carlsbad - San Diego Air Basin, Winter

Chick fil A Carlsbad
San Diego Air Basin, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	36.00	Space	0.32	14,400.00	0
Fast Food Restaurant w/o Drive Thru	3.43	1000sqft	0.08	3,427.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	517.31	CH4 Intensity (lb/MWhr)	0.021	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS

Land Use -

Construction Phase - 6 month construction schedule

Grading - Net export

Demolition -

Architectural Coating - Rule 67.0.1 coatings

Vehicle Trips - Based on SANDAG trip lengths and traffic analysis

Area Coating - Rule 67.0.1 coatings

Energy Use - Title 24 as of 2019

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	23.00
tblConstructionPhase	NumDays	100.00	88.00
tblConstructionPhase	NumDays	10.00	12.00
tblConstructionPhase	NumDays	2.00	32.00
tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	PhaseEndDate	12/20/2021	12/31/2021
tblConstructionPhase	PhaseEndDate	12/6/2021	12/31/2021
tblConstructionPhase	PhaseEndDate	7/14/2021	7/16/2021
tblConstructionPhase	PhaseEndDate	7/19/2021	8/31/2021
tblConstructionPhase	PhaseEndDate	12/13/2021	12/31/2021
tblConstructionPhase	PhaseStartDate	12/14/2021	12/1/2021
tblConstructionPhase	PhaseStartDate	7/20/2021	9/1/2021
tblConstructionPhase	PhaseStartDate	7/16/2021	7/17/2021
tblConstructionPhase	PhaseStartDate	12/7/2021	11/1/2021
tblEnergyUse	T24E	8.23	7.35
tblEnergyUse	T24NG	35.92	35.56
tblGrading	AcresOfGrading	0.00	0.89
tblGrading	MaterialExported	0.00	2,290.00

tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	517.31
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	CC_TL	7.30	4.70
tblVehicleTrips	CC_TL	7.30	4.70
tblVehicleTrips	CNW_TL	7.30	4.70
tblVehicleTrips	CNW_TL	7.30	4.70
tblVehicleTrips	CW_TL	9.50	4.70
tblVehicleTrips	CW_TL	9.50	4.70
tblVehicleTrips	DV_TP	37.00	25.00
tblVehicleTrips	PB_TP	12.00	25.00
tblVehicleTrips	PR_TP	51.00	50.00
tblVehicleTrips	ST_TR	696.00	700.00
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	WD_TR	716.00	700.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.1442	16.5998	16.9060	0.0284	1.0666	0.8972	1.4779	0.4831	0.8364	0.8989	0.0000	2,703.9345	2,703.9345	0.6900	0.0000	2,721.1853
Maximum	3.1442	16.5998	16.9060	0.0284	1.0666	0.8972	1.4779	0.4831	0.8364	0.8989	0.0000	2,703.9345	2,703.9345	0.6900	0.0000	2,721.1853

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.1442	16.5998	16.9060	0.0284	0.5473	0.8972	1.1311	0.2278	0.8364	0.8989	0.0000	2,703.9345	2,703.9345	0.6900	0.0000	2,721.1853
Maximum	3.1442	16.5998	16.9060	0.0284	0.5473	0.8972	1.1311	0.2278	0.8364	0.8989	0.0000	2,703.9345	2,703.9345	0.6900	0.0000	2,721.1853

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	48.69	0.00	23.47	52.84	0.00	0.00	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	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003
Energy	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
Mobile	2.7827	10.2710	22.9041	0.0597	4.9412	0.0556	4.9968	1.3206	0.0518	1.3724		6,084.3594	6,084.3594	0.4067		6,094.5268
Total	2.8873	10.4312	23.0426	0.0607	4.9412	0.0677	5.0090	1.3206	0.0640	1.3846		6,276.5893	6,276.5893	0.4104	3.5200e-003	6,287.8995

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	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003
Energy	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
Mobile	2.7772	10.2375	22.7856	0.0592	4.8918	0.0552	4.9470	1.3074	0.0515	1.3588		6,032.5633	6,032.5633	0.4044		6,042.6730
Total	2.8818	10.3977	22.9242	0.0602	4.8918	0.0673	4.9591	1.3074	0.0636	1.3710		6,224.7932	6,224.7932	0.4081	3.5200e-003	6,236.0458

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.19	0.32	0.51	0.84	1.00	0.59	0.99	1.00	0.59	0.98	0.00	0.83	0.83	0.56	0.00	0.82

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	7/1/2021	7/16/2021	5	12	
2	Grading	Grading	7/17/2021	8/31/2021	5	32	
3	Building Construction	Building Construction	9/1/2021	12/31/2021	5	88	
4	Paving	Paving	11/1/2021	12/31/2021	5	45	
5	Architectural Coating	Architectural Coating	12/1/2021	12/31/2021	5	23	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.89

Acres of Paving: 0.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,141; Non-Residential Outdoor: 1,714; Striped Parking Area: 864

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	50.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	286.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	7.00	3.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9117	0.0000	0.9117	0.1381	0.0000	0.1381			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886		1,147.4338	1,147.4338	0.2138		1,152.7797
Total	0.7965	7.2530	7.5691	0.0120	0.9117	0.4073	1.3190	0.1381	0.3886	0.5267		1,147.4338	1,147.4338	0.2138		1,152.7797

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	0.0318	1.0773	0.2777	3.1600e-003	0.0728	3.3300e-003	0.0761	0.0200	3.1800e-003	0.0231		346.2788	346.2788	0.0322		347.0826
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	0.0392	0.0252	0.2493	7.7000e-004	0.0822	5.7000e-004	0.0827	0.0218	5.2000e-004	0.0223		76.4548	76.4548	2.2000e-003		76.5097
Total	0.0710	1.1025	0.5271	3.9300e-003	0.1550	3.9000e-003	0.1589	0.0417	3.7000e-003	0.0455		422.7336	422.7336	0.0344		423.5922

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3556	0.0000	0.3556	0.0538	0.0000	0.0538			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797
Total	0.7965	7.2530	7.5691	0.0120	0.3556	0.4073	0.7629	0.0538	0.3886	0.4424	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797

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	0.0318	1.0773	0.2777	3.1600e-003	0.0728	3.3300e-003	0.0761	0.0200	3.1800e-003	0.0231		346.2788	346.2788	0.0322		347.0826
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	0.0392	0.0252	0.2493	7.7000e-004	0.0822	5.7000e-004	0.0827	0.0218	5.2000e-004	0.0223		76.4548	76.4548	2.2000e-003		76.5097
Total	0.0710	1.1025	0.5271	3.9300e-003	0.1550	3.9000e-003	0.1589	0.0417	3.7000e-003	0.0455		422.7336	422.7336	0.0344		423.5922

3.3 Grading - 2021

Unmitigated Construction On-Site

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

Fugitive Dust					0.7923	0.0000	0.7923	0.4185	0.0000	0.4185			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886		1,147.4338	1,147.4338	0.2138		1,152.7797
Total	0.7965	7.2530	7.5691	0.0120	0.7923	0.4073	1.1997	0.4185	0.3886	0.8071		1,147.4338	1,147.4338	0.2138		1,152.7797

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	0.0682	2.3107	0.5958	6.7700e-003	0.1562	7.1400e-003	0.1633	0.0428	6.8300e-003	0.0496		742.7681	742.7681	0.0690		744.4921
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	0.0392	0.0252	0.2493	7.7000e-004	0.0822	5.7000e-004	0.0827	0.0218	5.2000e-004	0.0223		76.4548	76.4548	2.2000e-003		76.5097
Total	0.1074	2.3360	0.8451	7.5400e-003	0.2383	7.7100e-003	0.2460	0.0646	7.3500e-003	0.0719		819.2229	819.2229	0.0712		821.0018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3090	0.0000	0.3090	0.1632	0.0000	0.1632			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797
Total	0.7965	7.2530	7.5691	0.0120	0.3090	0.4073	0.7163	0.1632	0.3886	0.5518	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797

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	0.0682	2.3107	0.5958	6.7700e-003	0.1562	7.1400e-003	0.1633	0.0428	6.8300e-003	0.0496		742.7681	742.7681	0.0690		744.4921
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	0.0392	0.0252	0.2493	7.7000e-004	0.0822	5.7000e-004	0.0827	0.0218	5.2000e-004	0.0223		76.4548	76.4548	2.2000e-003		76.5097
Total	0.1074	2.3360	0.8451	7.5400e-003	0.2383	7.7100e-003	0.2460	0.0646	7.3500e-003	0.0719		819.2229	819.2229	0.0712		821.0018

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358

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	9.5600e-003	0.3047	0.0867	7.9000e-004	0.0203	6.7000e-004	0.0210	5.8500e-003	6.4000e-004	6.4800e-003		85.1458	85.1458	6.6300e-003		85.3116
Worker	0.0275	0.0177	0.1745	5.4000e-004	0.0575	4.0000e-004	0.0579	0.0153	3.7000e-004	0.0156		53.5183	53.5183	1.5400e-003		53.5568
Total	0.0370	0.3223	0.2612	1.3300e-003	0.0778	1.0700e-003	0.0789	0.0211	1.0100e-003	0.0221		138.6641	138.6641	8.1700e-003		138.8684

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358

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	9.5600e-003	0.3047	0.0867	7.9000e-004	0.0203	6.7000e-004	0.0210	5.8500e-003	6.4000e-004	6.4800e-003		85.1458	85.1458	6.6300e-003		85.3116
Worker	0.0275	0.0177	0.1745	5.4000e-004	0.0575	4.0000e-004	0.0579	0.0153	3.7000e-004	0.0156		53.5183	53.5183	1.5400e-003		53.5568
Total	0.0370	0.3223	0.2612	1.3300e-003	0.0778	1.0700e-003	0.0789	0.0211	1.0100e-003	0.0221		138.6641	138.6641	8.1700e-003		138.8684

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7400	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818

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	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174
Total	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7400	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818

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	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174
Total	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.2987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	1.5176	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	3.9200e-003	2.5200e-003	0.0249	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.6455	7.6455	2.2000e-004		7.6510
Total	3.9200e-003	2.5200e-003	0.0249	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.6455	7.6455	2.2000e-004		7.6510

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	1.2987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	1.5176	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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	3.9200e-003	2.5200e-003	0.0249	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.6455	7.6455	2.2000e-004		7.6510
Total	3.9200e-003	2.5200e-003	0.0249	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.6455	7.6455	2.2000e-004		7.6510

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.7772	10.2375	22.7856	0.0592	4.8918	0.0552	4.9470	1.3074	0.0515	1.3588		6,032.5633	6,032.5633	0.4044		6,042.6730

Unmitigated	2.7827	10.2710	22.9041	0.0597	4.9412	0.0556	4.9968	1.3206	0.0518	1.3724		6,084.3594	6,084.3594	0.4067		6,094.5268
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4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	2,398.90	2,398.90	0.00	1,997,444	1,977,470
Parking Lot	0.00	0.00	0.00		
Total	2,398.90	2,398.90	0.00	1,997,444	1,977,470

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive Thru	4.70	4.70	4.70	1.50	79.50	19.00	50	25	25
Parking Lot	4.70	4.70	4.70	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
Fast Food Restaurant w/o Drive Thru	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Parking Lot	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
NaturalGas Unmitigated	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636

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					
Fast Food Restaurant w/o Drive-Thru	1633.88	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
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		0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636

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					
Fast Food Restaurant w/o Drive-Thru	1.63388	0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
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		0.0176	0.1602	0.1346	9.6000e-004		0.0122	0.0122		0.0122	0.0122		192.2213	192.2213	3.6800e-003	3.5200e-003	193.3636
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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	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003
Unmitigated	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.1800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0784					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7000e-004	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003
Total	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003

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	8.1800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0784					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7000e-004	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003
Total	0.0870	4.0000e-005	4.0300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.6300e-003	8.6300e-003	2.0000e-005		9.2000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
