



Altitude Business Center

ENERGY ANALYSIS

CITY OF CHINO

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LIST OF ABBREVIATED TERMS

(1)	Reference
AQIA	Air Quality Impact Analysis
ARB	Air Resources Board
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CEC	California Energy Commission
CPUC	California Public Utilities Commission
EVs	Electric Vehicles
EMFAC	Emissions Factor
FERC	Federal Energy Regulatory Commission
GPA	General Plan Amendment
GWh	Gigawatt Hour
HHD	Heavy-Heavy Duty
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
LHD	Light-Heavy Duty
MHD	Medium-Heavy Duty
MPG	Miles Per Gallon
MPO	Metropolitan Planning Organization
Project	Altitude Business Center
SCE	Southern California Edison
SoCalGas	Southern California Gas
SF	Square Feet
TEA-21	Transportation Equity Act for the 21 st Century
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

For new development such as that proposed by the Altitude Business Center, compliance with California Building Standards Code Title 24 energy efficiency requirements (CalGreen), combined with the mitigation measures that are recommended by the Altitude Business Center Air Quality Impact Analysis, Greenhouse Gas Analysis, and Health Risk Assessment, are considered demonstrable evidence of efficient use of energy. As discussed below, the Project would provide for, and promote, energy efficiencies beyond those required under other applicable federal and State of California standards and regulations, and in so doing would meet or exceed all California Building Standards Code Title 24 standards. Moreover, energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other industrial warehouse uses of similar scale and intensity that are constructed and operating in California. On this basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the Project would not cause or result in the need for additional energy producing facilities or energy delivery systems.

1 INTRODUCTION

This report presents the results of the air energy analysis prepared by Urban Crossroads, Inc., for the proposed Altitude Business Center (referred to as “Project”). The purpose of this report is to ensure that energy implication is considered by the City of Chino, as the lead agency, and to quantify anticipated energy usage associated with construction and operation of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

1.1 SITE LOCATION

The proposed Altitude Business Center site is located between Kimball Avenue and Bickmore Avenue on either side of the future Mayhew Avenue, in the City of Chino, as shown on Exhibit 1-A. State Route 71 (SR-71) Freeway is located approximately two miles west of the Project site.

1.2 PROJECT DESCRIPTION

Exhibit 1-B illustrates the preliminary Project site plan. As indicated, the total development is proposed to consist of up to 1,313,000 sf of business center use, specifically with the following uses:

- 715,000 sf of warehousing use within 4 buildings (Buildings 3, 4, 5, and 6). Warehouse use has been utilized for a portion of the buildings that are proposed to include dock doors.
- 255,000 sf of general light industrial use within 3 buildings (Buildings 1, 2, N, and O). General Light Industrial use has been utilized for remaining buildings that are proposed to include dock doors.
- 233,000 sf of business park use within 14 buildings (Buildings 7A, 7B, 8, 9, and A through L). The business park land use has been utilized for all the remaining smaller buildings without dock doors.
- 110,000 sf of self-storage use within 1 building (Building 2).

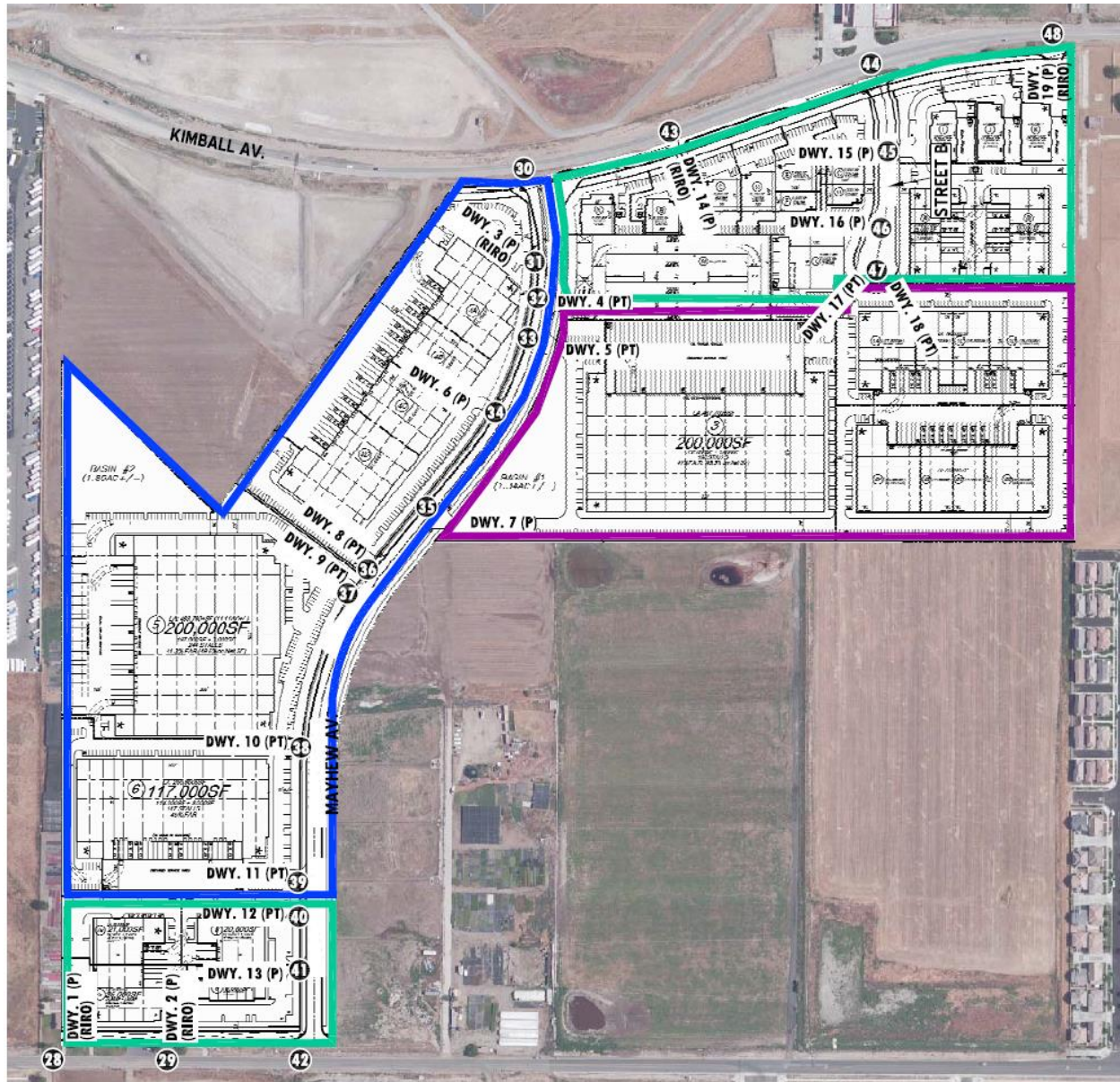
The Project is planned to be completed in 3 phases, as illustrated in Exhibit 1-1:

- Phase 1 (2018): Buildings 4, 5, and 6 – 515,000 sf Warehouse use
- Phase 2 (2019): Buildings 1, 2, and 3 – 194,000 sf of General Light Industrial use and 200,000 sf Warehouse use
- Phase 3 (2020): Buildings M, N, O, 7A, 7B, 8, 9, and A through L – 61,000 sf General Light Industrial use, 233,000 sf Business Park use, and 110,000 sf of Self-Storage use

EXHIBIT 1-A: LOCATION MAP



EXHIBIT 1-B: SITE PLAN

**LEGEND:**

RIRO	RIGHT-IN/RIGHT-OUT ONLY ACCESS	PHASE 1 (2018)
P	PASSENGER CARS ONLY	PHASE 2 (2019)
T	TRUCKS ONLY	PHASE 3 (2020)
PT	PASSENGER CARS AND TRUCKS	

NOTE: UNLESS NOTED, ALL DRIVEWAYS ARE ASSUMED TO BE FULL ACCESS.

As part of the Project's design, all on-site outdoor cargo handling equipment (CHE) (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) will be powered by electric or non-diesel engines.

1.3 CONSTRUCTION-SOURCE AIR POLLUTANT EMISSIONS MITIGATION MEASURES

1.3.1 MONITORING OF AND COMPLIANCE WITH STANDARD REGULATORY REQUIREMENTS/BEST AVAILABLE CONTROL MEASURES (BACMs)

SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1113 (Architectural Coatings) (1); Rule 431.2 (Low Sulfur Fuel) (2); Rule 403 (Fugitive Dust) (3); and Rule 1186 / 1186.1 (Street Sweepers) (4). In order to facilitate monitoring and compliance with SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings) applicable provisions of these Rules are restated at MM AQ-1 and MM AQ-2.

BACM AQ-1

- The following measures shall be incorporated into Project plans and specifications as implementation of Rule 403.
- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered, with complete coverage of disturbed areas, at least three (3) times daily during dry weather; preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less
- Only "Low-Volatile Organic Compounds" paints (no more than 50 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications consistent with South Coast Air Quality Management District Rule 1113 shall be used.

BACM AQ-2

Plans, specifications, and contract documents shall note that a sign shall be posted on-site stating that construction workers shall not idle diesel engines in excess of five (5) minutes (5).

1.3.2 OTHER MEASURES

MM AQ-1

During grading activity, all construction equipment greater than 150 horsepower shall be California Air Resources Board (CARB) Tier 3 Certified or better.

MM AQ-2

During site preparation and grading activity all actively graded areas within the Project site shall be watered at 2.1-hour watering intervals (e.g., 4 times per day) or a movable sprinkler system shall be in place to ensure minimum soil moisture of 12% is maintained for actively graded areas. Moisture content can be verified with use of a moisture probe by the grading contractor.

1.4 OPERATIONAL-SOURCE AIR POLLUTANT EMISSIONS MITIGATION MEASURES

No feasible mitigation measures exist that would reduce these emissions to levels that are less-than-significant. Project operational-source NOx emissions exceedances of applicable SCAQMD regional thresholds are therefore considered significant and unavoidable. Moreover, more than 94 percent of all operational-source emissions (by weight) would be generated by Project mobile sources (traffic). Neither the Project Applicant nor the Lead Agency (City of Chino) can substantively or materially affect reductions in Project mobile-source emissions beyond the regulatory requirements, and mitigation measures identified herein. As such the following mitigation measures will reduce impacts to the maximum extent feasible. Notwithstanding, as a conservative measure, no “credit” has been taken for implementation of the following mitigation measures.

MM AQ-3

The truck access gates and loading docks within the truck court on the Project site shall be posted with signs which state:

- a) Truck drivers shall turn off engines when not in use;
- b) Diesel delivery trucks servicing the Project shall not idle for more than five (5) minutes^[1]; and
- c) Telephone numbers of the building facilities manager and the CARB to report violations.

MM AQ-4

The project Applicant shall make its tenants aware of the funding opportunities, such as Carl Moyer, and other similar funding opportunities, by providing applicable literature on such funding opportunities as available from the CARB.

MM AQ-5

The project shall be designed to incorporate electric vehicle charging stations and carpool parking spaces for employees.

1.5 EVALUATION OF APPLICABILITY OF SCAQMD-RECOMMENDED MITIGATION MEASURES

The South Coast Air Quality Management District (SCAQMD) provided a comment letter on the Notice of Preparation of a CEQA document for the Project. The SCAQMD’s comment letter includes a reference to several sources to consider for purposes of mitigating significant air quality impacts. The following table evaluates the applicability of the SCAQMD’s recommended measures.

^[1] While restricted idling is required per MM AQ-3, the analysis presented here takes no quantified credit or reduction in emissions for restricted idling, and reflects an assumed 15-minute “worst case” idling condition.

TABLE 1-1: APPLICABILITY OF SCAQMD-RECOMMENDED MITIGATION MEASURES

Mitigation Measure	Applicability
Chapter 11 of the SCAQMD <i>CEQA Air Quality Handbook</i> (Construction)	The applicable mitigation measures listed in Chapter 11 (Tables 11-2, 11-3, and 11-4) of the SCAQMD <i>CEQA Air Quality Handbook</i> have been reviewed. However, no additional mitigation measures are necessary since Project-related construction emissions (regional and localized) would not exceed the applicable SCAQMD thresholds with application of BACMs.
Chapter 11 of the SCAQMD <i>CEQA Air Quality Handbook</i> (Operations)	The applicable mitigation measures listed in Chapter 11 (Tables 11-6c and 11-7c) of the SCAQMD <i>CEQA Air Quality Handbook</i> have been reviewed. Mitigation measures recommended for the Project are generally consistent with measures recommended by SCAQMD. However, none of the additional mitigation measures beyond those identified above would reduce the significant NOx impact to less than significant levels. It should be noted the SCAQMD <i>CEQA Air Quality Handbook</i> has not been updated since 2003. Additionally, several of the measures listed provide a negligible NOx reduction with a number designated by SCAQMD as having no quantified benefit or negligible benefit. Therefore, implementation of these measures would not avoid or substantially lessen mobile source NOx emissions attributable to the project.
SCAQMD CEQA Web Pages (Fugitive Dust)	With application of BACMs, the Project would not have a significant impact for construction related PM10 or PM2.5 emissions. Therefore, no additional mitigation measures are required to reduce fugitive dust emissions.
SCAQMD CEQA Web Pages (Harbor Craft, Locomotives, Ocean Going Vessels)	The following mitigation measures are not applicable to the proposed Project. It is not expected that the Project would include the use of a harbor craft, locomotives, or ocean-going vessels.

SCAQMD CEQA Web Pages (Off-Road Engines)	Mitigation measures that would apply to off-road engines have been reviewed. Notwithstanding, implementation of these measures would not avoid or substantially lessen mobile source NOx emissions attributable to the project.
SCAQMD CEQA Web Pages (On-Road Engines)	The California Air Resources Board (CARB) has worked closely with the U.S. Environmental Protection Agency (U.S. EPA), engine and vehicle manufacturers, and other interested parties to reduce emissions from heavy-duty diesel vehicles in California, through a combination of measures including regulations requiring the use of ultra-low sulfur diesel fuel, new emission standards, restrictions on idling, addition of post-combustion filter and catalyst equipment, and retrofits for diesel truck fleets. These programs are expected to result in significant reductions in particulate matter (PM), nitrous oxides (NOX), volatile organic compounds (VOC), and carbon oxide (CO) emissions as they are fully implemented. Under the Truck and Bus Regulation, adopted by CARB in 2008, all diesel truck fleets operating in California are required to adhere to an aggressive schedule for upgrading and replacing heavy-duty truck engines. Pursuant to such regulation, older, heavier trucks, i.e., those with pre-2000-year engines and a gross vehicle weight rating (GVWR) greater than 26,000 pounds are already required to have installed a PM filter and must be replaced with a 2010 engine between 2015 and 2020, depending on the model year. By 2015, all heavier pre-1994 trucks must be upgraded to 2010 engines and newer trucks are thereafter required to be replaced over the next eight years. Older, more polluting trucks are required to be replaced first, while trucks that already have relatively clean 2007-2009 engines are not required to be replaced until 2023. Lighter trucks (those with a GVWR of 14,001 to 26,000 pounds) must adhere to a similar schedule and will all be replaced by 2020. Further, nearly all trucks that are not required under the Truck and Bus Regulation to be replaced by 2015 are required to be upgraded with a PM filter by that

	date. Therefore, most heavy-duty trucks entering the project site will meet or exceed U.S. EPA 2007 and 2010 emission standards within a relatively short period of time after the project becomes operational in 2020, and all such trucks entering the property will meet or exceed such standards by 2023. Federal and state agencies regulate and enforce vehicle emission standards. It is not feasible for the City of Chino staff to effectively enforce a prohibition on trucks from entering the property that are otherwise permitted to operate in California and access other properties in the city, region, and state. And, even if the City were to apply such a restriction, it would merely cause warehouse operators using truck fleets older than 2007/2010 to locate in another location in the South Coast Air Basin where the restriction does not apply, thereby resulting in no improvement to regional air quality. Further if a truck that did not meet this requirement were to attempt access to the site and be denied, there would be more idling emissions and travel emissions associated with that truck.
CAPCOA's <i>Quantifying Greenhouse Gas Mitigation Measures</i>	All feasible and applicable mitigation measures listed in the Energy, Water, and Transportation sections (as shown in Chart 6-1 and Chart 6-2 of the CAPCOA document) have been applied to the analysis. However, these measures are aimed at reducing GHG emissions and implementation of these measures would not avoid or substantially lessen mobile source NOx emissions attributable to the project.
SCAQMD Rule 403	As identified in BACM AQ-1 the Project would need to comply with applicable SCAQMD Rules including, but not limited to Rule 403.
SCAQMD's Guidance Document for addressing Air Quality Issues in General Plans and Local Planning	These measures are not applicable to the proposed Project because the measures listed are aimed towards local governments as a guidance to reduce community exposure to source-specific air pollution impacts at the General Plan level.

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2 EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the Project area and region.

2.1 OVERVIEW

California's estimated annual energy use as of 2016 included:

- Approximately 198,227 gigawatt hours of electricity; (6)
- Approximately 2,177,467 million cubic feet of natural gas per year (7); and
- Approximately 18.5 billion gallons of transportation fuel (for the year 2014) (8).

As of 2015, the year of most recent data currently available by the United States Energy Information Administration (EIA), energy use in California by demand sector was:

- Approximately 39.2 percent transportation;
- Approximately 24.0 percent industrial;
- Approximately 17.7 percent residential; and
- Approximately 19.1 percent commercial. (9)

California's massive electricity in-state generation system generates approximately 198,227 gigawatt-hours each year and is transported over the state's 32,000 miles of transmission lines. In 2016, California produced close to 68% of the electricity it uses; the rest was imported from the Pacific Northwest (15%) and the U.S. Southwest (17%). Natural gas is the main source for electricity generation at 50% of the total in-state electric generation system power as shown in Table 2-1.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2016)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	California Power Mix (GWh)	Percent California Power Mix
Coal	324	0.16%	373	11,310	12,006	4.13%
Large Hydro	24,410	12.31%	3367	1,904	29,681	10.21%
Natural Gas	98,831	49.86%	41	7,120	105,992	36.48%
Nuclear	18,931	9.55%	0	7,739	26,670	9.18%
Oil	37	0.0%	0	0	37	0.01%
Other	394	0.2%	0	0	394	0.14%
Renewables	55,300	27.90%	11,710	6,952	73,961	25.45%
Biomass	5,868	2.96%	659	25	6,553	2.26%
Geothermal	11,582	5.84%	96	1038	12,717	4.38%
Small Hydro	4,567	2.30%	229	1	4,796	1.65%
Solar	19,783	9.98%	0	3,791	23,574	8.11%
Wind	13,500	6.81%	10,725	2,097	26,321	9.06%
Unspecified Sources of Power	N/A	N/A	26,888	14,937	41,825	14.39%
Total	198,227	100.00%	42,378	49,963	290,567	100.00%

Source: http://energyalmanac.ca.gov/electricity/total_system_power.html

A summary of, and context for energy consumption and energy demands within the State is presented in “U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts” excerpted below:

- Excluding federal offshore areas, California was the third-largest producer of petroleum among the 50 states in 2016, after Texas and North Dakota, and, as of January 2017, third in oil refining capacity, with a combined capacity of almost 2 million barrels per calendar day at the state’s 18 operable refineries.
- In 2015, California accounted for one-fifth of the nation’s jet fuel consumption.
- California’s total energy consumption ranks amount the highest in the nation, but, in 2015, the state’s per capita energy consumption ranked 49th, due in part to its mild climate and its energy efficiency programs.
- In 2016, California ranked third in the nation in conventional hydroelectric generation, second in net electricity generation from all other renewable energy resources combined, and first as a producer of electricity from solar, geothermal, and biomass resources.
- California leads the nation in solar thermal electricity capacity and generation. In 2016, California had 73% of the nation’s capacity and produced 71% of the nation’s utility-scale electricity generation from solar thermal resources (10).

As indicated above, California is one of the nation’s leading energy-producing states, and California per capita energy use is among the nation’s most efficient. Given the nature of the proposed Project being an industrial development, the remainder of this discussion will focus on

the three sources of energy that are most relevant to the project—namely, electricity and natural gas for industrial uses, and transportation fuel for vehicle trips associated with industrial uses planned for the Project.

2.2 ELECTRICITY

The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California ISO studies had revealed the extent to which the Los Angeles Basin and San Diego region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (2013 IEPR) after a collaborative process with other energy agencies, utilities, and air districts (11). If the resource development outlined in the preliminary plan continues as detailed, reliability in Southern California would likely be assured; however, tight resource margins have led energy agencies and the ARB to develop a contingency plan. This contingency plan was discussed at a public workshop in Los Angeles on August 20, 2014, and is detailed within this Section (12).

Electricity would be provided to the Project by Southern California Edison (SCE). SCE provides electric power to more than 14 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers. (13)

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator ("ISO") is a nonprofit public benefit corporation, and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California residential and commercial users. While utilities [such as SCE] still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that sufficient power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities. (14)

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, transmission owners (investor-owned utilities such as SCE) file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the

western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Table 2-2 identifies SCE's specific proportional shares of electricity sources in 2016. As indicated in Table 2-2, shows the 2016 SCE Power Mix has renewable energy at 25% of the overall energy resources. Geothermal is remaining steady at 4%. Wind power is remaining steady at 9%, decreasing from 10% in 2014. Large hydro is at 10%, having increased from 3% in 2014. Solar energy is at 8% having increased from 4% in 2014. Biomass and waste has increased to 2% from 1% in 2014. Coal is at 4% having increased from 0%, in 2014 and having decreased significantly from 6% in 2013 and from 7% in 2012. Natural gas is at 37% having increased from 27%, in 2014 and 28% in 2013.

TABLE 2-2: SCE 2016 POWER CONTENT MIX

Energy Resources	2016 SCE Power Mix
<i>Eligible Renewable</i>	25%
Biomass & waste	2%
Geothermal	4%
Small Hydroelectric	2%
Solar	8%
Wind	9%
<i>Coal</i>	4%
<i>Large Hydroelectric</i>	10%
<i>Natural Gas</i>	37%
<i>Nuclear</i>	9%
<i>Other</i>	0%
Unspecified Sources of power*	15%
Total	100%

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources

2.3 NATURAL GAS

Natural gas would be provided to the Project by The Gas Company (Southern California Gas, SoCalGas). The following summary of natural gas resources and service providers, delivery systems, and associated regulation is excerpted from information provided by the California Public Utilities Commission (CPUC).

"The California Public Utilities Commission (PUC) regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

The vast majority of California's natural gas customers are residential and small commercial customers, referred to as "core" customers, who accounted for approximately 32% of the natural gas delivered by California utilities in 2012. Large consumers, like electric generators and industrial customers, referred to as "noncore" customers, accounted for approximately 68% of the natural gas delivered by California utilities in 2012.

The PUC regulates the California utilities' natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. In 2012, California customers received 35% of their natural gas supply from basins located in the Southwest, 16% from Canada, 40% from the Rocky Mountains, and 9% from basins located within California. California gas utilities may soon also begin receiving biogas into their pipeline systems.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, the Ruby Pipeline, Questar Southern Trails and Mojave Pipeline. Another pipeline, the North Baja – Baja Norte Pipeline, takes gas off the El Paso Pipeline at the California/Arizona border, and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, the PUC often participates in FERC regulatory proceedings to represent the interests of California natural gas consumers.

Most of the natural gas transported via the interstate pipelines, as well as some of the California-produced natural gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large noncore customers take natural gas directly off the high pressure backbone pipeline systems, while core customers and other noncore customers take natural gas off the utilities' distribution pipeline systems. The PUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82% of the total amount of natural gas delivered to California's gas consumers in 2012.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, and currently receive all of their natural gas from the SoCalGas system (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area). Some other municipal wholesale customers are the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Some of the natural gas delivered to California customers may be delivered directly to them without being transported over the regulated utility systems. For example, the Kern

River/Mojave pipeline system can deliver natural gas directly to some large customers, “bypassing” the utilities’ systems. Much of California-produced natural gas is also delivered directly to large consumers.

PG&E and SoCalGas own and operate several natural gas storage fields that are located in northern and southern California. These storage fields, and four independently owned storage utilities – Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage – help meet peak seasonal natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. (A portion of the Gill Ranch facility is owned by PG&E).

California’s regulated utilities do not own any natural gas production facilities. All of the natural gas sold by these utilities must be purchased from suppliers and/or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the FERC in the mid-1980’s and is determined by “market forces.” However, the PUC decides whether California’s utilities have taken reasonable steps in order to minimize the cost of natural gas purchased on behalf of their core customers.” (15)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The PUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would attract additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. As of 2017, there are more than 35 million registered vehicles in California (16), and those vehicles (as noted previously) consume an estimated 19 billion gallons of fuel each year¹. Gasoline (and other vehicle fuels) are commercially-provided commodities and would be available to the Project patrons and employees via commercial outlets.

California’s on-road transportation system includes 170,000 miles of highways and major roadways, more than 27 million passenger vehicles and light trucks, and almost 8 million medium- and heavy-duty vehicles (16). The most recent data available (2015) shows the transportation sector emits 37 percent of the total greenhouse gases in the state and about 81 percent of smog-forming oxides of nitrogen (NO_x) (17) (18). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. Petroleum comprises about 92 percent of all transportation energy use, excluding fuel consumed for aviation and most marine vessels (19). Nearly 19 billion gallons of on-highway fuel are burned each year, including 15.1 billion gallons of gasoline (including ethanol) and 3.9 billion gallons of diesel fuel (including biodiesel and

¹ Fuel consumptions estimated utilizing information from EMFAC2014.

renewable diesel)². In 2016, Californians also used 194 million therms of natural gas as a transportation fuel (20), or the equivalent of 155 million gallons of gasoline.

² Fuel consumptions estimated utilizing information from EMFAC2014.

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3 REGULATORY BACKGROUND

3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. On the state level, the PUC and the California Energy Commissions (CEC) are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below. Project consistency with applicable federal and state regulations is also presented in *italicized* text.

3.1 FEDERAL REGULATIONS

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. *Transportation and access to the Project site is provided primarily by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because SCAG is not planning for intermodal facilities on or through the Project site.*

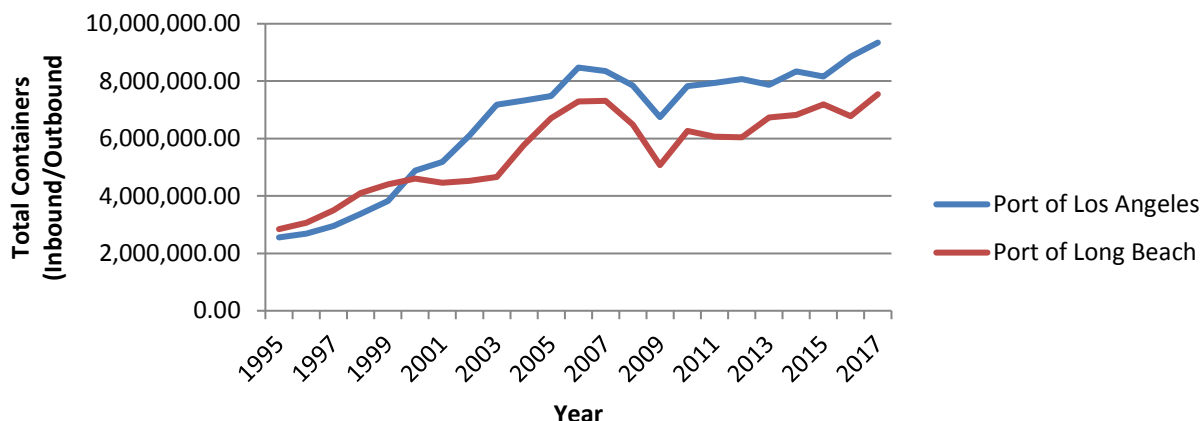
The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety. *The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.*

As shown on Exhibit 3-A, data from both the Port of Los Angeles and the Port of Long Beach shows that the receiving and shipping of containers have had a stable trend since the recession that hit in 2007 (21) (22). Therefore, truck transport from the ports is relatively stable and a Project of this type would not be increasing the amount of truck trips and consequently VMT than what would normally occur within the basin. As such, the estimation of the Altitude Business Center Project's vehicular-source emissions is likely overstated in that no credit for, or reduction in, emissions is assumed based on diversion of existing trips.

Additionally, the Southern California Association of Governments' (SCAG's) 2012-2035 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) includes information on goods movement that clearly illustrates that of the port-related trips within the SCAG region, more than 85% have an origin or destination within Los Angeles County. As a result, the Project would serve to meet this demand and not be expected to increase trips or VMT in the air basin.

EXHIBIT 3-A: PORT OF LOS ANGELES/PORT OF LONG BEACH CONTAINER COUNTS



3.2 CALIFORNIA REGULATIONS

Integrated Energy Policy Report

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commission to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301a). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2016 Integrated Energy Policy Report (2016 IEPR) was published in February 2017, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2016 IEPR focuses on a variety of topics such as including the environmental

performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast (23).

State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access. *The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through the introduction of commercial uses on a commercially-designated site. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.*

California Code Title 24, Part 6, Energy Efficiency Standards

California Code Title 24, Part 6 (also referred to as the California Energy Code), was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. According to the CEC, the Energy Commission's energy efficiency standards have saved Californians billions in reduced electricity bills since 1977. (24)

The newest 2016 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2017. The CEC indicates that the 2016 Title 24 standards will reduce energy consumption by 5 percent for nonresidential buildings above that achieved by the 2013 Title 24.

The Project would be designed, constructed and operated so as to exceed incumbent Title 24 Energy Efficiency Standards by a minimum of three percent. On this basis, the Project is determined to be consistent with, and would not interfere with, nor otherwise obstruct implementation of Title 24 Energy Efficiency Standards.

4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

4.1 EVALUATION CRITERIA

In compliance with Appendix F of the *State CEQA Guidelines*, (25) this report analyzes the project's anticipated energy use to determine if the Project would:

- Result in the wasteful, inefficient or unnecessary consumption of energy; or
- Result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

In addition, Appendix F of the State CEQA Guidelines states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

4.2 METHODOLOGY

Information from the CalEEMod 2016.3.2 outputs for the Altitude Business Center Air Quality Impact Analysis, Urban Crossroads (2018) (26) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands. These outputs can be referenced in Appendix 3.1.

4.3 CONSTRUCTION ENERGY DEMANDS

4.3.1 CONSTRUCTION EQUIPMENT ELECTRICITY USAGE ESTIMATES

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project. Based on the 2017 National Construction Estimator, Richard Pray (2017) (27), the typical power cost per 1,000 square feet of building construction per month is estimated to be \$2.32. For the Altitude Business Center development, the Project plans to develop 1,313,000 square feet of business center use over the course of approximately 27 months. Based on Table 4-1, the total power cost of the on-site electricity usage during the construction of the proposed Project is estimated to be approximately \$82,246.32. Additionally, as of June 1, 2016, SCE's general service rate schedule (GS-1) for an industrial land use is \$.08 per kWh of electricity (28). As shown on Table 4-2, the total electricity usage from on-site Project construction related activities is estimated to be approximately 1,028,079 kWh.

TABLE 4-1: PROJECT CONSTRUCTION POWER COST

Power Cost (per 1,000 SF of building per month of construction)	Total Building Size (1,000 SF)	Construction Duration (months)	Total Project Construction Power Cost
\$2.32	1,313	27	\$82,246.32

TABLE 4-2: PROJECT CONSTRUCTION ELECTRICITY USAGE

Cost per kWh	Total Project Construction Electricity Usage (kWh)
\$0.08	1,028,079

¹Assumes the Project will be under the GS-1 General Industrial service rate under SCE

4.3.2 CONSTRUCTION EQUIPMENT FUEL ESTIMATES

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-3. Eight-hour daily use of all equipment is assumed. The aggregate fuel consumption rate for all equipment is estimated at 18.5 hp-hr-gal., obtained from California Air Resources Board (CARB) 2013 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. (29) For the purposes of this analysis, that the calculations are based on all construction equipment being diesel-powered which is standard practice consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the County and region.

As presented in Table 4-3, Project construction activities would consume an estimated 198,055 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 4-3: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Activity/Duration	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Demolition (20 days)	Concrete/Industrial Saws	81	1	8	0.73	473	511
	Crushing/Proc. Equipment	85	1	8	0.78	530	573
	Excavators	158	2	8	0.38	961	1,039
	Rubber Tired Dozers	247	2	8	0.40	1,581	1,709
Grading (135 days)	Excavators	159	2	8	0.38	967	7,054
	Graders	187	4	8	0.41	2,453	17,903
	Other Construction Equipment	172	2	8	0.42	1,156	8,435
	Rubber Tired Dozers	247	4	8	0.40	3,162	23,071
	Scrapers	367	4	8	0.48	5,637	41,136
	Tractors/Loaders/Backhoes	97	2	8	0.37	574	4,190
Building Construction (345 days)	Cranes	231	2	8	0.29	1,072	19,988
	Forklifts	89	3	8	0.20	427	7,967
	Generator Sets	84	2	8	0.74	995	18,547
	Tractors/Loaders/Backhoes	97	3	8	0.37	861	16,063
	Welders	46	2	8	0.45	331	6,176
Paving (105 days)	Pavers	130	2	8	0.42	874	4,958
	Paving Equipment	132	2	8	0.36	760	4,315
	Rollers	80	2	8	0.38	486	2,761
Architectural Coating (240 days)	Air Compressors	78	3	8	0.48	899	11,657
CONSTRUCTION FUEL DEMAND (gallons diesel fuel)							198,055

4.3.3 CONSTRUCTION WORKER FUEL ESTIMATES

It is assumed that all construction worker trips are from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 3,384,896 VMT (26). Data regarding Project related construction worker trips were based on CalEEMod 2016.3.2 model defaults utilized within the AQIA.

Vehicle fuel efficiencies for LDA were estimated using information generated within the 2014 version of the Emissions FACTor model (EMFAC) developed by the Air Resources Board (ARB). EMFAC 2014 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the ARB to project changes in future emissions from on-road mobile sources (30). EMFAC 2014 was run for the LDA vehicle class within the California sub-area for a 2020 calendar year. Data from EMFAC 2014 is shown in Appendix 3.2.

As generated by EMFAC 2014, an aggregated fuel economy of LDAs ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 27.75 miles per gallon (MPG). Table 4-4 provides an estimated annual fuel consumption resulting from Project generated light duty autos related to construction worker trips. Based on Table 4-4, it is estimated that 121,978 gallons of fuel will be consumed related to construction worker trips after full construction of the proposed Project. Project construction worker trips would represent a “single-event” gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

TABLE 4-4: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES

Construction Activity	Worker Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Demolition (20 days)	15	14.7	4,410	27.75	159
Grading (135 days)	135	14.7	267,908	27.75	9,654
Building Construction (345 days)	527	14.7	2,672,681	27.75	96,313
Architectural Coating (240 days)	105	14.7	370,440	27.75	13,349
Paving (105 days)	45	14.7	69,458	27.75	2,503
TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION					121,978

4.3.4 CONSTRUCTION VENDOR/HAULING FUEL ESTIMATES

With respect to estimated VMT, the construction vendor/hauling trips would generate an estimated 997,654 VMT along area roadways (26). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHD) and 50% are from heavy-heavy duty trucks (HHD). It is assumed that 100% of all hauling trips are from HHD. These assumptions are consistent with the

2016.3.2 CalEEMod defaults utilized within the Altitude Business Center Air Quality Impact Analysis. Vehicle fuel efficiencies for MHD and HHD trucks were estimated using information generated within EMFAC 2014. For purposes of this analysis, EMFAC 2014 was run for the MHD and HHD vehicle class within the California sub-area for a 2020 calendar year. Data from EMFAC 2014 is shown in Appendix 3.2.

As generated by EMFAC 2014, an aggregated fuel economy of MHD trucks ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 8.5 mpg. Additionally, HHD trucks are estimated to have a fuel efficiency of 5.85 mpg.

Table 4-5 and Table 4-6 shows the estimated fuel economy of MHD and HHD trucks accessing the Project site. Based on Table 4-5 and Table 4-6, fuel consumption from construction hauling and vendor trips (medium and heavy-duty trucks) will total approximately 156,901 gallons. Project construction vendor trips would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 4-5: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (MHD TRUCKS)³

Construction Activity	Vendor Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Building Construction (345 days)	108	6.9	255,904	8.5	30,106

TABLE 4-6: CONSTRUCTION VENDOR/HAULING FUEL CONSUMPTION ESTIMATES (HHD TRUCKS)⁴

Construction Activity	Vendor/Hauling Trips/ Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Building Construction (345 days)	108	20	741,750	5.85	126,795

4.3.5 CONSTRUCTION ENERGY EFFICIENCY/CONSERVATION MEASURES

The equipment used for Project construction would conform to CARB regulations and CA emissions standards and would evince related fuel efficiencies. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not

³ Assumptions for the vendor trip length and vehicle miles traveled are consistent with 2013.2.2 model defaults utilized within the Altitude Business Center Air Quality Impact Analysis.

⁴ Assumptions for the vendor trip length and vehicle miles traveled are consistent with 2013.2.2 model defaults utilized within the Altitude Business Center Air Quality Impact Analysis.

conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

The Project would utilize construction contractors which practice compliance with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations and best available control measures (BACM). More specifically, California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. To this end, "grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints.

Indirectly, construction energy efficiencies and energy conservation would be achieved for the proposed development through energy efficiencies realized from bulk purchase, transport and use of construction materials.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

4.3.6 SUMMARY

The estimated power cost of on-site electricity usage during the construction of the proposed Project is assumed to be around \$82,246.32. Additionally, based on the assumed power cost, it

is estimated that the total electricity usage during construction, after full Project build-out, is calculated to be around 1,028,079 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 198,055 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Best available control measures inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the proposed Project would result in the estimated fuel consumption of 12,978 gallons of fuel. Additionally, fuel consumption from construction vendor trips (medium and heavy-duty trucks) will total approximately 156,901 gallons. Diesel fuel would be supplied by County and regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved through the use of bulk purchases, transport and use of construction materials. The 2016 IEPR released by the California Energy Commission has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (31). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.4 OPERATIONAL ENERGY DEMANDS

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

4.4.1 TRANSPORTATION ENERGY DEMANDS

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site.

LIGHT DUTY AUTOS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's Air Quality Impact Analysis, the Project would generate an estimated 31,768,868 annual VMT along area roadways for all passenger cars with full build-out of the Project (26). As generated by EMFAC 2014, an aggregated fuel economy of LDAs ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 27.75 mpg. Table

4-7 provides an estimated range of annual fuel consumption resulting from Project generated LDAs. Based on Table 4-7, it is estimated that 1,144,824 gallons of fuel will be consumed from Project generated LDA trips.

TABLE 4-7: PROJECT-GENERATED PASSENGER CAR TRAFFIC ANNUAL FUEL CONSUMPTION

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
31,768,868	27.75	1,144,824

LIGHT-HEAVY DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's Air Quality Impact Analysis, the Project would generate an estimated 6,292,203 annual VMT along area roadways for all LHD trucks with full build-out of the Project (26). As generated by EMFAC 2014, an aggregated fuel economy of LHD trucks ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 14.08 mpg. Table 4-8 provides an estimated range of annual fuel consumption resulting from Project generated LHD trucks. Based on Table 4-8, it is estimated that 446,889 gallons of fuel will be consumed from Project generated LHD truck trips.

TABLE 4-8: PROJECT-GENERATED LHD TRUCK TRAFFIC ANNUAL FUEL CONSUMPTION

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
6,292,203	14.08	446,889

MEDIUM-HEAVY DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's Air Quality Impact Analysis, the Project would generate an estimated 4,924,129 annual VMT along area roadways for all MHD trucks with full build-out of the Project (26). As generated by EMFAC 2014, an aggregated fuel economy of MHD trucks ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 8.5 mpg. Table 4-9 provides an estimated range of annual fuel consumption resulting from Project generated MHD trucks. Based on Table 4-9, it is estimated that 579,309 gallons of fuel will be consumed from Project generated MHD truck trips.

TABLE 4-9: PROJECT-GENERATED MHD TRUCK TRAFFIC ANNUAL FUEL CONSUMPTION

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
4,924,129	8.5	579,309

HEAVY-HEAVY DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's Air Quality Impact Analysis, the Project would generate an estimated

12,816,860 annual VMT along area roadways for all HHD trucks with full build-out of the Project (26). As generated by EMFAC 2014, an aggregated fuel economy of HHD trucks ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 5.85 mpg. Table 4-10 provides an estimated range of annual fuel consumption resulting from Project generated HHD trucks. Based on Table 4-10, it is estimated that 2,190,916 gallons of fuel will be consumed from Project generated HHD truck trips.

TABLE 4-10: PROJECT-GENERATED HHD TRUCK TRAFFIC ANNUAL FUEL CONSUMPTION

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
12,816,860	5.85	2,190,916

As summarized on Table 4-11, the Project will result in 55,802,059 annual VMT and an estimated annual fuel consumption of 4,361,939 gallons of fuel.

TABLE 4-11: PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (ALL VEHICLES)

Vehicle Type	Annual Miles Traveled	Estimated Annual Fuel Consumption (gallons)
Light Duty Autos	31,768,868	1,144,824
LHD Trucks	6,292,203	446,889
MHD Trucks	4,924,129	579,309
HHD Trucks	12,816,860	2,190,916
Total (All Vehicles)	55,802,059	4,361,939

4.4.2 FACILITY ENERGY DEMANDS

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by The Gas Company; electricity would be supplied to the Project by Southern California Edison. Annual natural gas and electricity demands of the Project are summarized in Table 4-12.

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting (32). Non-building energy use, or “plug-in” energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.).

TABLE 4-12: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY

Natural Gas Demand	kBTU/year
General Light Industrial	7,529,160
General Office Building	652,500
Unrefrigerated Warehouse - No Rail	1,175,520
Mini-Storage	180,849
Total Project Natural Gas Demand	8,538,029
Electricity Demand	kWh/year
General Light Industrial	2,452,790
General Office Building	2,045,440
Unrefrigerated Warehouse - No Rail	1,623,520
Mini-Storage	249,773
Total Project Electricity Demand	6,371,523

4.4.3 OPERATIONAL ENERGY EFFICIENCY/CONSERVATION MEASURES

Energy efficient/energy conserving design features and operational programs that would be implemented under the Project are summarized below. Also noted in the following discussions, energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title24, California Green Building Code).

The Project would also not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

Enhanced Vehicle Fuel Efficiencies

Estimated annual fuel consumption estimates presented previously in Table 4-11 represent likely potential maximums that would occur in the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

4.5 SUMMARY

4.5.1 TRANSPORTATION ENERGY DEMANDS

Annual vehicular trips and related VMT generated by the Project would result in an estimated 1,144,824 gallons of fuel consumption per year for LDAs. Additionally, the Project would result in an estimated 446,889 gallons of fuel consumption per year for LHD trucks. In regards to MHD trucks, the Project would result in an estimated 579,309 gallons of fuel consumption per year. For HHD trucks an estimated 2,190,916 gallons of fuel consumption per year is estimated for the

year 2020. The total estimated annual fuel consumption from Project generated VMT would result in a fuel demand 4,361,939 gallons of fuel.

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other warehouse uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Ed., 2017); and California Emissions Estimator Model (CalEEMod) v2016.3.2. That is, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of LDVs and HDVs to alternative energy sources (e.g., electricity, natural gas, bio fuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would also implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.5.2 FACILITY ENERGY DEMANDS

Project facility operational energy demands are estimated at: 9,538,029 kBTU/year of natural gas; and 6,371,523 kWh/year of electricity. Natural gas would be supplied to the Project by The Gas Company; electricity would be supplied by Southern California Edison. The Project proposes conventional warehouse uses reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project are not inherently energy intensive, and the Project energy demands in total would be comparable to, or less than, other warehouse projects of similar scale and configuration.

The Project would exceed the incumbent Title 24 standards by a minimum of three percent as previously discussed. Based on the preceding, Project facilities energy demands and energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.6 CONCLUSIONS

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. Notwithstanding, the Project proposes warehousing land use and will not have any long-term effects on an energy provider's future energy development or future energy conservation strategies.

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6 CERTIFICATION

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Altitude Business Center Project. The information contained in this air quality impact report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5987.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May, 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Environmental Site Assessment – American Society for Testing and Materials • June, 2013
Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 3.1:

CALEEMOD EMISSIONS MODEL OUTPUTS

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

Altitude Business Centre Phase 1 (Mitigated)**San Bernardino-South Coast County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	515.00	1000sqft	11.82	515,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

Project Characteristics -

Land Use -

Construction Phase - Construction Schedule adjusted and approved by the Client.

Off-road Equipment - Equipment List adjusted and approved by the Client.

Off-road Equipment - Equipment List adjusted and approved by the Client.

Off-road Equipment - Equipment List adjusted and approved by the Client.

Off-road Equipment - Equipment List adjusted and approved by the Client.

Off-road Equipment -

Demolition -

Grading -

Architectural Coating - All architectural coatings shall be no more than 50 g/L low VOC paint

Vehicle Trips - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation - 'During Grading, all construction equipment greater than >150 HP are required to have Tier 3 or better engines.

Fleet Mix - Construction Run Only.

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	74
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	74
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	300.00	115.00
tblConstructionPhase	NumDays	20.00	35.00
tblConstructionPhase	NumDays	20.00	80.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	2.00	0.00
tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.54	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.9060e-003	0.00
tblFleetMix	MCY	6.3790e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.2510e-003	0.00
tblFleetMix	MHD	0.02	0.00

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

tblFleetMix	OBUS	1.3150e-003	0.00
tblFleetMix	SBUS	8.2900e-004	0.00
tblFleetMix	UBUS	1.7780e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	484.10	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	119,093,750.00	0.00

2.0 Emissions Summary

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.7290	7.1873	4.6562	9.7100e-003	0.9136	0.3299	1.2436	0.3699	0.3076	0.6775	0.0000	881.4686	881.4686	0.1817	0.0000	886.0117
Maximum	0.7290	7.1873	4.6562	9.7100e-003	0.9136	0.3299	1.2436	0.3699	0.3076	0.6775	0.0000	881.4686	881.4686	0.1817	0.0000	886.0117

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.5343	5.4210	4.7936	9.7100e-003	0.3749	0.2519	0.6268	0.1332	0.2404	0.3736	0.0000	881.4679	881.4679	0.1817	0.0000	886.0109
Maximum	0.5343	5.4210	4.7936	9.7100e-003	0.3749	0.2519	0.6268	0.1332	0.2404	0.3736	0.0000	881.4679	881.4679	0.1817	0.0000	886.0109

	ROG	NOx	CO	SO2	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	26.71	24.58	-2.95	0.00	58.96	23.65	49.59	63.99	21.86	44.86	0.00	0.00	0.00	0.00	0.00	0.00

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2018	5-31-2018	4.4133	2.4522
2	6-1-2018	8-31-2018	1.8146	1.8146
3	9-1-2018	9-30-2018	0.5917	0.5917
		Highest	4.4133	2.4522

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1003	6.0000e-005	6.6600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	4.0000e-005	0.0000	0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.1003	6.0000e-005	6.6600e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	4.0000e-005	0.0000	0.0137

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1003	6.0000e-005	6.6600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	4.0000e-005	0.0000	0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.1003	6.0000e-005	6.6600e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	4.0000e-005	0.0000	0.0137

	ROG	NOx	CO	SO2	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**

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2018	3/28/2018	5	20	
2	Grading	Grading	3/29/2018	5/30/2018	5	45	
3	Building Construction	Building Construction	5/31/2018	11/7/2018	5	115	
4	Paving	Paving	11/8/2018	12/26/2018	5	35	
5	Architectural Coating	Architectural Coating	12/27/2018	11/7/2018	5	80	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 270

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 772,500; Non-Residential Outdoor: 257,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition	Excavators	2	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	4	8.00	187	0.41
Grading	Other Construction Equipment	2	8.00	172	0.42
Grading	Rubber Tired Dozers	4	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	3	8.00	78	0.48

Trips and VMT

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	396.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	18	45.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	216.00	84.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	43.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0428	0.0000	0.0428	6.4800e-003	0.0000	6.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0411	0.3977	0.2343	4.1000e-004		0.0212	0.0212		0.0200	0.0200	0.0000	36.4390	36.4390	8.7600e-003	0.0000	36.6580
Total	0.0411	0.3977	0.2343	4.1000e-004	0.0428	0.0212	0.0640	6.4800e-003	0.0200	0.0265	0.0000	36.4390	36.4390	8.7600e-003	0.0000	36.6580

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

3.2 Demolition - 2018**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4400e-003	0.0573	8.4600e-003	1.6000e-004	3.4100e-003	2.0000e-004	3.6000e-003	9.4000e-004	1.9000e-004	1.1200e-003	0.0000	15.1291	15.1291	8.7000e-004	0.0000	15.1509
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	7.5000e-004	7.3100e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5063	1.5063	5.0000e-005	0.0000	1.5077
Total	2.3300e-003	0.0580	0.0158	1.8000e-004	5.0500e-003	2.1000e-004	5.2600e-003	1.3800e-003	2.0000e-004	1.5700e-003	0.0000	16.6355	16.6355	9.2000e-004	0.0000	16.6586

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0111	0.0000	0.0111	1.6900e-003	0.0000	1.6900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0268	0.2788	0.2427	4.1000e-004		0.0149	0.0149		0.0144	0.0144	0.0000	36.4390	36.4390	8.7600e-003	0.0000	36.6580
Total	0.0268	0.2788	0.2427	4.1000e-004	0.0111	0.0149	0.0260	1.6900e-003	0.0144	0.0161	0.0000	36.4390	36.4390	8.7600e-003	0.0000	36.6580

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3.2 Demolition - 2018**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4400e-003	0.0573	8.4600e-003	1.6000e-004	3.4100e-003	2.0000e-004	3.6000e-003	9.4000e-004	1.9000e-004	1.1200e-003	0.0000	15.1291	15.1291	8.7000e-004	0.0000	15.1509
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	7.5000e-004	7.3100e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5063	1.5063	5.0000e-005	0.0000	1.5077
Total	2.3300e-003	0.0580	0.0158	1.8000e-004	5.0500e-003	2.1000e-004	5.2600e-003	1.3800e-003	2.0000e-004	1.5700e-003	0.0000	16.6355	16.6355	9.2000e-004	0.0000	16.6586

3.3 Grading - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6852	0.0000	0.6852	0.3134	0.0000	0.3134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3050	3.5794	1.7967	3.3800e-003		0.1556	0.1556		0.1432	0.1432	0.0000	308.7841	308.7841	0.0961	0.0000	311.1874
Total	0.3050	3.5794	1.7967	3.3800e-003	0.6852	0.1556	0.8408	0.3134	0.1432	0.4566	0.0000	308.7841	308.7841	0.0961	0.0000	311.1874

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3.3 Grading - 2018**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9800e-003	5.0400e-003	0.0493	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	10.1678	10.1678	3.7000e-004	0.0000	10.1770
Total	5.9800e-003	5.0400e-003	0.0493	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	10.1678	10.1678	3.7000e-004	0.0000	10.1770

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1781	0.0000	0.1781	0.0815	0.0000	0.0815	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1245	1.9318	1.9256	3.3800e-003		0.0840	0.0840		0.0815	0.0815	0.0000	308.7838	308.7838	0.0961	0.0000	311.1870
Total	0.1245	1.9318	1.9256	3.3800e-003	0.1781	0.0840	0.2621	0.0815	0.0815	0.1630	0.0000	308.7838	308.7838	0.0961	0.0000	311.1870

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3.3 Grading - 2018**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9800e-003	5.0400e-003	0.0493	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	10.1678	10.1678	3.7000e-004	0.0000	10.1770
Total	5.9800e-003	5.0400e-003	0.0493	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	10.1678	10.1678	3.7000e-004	0.0000	10.1770

3.4 Building Construction - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2512	2.1761	1.5468	2.5100e-003		0.1310	0.1310		0.1239	0.1239	0.0000	220.2281	220.2281	0.0504	0.0000	221.4888
Total	0.2512	2.1761	1.5468	2.5100e-003		0.1310	0.1310		0.1239	0.1239	0.0000	220.2281	220.2281	0.0504	0.0000	221.4888

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3.4 Building Construction - 2018**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0198	0.6014	0.1367	1.3100e-003	0.0305	4.1300e-003	0.0346	8.7900e-003	3.9500e-003	0.0127	0.0000	125.4329	125.4329	9.1400e-003	0.0000	125.6615
Worker	0.0734	0.0618	0.6050	1.3800e-003	0.1362	9.6000e-004	0.1372	0.0362	8.9000e-004	0.0371	0.0000	124.7247	124.7247	4.5400e-003	0.0000	124.8381
Total	0.0932	0.6632	0.7417	2.6900e-003	0.1666	5.0900e-003	0.1717	0.0450	4.8400e-003	0.0498	0.0000	250.1577	250.1577	0.0137	0.0000	250.4996

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2512	2.1761	1.5468	2.5100e-003		0.1310	0.1310		0.1239	0.1239	0.0000	220.2278	220.2278	0.0504	0.0000	221.4885
Total	0.2512	2.1761	1.5468	2.5100e-003		0.1310	0.1310		0.1239	0.1239	0.0000	220.2278	220.2278	0.0504	0.0000	221.4885

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3.4 Building Construction - 2018**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0198	0.6014	0.1367	1.3100e-003	0.0305	4.1300e-003	0.0346	8.7900e-003	3.9500e-003	0.0127	0.0000	125.4329	125.4329	9.1400e-003	0.0000	125.6615
Worker	0.0734	0.0618	0.6050	1.3800e-003	0.1362	9.6000e-004	0.1372	0.0362	8.9000e-004	0.0371	0.0000	124.7247	124.7247	4.5400e-003	0.0000	124.8381
Total	0.0932	0.6632	0.7417	2.6900e-003	0.1666	5.0900e-003	0.1717	0.0450	4.8400e-003	0.0498	0.0000	250.1577	250.1577	0.0137	0.0000	250.4996

3.5 Paving - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0288	0.3066	0.2589	4.0000e-004		0.0167	0.0167		0.0154	0.0154	0.0000	36.4203	36.4203	0.0113	0.0000	36.7038
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0288	0.3066	0.2589	4.0000e-004		0.0167	0.0167		0.0154	0.0154	0.0000	36.4203	36.4203	0.0113	0.0000	36.7038

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3.5 Paving - 2018**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5500e-003	1.3100e-003	0.0128	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6361	2.6361	1.0000e-004	0.0000	2.6385
Total	1.5500e-003	1.3100e-003	0.0128	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6361	2.6361	1.0000e-004	0.0000	2.6385

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0288	0.3066	0.2589	4.0000e-004		0.0167	0.0167		0.0154	0.0154	0.0000	36.4203	36.4203	0.0113	0.0000	36.7038
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0288	0.3066	0.2589	4.0000e-004		0.0167	0.0167		0.0154	0.0154	0.0000	36.4203	36.4203	0.0113	0.0000	36.7038

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3.5 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5500e-003	1.3100e-003	0.0128	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6361	2.6361	1.0000e-004	0.0000	2.6385
Total	1.5500e-003	1.3100e-003	0.0128	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6361	2.6361	1.0000e-004	0.0000	2.6385

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

[illegible]

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3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

3.6 Architectural Coating - 2018**Mitigated Construction Off-Site**

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

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	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
Unrefrigerated Warehouse-No Rail	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.1003	6.0000e-005	6.6600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	4.0000e-005	0.0000	0.0137
Unmitigated	2.1003	6.0000e-005	6.6600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	4.0000e-005	0.0000	0.0137

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2387					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8610					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.4000e-004	6.0000e-005	6.6600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	4.0000e-005	0.0000	0.0137
Total	2.1003	6.0000e-005	6.6600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	4.0000e-005	0.0000	0.0137

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2387					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8610					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.4000e-004	6.0000e-005	6.6600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	4.0000e-005	0.0000	0.0137
Total	2.1003	6.0000e-005	6.6600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	4.0000e-005	0.0000	0.0137

7.0 Water Detail**7.1 Mitigation Measures Water**

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

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

Altitude Business Centre Phase 1 (Mitigated) - San Bernardino-South Coast County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

Altitude Business Center Phase 2 (Mitigated) - San Bernardino-South Coast County, Annual

Altitude Business Center Phase 2 (Mitigated)
San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	194.00	1000sqft	4.45	194,000.00	0
Unrefrigerated Warehouse-No Rail	200.00	1000sqft	4.59	200,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use -

Construction Phase - Construction Schedule adjusted and approved by the Client.

Off-road Equipment - Equipment List adjusted and approved by the Client.

Off-road Equipment - Equipment List adjusted and approved by the Client.

Off-road Equipment - Equipment List adjusted and approved by the Client.

Off-road Equipment -

Grading -

Architectural Coating - All architectural coatings shall be no more than 50 g/L low VOC paint.

Vehicle Trips - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation - During Grading, all construction equipment greater than >150 HP are required to have Tier 3 or better engines.

Fleet Mix - Construction Run Only.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	74
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	74
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	80.00
tblConstructionPhase	NumDays	230.00	115.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	20.00	35.00
tblConstructionPhase	PhaseEndDate	4/10/2019	8/7/2019
tblConstructionPhase	PhaseEndDate	2/13/2019	8/7/2019
tblConstructionPhase	PhaseEndDate	3/28/2018	2/27/2019
tblConstructionPhase	PhaseEndDate	3/13/2019	9/25/2019
tblConstructionPhase	PhaseStartDate	3/14/2019	4/18/2019
tblConstructionPhase	PhaseStartDate	3/29/2018	2/28/2019
tblConstructionPhase	PhaseStartDate	3/1/2018	12/27/2018
tblConstructionPhase	PhaseStartDate	2/14/2019	8/8/2019
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	15.36	0.00
tblEnergyUse	T24NG	2.00	0.00

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tblFleetMix	HHD	0.06	0.00
tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.54	1.00
tblFleetMix	LDA	0.54	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.6710e-003	0.00
tblFleetMix	LHD2	5.6710e-003	0.00
tblFleetMix	MCY	6.2440e-003	0.00
tblFleetMix	MCY	6.2440e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.1630e-003	0.00
tblFleetMix	MH	1.1630e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3260e-003	0.00
tblFleetMix	OBUS	1.3260e-003	0.00
tblFleetMix	SBUS	8.2300e-004	0.00
tblFleetMix	SBUS	8.2300e-004	0.00
tblFleetMix	UBUS	1.7150e-003	0.00
tblFleetMix	UBUS	1.7150e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	240.56	0.00
tblSolidWaste	SolidWasteGenerationRate	188.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00

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tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	44,862,500.00	0.00
tblWater	IndoorWaterUseRate	46,250,000.00	0.00

2.0 Emissions Summary

Altitude Business Center Phase 2 (Mitigated) - San Bernardino-South Coast County, Annual

2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0207	0.2390	0.1231	2.3000e-004	0.1800	0.0104	0.1904	0.0355	9.5500e-003	0.0451	0.0000	21.2635	21.2635	6.4300e-003	0.0000	21.4243
2019	1.5204	5.9151	4.0693	8.5200e-003	0.8043	0.2718	1.0761	0.3353	0.2537	0.5890	0.0000	763.4765	763.4765	0.1622	0.0000	767.5317
Maximum	1.5204	5.9151	4.0693	8.5200e-003	0.8043	0.2718	1.0761	0.3353	0.2537	0.5890	0.0000	763.4765	763.4765	0.1622	0.0000	767.5317

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	6.5000e-003	0.1108	0.1329	2.3000e-004	0.0474	4.6200e-003	0.0520	9.3800e-003	4.5800e-003	0.0140	0.0000	21.2634	21.2634	6.4300e-003	0.0000	21.4243
2019	1.3360	4.3494	4.2836	8.5200e-003	0.3241	0.2010	0.5251	0.1181	0.1931	0.3112	0.0000	763.4758	763.4758	0.1622	0.0000	767.5310
Maximum	1.3360	4.3494	4.2836	8.5200e-003	0.3241	0.2010	0.5251	0.1181	0.1931	0.3112	0.0000	763.4758	763.4758	0.1622	0.0000	767.5310

	ROG	NOx	CO	SO2	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	12.89	27.52	-5.35	0.00	62.27	27.13	54.44	65.62	24.90	48.72	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
4	12-1-2018	2-28-2019	3.6578	1.7621
5	3-1-2019	5-31-2019	1.9623	1.9623
6	6-1-2019	8-31-2019	1.9236	1.9236
7	9-1-2019	9-30-2019	0.1504	0.1504
		Highest	3.6578	1.9623

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6068	5.0000e-005	5.0800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.6068	5.0000e-005	5.0800e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

Altitude Business Center Phase 2 (Mitigated) - San Bernardino-South Coast County, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6068	5.0000e-005	5.0800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.6068	5.0000e-005	5.0800e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

	ROG	NOx	CO	SO2	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**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	12/27/2018	2/27/2019	5	45	
2	Building Construction	Building Construction	2/28/2019	8/7/2019	5	115	
3	Paving	Paving	8/8/2019	9/25/2019	5	35	
4	Architectural Coating	Architectural Coating	4/18/2019	8/7/2019	5	80	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 270

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 591,000; Non-Residential Outdoor: 197,000; Striped Parking Area: 0
(Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	4	8.00	187	0.41
Grading	Other Construction Equipment	2	8.00	172	0.42
Grading	Rubber Tired Dozers	4	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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
Grading	18	45.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	165.00	65.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1793	0.0000	0.1793	0.0353	0.0000	0.0353	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0203	0.2386	0.1198	2.3000e-004		0.0104	0.0104		9.5400e-003	9.5400e-003	0.0000	20.5856	20.5856	6.4100e-003	0.0000	20.7458
Total	0.0203	0.2386	0.1198	2.3000e-004	0.1793	0.0104	0.1897	0.0353	9.5400e-003	0.0449	0.0000	20.5856	20.5856	6.4100e-003	0.0000	20.7458

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3.2 Grading - 2018**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.4000e-004	3.2900e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.6779	0.6779	2.0000e-005	0.0000	0.6785
Total	4.0000e-004	3.4000e-004	3.2900e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.6779	0.6779	2.0000e-005	0.0000	0.6785

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0466	0.0000	0.0466	9.1800e-003	0.0000	9.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-003	0.1105	0.1297	2.3000e-004		4.6200e-003	4.6200e-003		4.5700e-003	4.5700e-003	0.0000	20.5856	20.5856	6.4100e-003	0.0000	20.7458
Total	6.1000e-003	0.1105	0.1297	2.3000e-004	0.0466	4.6200e-003	0.0512	9.1800e-003	4.5700e-003	0.0138	0.0000	20.5856	20.5856	6.4100e-003	0.0000	20.7458

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3.2 Grading - 2018**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.4000e-004	3.2900e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.6779	0.6779	2.0000e-005	0.0000	0.6785
Total	4.0000e-004	3.4000e-004	3.2900e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.6779	0.6779	2.0000e-005	0.0000	0.6785

3.2 Grading - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6490	0.0000	0.6490	0.2935	0.0000	0.2935	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2685	3.0997	1.5994	3.1500e-003		0.1342	0.1342		0.1234	0.1234	0.0000	283.3456	283.3456	0.0897	0.0000	285.5868
Total	0.2685	3.0997	1.5994	3.1500e-003	0.6490	0.1342	0.7832	0.2935	0.1234	0.4170	0.0000	283.3456	283.3456	0.0897	0.0000	285.5868

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3.2 Grading - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0700e-003	4.1300e-003	0.0407	1.0000e-004	0.0104	7.0000e-005	0.0104	2.7500e-003	7.0000e-005	2.8200e-003	0.0000	9.1671	9.1671	3.0000e-004	0.0000	9.1747
Total	5.0700e-003	4.1300e-003	0.0407	1.0000e-004	0.0104	7.0000e-005	0.0104	2.7500e-003	7.0000e-005	2.8200e-003	0.0000	9.1671	9.1671	3.0000e-004	0.0000	9.1747

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1688	0.0000	0.1688	0.0763	0.0000	0.0763	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0841	1.5341	1.8137	3.1500e-003		0.0634	0.0634		0.0629	0.0629	0.0000	283.3453	283.3453	0.0897	0.0000	285.5865
Total	0.0841	1.5341	1.8137	3.1500e-003	0.1688	0.0634	0.2321	0.0763	0.0629	0.1392	0.0000	283.3453	283.3453	0.0897	0.0000	285.5865

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3.2 Grading - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0700e-003	4.1300e-003	0.0407	1.0000e-004	0.0104	7.0000e-005	0.0104	2.7500e-003	7.0000e-005	2.8200e-003	0.0000	9.1671	9.1671	3.0000e-004	0.0000	9.1747
Total	5.0700e-003	4.1300e-003	0.0407	1.0000e-004	0.0104	7.0000e-005	0.0104	2.7500e-003	7.0000e-005	2.8200e-003	0.0000	9.1671	9.1671	3.0000e-004	0.0000	9.1747

3.3 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2211	1.9616	1.5029	2.5100e-003		0.1127	0.1127		0.1067	0.1067	0.0000	218.0436	218.0436	0.0493	0.0000	219.2763
Total	0.2211	1.9616	1.5029	2.5100e-003		0.1127	0.1127		0.1067	0.1067	0.0000	218.0436	218.0436	0.0493	0.0000	219.2763

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3.3 Building Construction - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0137	0.4365	0.0946	1.0000e-003	0.0236	2.7100e-003	0.0263	6.8000e-003	2.5900e-003	9.3900e-003	0.0000	96.0851	96.0851	6.9200e-003	0.0000	96.2579
Worker	0.0509	0.0415	0.4087	1.0200e-003	0.1040	7.1000e-004	0.1047	0.0276	6.6000e-004	0.0283	0.0000	92.0349	92.0349	3.0400e-003	0.0000	92.1109
Total	0.0646	0.4780	0.5033	2.0200e-003	0.1276	3.4200e-003	0.1310	0.0344	3.2500e-003	0.0377	0.0000	188.1200	188.1200	9.9600e-003	0.0000	188.3689

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2211	1.9616	1.5029	2.5100e-003		0.1127	0.1127		0.1067	0.1067	0.0000	218.0433	218.0433	0.0493	0.0000	219.2760
Total	0.2211	1.9616	1.5029	2.5100e-003		0.1127	0.1127		0.1067	0.1067	0.0000	218.0433	218.0433	0.0493	0.0000	219.2760

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3.3 Building Construction - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0137	0.4365	0.0946	1.0000e-003	0.0236	2.7100e-003	0.0263	6.8000e-003	2.5900e-003	9.3900e-003	0.0000	96.0851	96.0851	6.9200e-003	0.0000	96.2579
Worker	0.0509	0.0415	0.4087	1.0200e-003	0.1040	7.1000e-004	0.1047	0.0276	6.6000e-004	0.0283	0.0000	92.0349	92.0349	3.0400e-003	0.0000	92.1109
Total	0.0646	0.4780	0.5033	2.0200e-003	0.1276	3.4200e-003	0.1310	0.0344	3.2500e-003	0.0377	0.0000	188.1200	188.1200	9.9600e-003	0.0000	188.3689

3.4 Paving - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0255	0.2668	0.2566	4.0000e-004		0.0144	0.0144		0.0133	0.0133	0.0000	35.8316	35.8316	0.0113	0.0000	36.1150
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0255	0.2668	0.2566	4.0000e-004		0.0144	0.0144		0.0133	0.0133	0.0000	35.8316	35.8316	0.0113	0.0000	36.1150

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3.4 Paving - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4100e-003	1.1500e-003	0.0113	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.5464	2.5464	8.0000e-005	0.0000	2.5485
Total	1.4100e-003	1.1500e-003	0.0113	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.5464	2.5464	8.0000e-005	0.0000	2.5485

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0255	0.2668	0.2566	4.0000e-004		0.0144	0.0144		0.0133	0.0133	0.0000	35.8315	35.8315	0.0113	0.0000	36.1149
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0255	0.2668	0.2566	4.0000e-004		0.0144	0.0144		0.0133	0.0133	0.0000	35.8315	35.8315	0.0113	0.0000	36.1149

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3.4 Paving - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4100e-003	1.1500e-003	0.0113	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.5464	2.5464	8.0000e-005	0.0000	2.5485
Total	1.4100e-003	1.1500e-003	0.0113	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.5464	2.5464	8.0000e-005	0.0000	2.5485

3.5 Architectural Coating - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.0979	0.0982	1.6000e-004		6.8700e-003	6.8700e-003		6.8700e-003	6.8700e-003	0.0000	13.6174	13.6174	1.1500e-003	0.0000	13.6461
Total	0.9273	0.0979	0.0982	1.6000e-004		6.8700e-003	6.8700e-003		6.8700e-003	6.8700e-003	0.0000	13.6174	13.6174	1.1500e-003	0.0000	13.6461

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3.5 Architectural Coating - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0800e-003	5.7700e-003	0.0569	1.4000e-004	0.0145	1.0000e-004	0.0146	3.8400e-003	9.0000e-005	3.9400e-003	0.0000	12.8049	12.8049	4.2000e-004	0.0000	12.8154
Total	7.0800e-003	5.7700e-003	0.0569	1.4000e-004	0.0145	1.0000e-004	0.0146	3.8400e-003	9.0000e-005	3.9400e-003	0.0000	12.8049	12.8049	4.2000e-004	0.0000	12.8154

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.0979	0.0982	1.6000e-004		6.8700e-003	6.8700e-003		6.8700e-003	6.8700e-003	0.0000	13.6173	13.6173	1.1500e-003	0.0000	13.6461
Total	0.9273	0.0979	0.0982	1.6000e-004		6.8700e-003	6.8700e-003		6.8700e-003	6.8700e-003	0.0000	13.6173	13.6173	1.1500e-003	0.0000	13.6461

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3.5 Architectural Coating - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0800e-003	5.7700e-003	0.0569	1.4000e-004	0.0145	1.0000e-004	0.0146	3.8400e-003	9.0000e-005	3.9400e-003	0.0000	12.8049	12.8049	4.2000e-004	0.0000	12.8154
Total	7.0800e-003	5.7700e-003	0.0569	1.4000e-004	0.0145	1.0000e-004	0.0146	3.8400e-003	9.0000e-005	3.9400e-003	0.0000	12.8049	12.8049	4.2000e-004	0.0000	12.8154

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Altitude Business Center Phase 2 (Mitigated) - San Bernardino-South Coast County, Annual

[illegible]

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

[illegible]

4.4 Fleet Mix

[illegible]

Altitude Business Center Phase 2 (Mitigated) - San Bernardino-South Coast County, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

Altitude Business Center Phase 2 (Mitigated) - San Bernardino-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

Altitude Business Center Phase 2 (Mitigated) - San Bernardino-South Coast County, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6068	5.0000e-005	5.0800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Unmitigated	1.6068	5.0000e-005	5.0800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1826					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.0800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	1.6068	5.0000e-005	5.0800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1826					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.0800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	1.6068	5.0000e-005	5.0800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

7.0 Water Detail**7.1 Mitigation Measures Water**

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

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

Altitude Business Center Phase 2 (Mitigated) - San Bernardino-South Coast County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Altitude Business Center Phase 2 (Mitigated) - San Bernardino-South Coast County, Annual

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

Altitude Business Centre Phase 3 (Mitigated) - San Bernardino-South Coast County, Annual

Altitude Business Centre Phase 3 (Mitigated)**San Bernardino-South Coast County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	233.00	1000sqft	5.35	233,000.00	0
General Light Industry	61.00	1000sqft	1.40	61,000.00	0
Mini-Storage	110.00	1000sqft	2.53	110,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Altitude Business Centre Phase 3 (Mitigated) - San Bernardino-South Coast County, Annual

Project Characteristics -

Land Use -

Construction Phase - Construction Schedule adjusted and approved by the Client.

Off-road Equipment - Equipment List adjusted and approved by the Client.

Off-road Equipment - Equipment List adjusted and approved by the Client.

Off-road Equipment - Equipment List adjusted and approved by the Client.

Off-road Equipment -

On-road Fugitive Dust -

Grading -

Architectural Coating - All architectural coatings shall be no more than 50 g/L low VOC paint

Vehicle Trips - Construction Run Only

Energy Use - Construction Run Only

Water And Wastewater - Construction Run Only

Solid Waste - Construction Run Only

Construction Off-road Equipment Mitigation - During Grading, all construction equipment greater than >150 HP are required to have Tier 3 or better engines.

Fleet Mix - Construction Run Only

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	74
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	74
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	80.00
tblConstructionPhase	NumDays	230.00	115.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	20.00	35.00
tblConstructionPhase	PhaseEndDate	11/4/2020	5/6/2020
tblConstructionPhase	PhaseEndDate	9/9/2020	5/6/2020
tblConstructionPhase	PhaseEndDate	10/23/2019	11/27/2019
tblConstructionPhase	PhaseEndDate	10/7/2020	6/24/2020
tblConstructionPhase	PhaseStartDate	10/8/2020	1/16/2020
tblConstructionPhase	PhaseStartDate	10/24/2019	11/28/2019
tblConstructionPhase	PhaseStartDate	9/10/2020	5/7/2020
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24E	3.07	0.00

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tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	15.36	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	2.00	0.00
tblFleetMix	HHD	0.06	0.00
tblFleetMix	HHD	0.06	0.00
tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00

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tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

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tblSolidWaste	SolidWasteGenerationRate	75.64	0.00
tblSolidWaste	SolidWasteGenerationRate	216.69	0.00
tblSolidWaste	SolidWasteGenerationRate	103.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00

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tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	14,106,250.00	0.00
tblWater	IndoorWaterUseRate	41,411,963.28	0.00
tblWater	IndoorWaterUseRate	25,437,500.00	0.00
tblWater	OutdoorWaterUseRate	25,381,525.88	0.00

2.0 Emissions Summary

Altitude Business Centre Phase 3 (Mitigated) - San Bernardino-South Coast County, Annual

2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3515	3.8351	2.1665	4.4100e-003	0.7205	0.1681	0.8885	0.3229	0.1553	0.4781	0.0000	396.2678	396.2678	0.1087	0.0000	398.9851
2020	1.2049	2.2821	2.0921	4.5000e-003	0.1074	0.1103	0.2177	0.0290	0.1051	0.1340	0.0000	398.6417	398.6417	0.0604	0.0000	400.1517
Maximum	1.2049	3.8351	2.1665	4.5000e-003	0.7205	0.1681	0.8885	0.3229	0.1553	0.4781	0.0000	398.6417	398.6417	0.1087	0.0000	400.1517

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1539	2.1576	2.3960	4.4100e-003	0.2135	0.0922	0.3057	0.0910	0.0903	0.1813	0.0000	396.2674	396.2674	0.1087	0.0000	398.9847
2020	1.2049	2.2821	2.0921	4.5000e-003	0.1074	0.1103	0.2177	0.0290	0.1051	0.1340	0.0000	398.6414	398.6414	0.0604	0.0000	400.1514
Maximum	1.2049	2.2821	2.3960	4.5000e-003	0.2135	0.1103	0.3057	0.0910	0.1051	0.1813	0.0000	398.6414	398.6414	0.1087	0.0000	400.1514

	ROG	NOx	CO	SO2	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	12.69	27.42	-5.39	0.00	61.25	27.25	52.69	65.91	24.94	48.49	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-26-2019	12-25-2019	4.0913	2.2162
2	12-26-2019	3-25-2020	2.1908	2.1908
3	3-26-2020	6-25-2020	1.3880	1.3880
		Highest	4.0913	2.2162

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6476	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.6476	5.0000e-005	5.1900e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6476	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.6476	5.0000e-005	5.1900e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107

	ROG	NOx	CO	SO2	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**

Altitude Business Centre Phase 3 (Mitigated) - San Bernardino-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/26/2019	11/27/2019	5	45	
2	Building Construction	Building Construction	11/28/2019	5/6/2020	5	115	
3	Paving	Paving	5/7/2020	6/24/2020	5	35	
4	Architectural Coating	Architectural Coating	1/16/2020	5/6/2020	5	80	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 270

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 606,000; Non-Residential Outdoor: 202,000; Striped Parking Area: 0
(Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	4	8.00	187	0.41
Grading	Other Construction Equipment	2	8.00	172	0.42
Grading	Rubber Tired Dozers	4	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	3	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	18	45.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	146.00	66.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	29.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6852	0.0000	0.6852	0.3134	0.0000	0.3134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2876	3.3211	1.7137	3.3800e-003		0.1438	0.1438		0.1323	0.1323	0.0000	303.5846	303.5846	0.0961	0.0000	305.9859
Total	0.2876	3.3211	1.7137	3.3800e-003	0.6852	0.1438	0.8289	0.3134	0.1323	0.4456	0.0000	303.5846	303.5846	0.0961	0.0000	305.9859

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3.2 Grading - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4300e-003	4.4300e-003	0.0436	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	9.8219	9.8219	3.2000e-004	0.0000	9.8300
Total	5.4300e-003	4.4300e-003	0.0436	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	9.8219	9.8219	3.2000e-004	0.0000	9.8300

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1781	0.0000	0.1781	0.0815	0.0000	0.0815	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0901	1.6437	1.9433	3.3800e-003		0.0679	0.0679		0.0673	0.0673	0.0000	303.5842	303.5842	0.0961	0.0000	305.9855
Total	0.0901	1.6437	1.9433	3.3800e-003	0.1781	0.0679	0.2460	0.0815	0.0673	0.1488	0.0000	303.5842	303.5842	0.0961	0.0000	305.9855

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3.2 Grading - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4300e-003	4.4300e-003	0.0436	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	9.8219	9.8219	3.2000e-004	0.0000	9.8300
Total	5.4300e-003	4.4300e-003	0.0436	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	9.8219	9.8219	3.2000e-004	0.0000	9.8300

3.3 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0461	0.4094	0.3137	5.2000e-004		0.0235	0.0235		0.0223	0.0223	0.0000	45.5047	45.5047	0.0103	0.0000	45.7620
Total	0.0461	0.4094	0.3137	5.2000e-004		0.0235	0.0235		0.0223	0.0223	0.0000	45.5047	45.5047	0.0103	0.0000	45.7620

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3.3 Building Construction - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-003	0.0925	0.0200	2.1000e-004	4.9900e-003	5.7000e-004	5.5700e-003	1.4400e-003	5.5000e-004	1.9900e-003	0.0000	20.3610	20.3610	1.4700e-003	0.0000	20.3977
Worker	9.4000e-003	7.6600e-003	0.0755	1.9000e-004	0.0192	1.3000e-004	0.0193	5.1000e-003	1.2000e-004	5.2200e-003	0.0000	16.9955	16.9955	5.6000e-004	0.0000	17.0096
Total	0.0123	0.1002	0.0955	4.0000e-004	0.0242	7.0000e-004	0.0249	6.5400e-003	6.7000e-004	7.2100e-003	0.0000	37.3566	37.3566	2.0300e-003	0.0000	37.4072

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0461	0.4094	0.3137	5.2000e-004		0.0235	0.0235		0.0223	0.0223	0.0000	45.5047	45.5047	0.0103	0.0000	45.7620
Total	0.0461	0.4094	0.3137	5.2000e-004		0.0235	0.0235		0.0223	0.0223	0.0000	45.5047	45.5047	0.0103	0.0000	45.7620

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3.3 Building Construction - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-003	0.0925	0.0200	2.1000e-004	4.9900e-003	5.7000e-004	5.5700e-003	1.4400e-003	5.5000e-004	1.9900e-003	0.0000	20.3610	20.3610	1.4700e-003	0.0000	20.3977
Worker	9.4000e-003	7.6600e-003	0.0755	1.9000e-004	0.0192	1.3000e-004	0.0193	5.1000e-003	1.2000e-004	5.2200e-003	0.0000	16.9955	16.9955	5.6000e-004	0.0000	17.0096
Total	0.0123	0.1002	0.0955	4.0000e-004	0.0242	7.0000e-004	0.0249	6.5400e-003	6.7000e-004	7.2100e-003	0.0000	37.3566	37.3566	2.0300e-003	0.0000	37.4072

3.3 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1570	1.4146	1.1628	1.9900e-003		0.0774	0.0774		0.0732	0.0732	0.0000	170.2673	170.2673	0.0383	0.0000	171.2254
Total	0.1570	1.4146	1.1628	1.9900e-003		0.0774	0.0774		0.0732	0.0732	0.0000	170.2673	170.2673	0.0383	0.0000	171.2254

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3.3 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.3200e-003	0.3206	0.0670	8.0000e-004	0.0189	1.4700e-003	0.0204	5.4600e-003	1.4000e-003	6.8700e-003	0.0000	76.6717	76.6717	5.3000e-003	0.0000	76.8044
Worker	0.0328	0.0258	0.2577	6.9000e-004	0.0728	4.9000e-004	0.0733	0.0193	4.5000e-004	0.0198	0.0000	62.4323	62.4323	1.8700e-003	0.0000	62.4791
Total	0.0421	0.3464	0.3247	1.4900e-003	0.0918	1.9600e-003	0.0937	0.0248	1.8500e-003	0.0267	0.0000	139.1040	139.1040	7.1700e-003	0.0000	139.2835

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1570	1.4146	1.1628	1.9900e-003		0.0774	0.0774		0.0732	0.0732	0.0000	170.2671	170.2671	0.0383	0.0000	171.2252
Total	0.1570	1.4146	1.1628	1.9900e-003		0.0774	0.0774		0.0732	0.0732	0.0000	170.2671	170.2671	0.0383	0.0000	171.2252

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3.3 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.3200e-003	0.3206	0.0670	8.0000e-004	0.0189	1.4700e-003	0.0204	5.4600e-003	1.4000e-003	6.8700e-003	0.0000	76.6717	76.6717	5.3000e-003	0.0000	76.8044
Worker	0.0328	0.0258	0.2577	6.9000e-004	0.0728	4.9000e-004	0.0733	0.0193	4.5000e-004	0.0198	0.0000	62.4323	62.4323	1.8700e-003	0.0000	62.4791
Total	0.0421	0.3464	0.3247	1.4900e-003	0.0918	1.9600e-003	0.0937	0.0248	1.8500e-003	0.0267	0.0000	139.1040	139.1040	7.1700e-003	0.0000	139.2835

3.4 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0237	0.2462	0.2564	4.0000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	35.0494	35.0494	0.0113	0.0000	35.3328
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0237	0.2462	0.2564	4.0000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	35.0494	35.0494	0.0113	0.0000	35.3328

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3.4 Paving - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.0200e-003	0.0102	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.4670	2.4670	7.0000e-005	0.0000	2.4689
Total	1.3000e-003	1.0200e-003	0.0102	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.4670	2.4670	7.0000e-005	0.0000	2.4689

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0237	0.2462	0.2564	4.0000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	35.0493	35.0493	0.0113	0.0000	35.3327
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0237	0.2462	0.2564	4.0000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	35.0493	35.0493	0.0113	0.0000	35.3327

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3.4 Paving - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.0200e-003	0.0102	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.4670	2.4670	7.0000e-005	0.0000	2.4689
Total	1.3000e-003	1.0200e-003	0.0102	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.4670	2.4670	7.0000e-005	0.0000	2.4689

3.5 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9363					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0388	0.2694	0.2930	4.8000e-004		0.0178	0.0178		0.0178	0.0178	0.0000	40.8521	40.8521	3.1600e-003	0.0000	40.9311
Total	0.9750	0.2694	0.2930	4.8000e-004		0.0178	0.0178		0.0178	0.0178	0.0000	40.8521	40.8521	3.1600e-003	0.0000	40.9311

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3.5 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7300e-003	4.5000e-003	0.0450	1.2000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	8.0000e-005	3.4600e-003	0.0000	10.9019	10.9019	3.3000e-004	0.0000	10.9101
Total	5.7300e-003	4.5000e-003	0.0450	1.2000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	8.0000e-005	3.4600e-003	0.0000	10.9019	10.9019	3.3000e-004	0.0000	10.9101

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9363					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0388	0.2694	0.2930	4.8000e-004		0.0178	0.0178		0.0178	0.0178	0.0000	40.8520	40.8520	3.1600e-003	0.0000	40.9311
Total	0.9750	0.2694	0.2930	4.8000e-004		0.0178	0.0178		0.0178	0.0178	0.0000	40.8520	40.8520	3.1600e-003	0.0000	40.9311

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3.5 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7300e-003	4.5000e-003	0.0450	1.2000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	8.0000e-005	3.4600e-003	0.0000	10.9019	10.9019	3.3000e-004	0.0000	10.9101
Total	5.7300e-003	4.5000e-003	0.0450	1.2000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	8.0000e-005	3.4600e-003	0.0000	10.9019	10.9019	3.3000e-004	0.0000	10.9101

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Mini-Storage	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Mini-Storage	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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[illegible]

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

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5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Mini-Storage	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Mini-Storage	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6476	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107
Unmitigated	1.6476	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1873					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4599					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107
Total	1.6476	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107

Altitude Business Centre Phase 3 (Mitigated) - San Bernardino-South Coast County, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1873					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4599					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107
Total	1.6476	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107

7.0 Water Detail**7.1 Mitigation Measures Water**

Altitude Business Centre Phase 3 (Mitigated) - San Bernardino-South Coast County, Annual

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Mini-Storage	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Altitude Business Centre Phase 3 (Mitigated) - San Bernardino-South Coast County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Mini-Storage	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Altitude Business Centre Phase 3 (Mitigated) - San Bernardino-South Coast County, Annual

Category/Year

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

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Mini-Storage	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Altitude Business Centre Phase 3 (Mitigated) - San Bernardino-South Coast County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Mini-Storage	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

Boilers

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

User Defined Equipment

Equipment Type	Number
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Altitude Business Centre Phase 3 (Mitigated) - San Bernardino-South Coast County, Annual

11.0 Vegetation

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

Altitude Business Centre (Trucks)
San Bernardino-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	233.00	1000sqft	5.35	233,000.00	0
General Light Industry	255.00	1000sqft	5.85	255,000.00	0
Unrefrigerated Warehouse-No Rail	715.00	1000sqft	16.41	715,000.00	0
Mini-Storage	110.00	1000sqft	2.53	110,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

Project Characteristics -

Land Use -

Construction Phase - Operations (Passenger Car) Run Only.

Off-road Equipment - Operations (Passenger Car) Run Only.

Vehicle Trips - Trip Rates based on ITE 9th Edition (2012) and TIA Report prepared by Urban Crossroads (2017). Operations (Passenger Car) Run Only.

Fleet Mix - Operations (Passenger Car) Run Only.

Architectural Coating -

Area Coating - Operationas (Truck) Run Only.

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 21.8% and 16.8% respectively, to reflect 2013 Title 24 requirements. Source: Impact Analysis California's 2013 Building Energy Efficiency Standards (CEC 2013)

Water And Wastewater - Based on similar industrial projects and the 2004 City Water Master Plan Update- 1,250 gallons per day

Operational Off-Road Equipment - Included Yard Tractors

Area Mitigation - Based on Rule 1113

Energy Mitigation - Compliance with City of Chino CAP

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	656500	0
tblAreaCoating	Area_Nonresidential_Interior	1969500	0
tblEnergyUse	T24E	2.20	1.72
tblEnergyUse	T24E	3.07	2.40
tblEnergyUse	T24E	0.37	0.29
tblEnergyUse	T24E	0.37	0.29
tblEnergyUse	T24NG	15.36	12.78
tblEnergyUse	T24NG	3.47	2.89
tblEnergyUse	T24NG	2.00	1.66
tblEnergyUse	T24NG	2.00	1.66
tblFleetMix	HHD	0.06	0.44
tblFleetMix	HHD	0.06	0.54

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

tblFleetMix	HHD	0.06	0.60
tblFleetMix	HHD	0.06	0.54
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.38
tblFleetMix	LHD1	0.02	0.25
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD1	0.02	0.25
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MDV	0.12	0.00

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MHD	0.02	0.18
tblFleetMix	MHD	0.02	0.21
tblFleetMix	MHD	0.02	0.23
tblFleetMix	MHD	0.02	0.21
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	124.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	50.00
tblVehicleTrips	CW_TL	16.60	50.00
tblVehicleTrips	CW_TL	16.60	50.00
tblVehicleTrips	CW_TL	16.60	50.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	1.49
tblVehicleTrips	ST_TR	2.46	1.62
tblVehicleTrips	ST_TR	1.68	0.73
tblVehicleTrips	ST_TR	1.68	0.38
tblVehicleTrips	SU_TR	0.68	1.49
tblVehicleTrips	SU_TR	1.05	1.62
tblVehicleTrips	SU_TR	1.68	0.73
tblVehicleTrips	SU_TR	1.68	0.38
tblVehicleTrips	WD_TR	6.97	1.49
tblVehicleTrips	WD_TR	11.03	1.62
tblVehicleTrips	WD_TR	1.68	0.73
tblVehicleTrips	WD_TR	1.68	0.38
tblWater	IndoorWaterUseRate	58,968,750.00	2,669,062.50
tblWater	IndoorWaterUseRate	41,411,963.28	2,440,937.50
tblWater	IndoorWaterUseRate	165,343,750.00	7,487,062.50
tblWater	IndoorWaterUseRate	25,437,500.00	155,235.95

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

tblWater	OutdoorWaterUseRate	25,381,525.88	2,440,937.50
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible]

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

	ROG	NOx	CO	SO2	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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348
Energy	0.0523	0.4754	0.3993	2.8500e-003		0.0361	0.0361		0.0361	0.0361	0.0000	2,559.4038	2,559.4038	0.0942	0.0269	2,569.7840
Mobile	2.8156	86.7498	22.3408	0.3198	10.5135	0.5809	11.0944	2.9691	0.5556	3.5247	0.0000	30,541.6831	30,541.6831	0.9552	0.0000	30,565.5636
Offroad	0.0627	0.7295	0.3346	1.3800e-003		0.0244	0.0244		0.0225	0.0225	0.0000	121.0135	121.0135	0.0391	0.0000	121.9920
Waste						0.0000	0.0000		0.0000	0.0000	265.5914	0.0000	265.5914	15.6960	0.0000	657.9913
Water						0.0000	0.0000		0.0000	0.0000	4.0457	61.5470	65.5927	0.4181	0.0103	79.1251
Total	7.6767	87.9548	23.0915	0.3240	10.5135	0.6415	11.1550	2.9691	0.6142	3.5833	269.6371	33,283.6799	33,553.3170	17.2027	0.0373	33,994.4907

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348
Energy	0.0514	0.4676	0.3927	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	2,539.0902	2,539.0902	0.0936	0.0267	2,549.3776
Mobile	2.8156	86.7498	22.3408	0.3198	10.5135	0.5809	11.0944	2.9691	0.5556	3.5247	0.0000	30,541.6831	30,541.6831	0.9552	0.0000	30,565.5636
Offroad	0.0627	0.7295	0.3346	1.3800e-003		0.0244	0.0244		0.0225	0.0225	0.0000	121.0135	121.0135	0.0391	0.0000	121.9920
Waste						0.0000	0.0000		0.0000	0.0000	265.5914	0.0000	265.5914	15.6960	0.0000	657.9913
Water						0.0000	0.0000		0.0000	0.0000	4.0457	61.5470	65.5927	0.4181	0.0103	79.1251
Total	7.6759	87.9470	23.0850	0.3240	10.5135	0.6409	11.1544	2.9691	0.6136	3.5827	269.6371	33,263.3664	33,533.0034	17.2021	0.0370	33,974.0844

	ROG	NOx	CO	SO2	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	0.01	0.01	0.03	0.01	0.00	0.09	0.01	0.00	0.10	0.02	0.00	0.06	0.06	0.00	0.70	0.06

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2018	4/11/2018	5	30	

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

3.2 Demolition - 2018

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

3.2 Demolition - 2018**Mitigated Construction On-Site**

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.8156	86.7498	22.3408	0.3198	10.5135	0.5809	11.0944	2.9691	0.5556	3.5247	0.0000	30,541.68 31	30,541.68 31	0.9552	0.0000	30,565.56 36
Unmitigated	2.8156	86.7498	22.3408	0.3198	10.5135	0.5809	11.0944	2.9691	0.5556	3.5247	0.0000	30,541.68 31	30,541.68 31	0.9552	0.0000	30,565.56 36

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	380.46	380.46	380.46	6,924,372	6,924,372
General Office Building	376.30	376.30	376.30	6,848,569	6,848,569
Unrefrigerated Warehouse-No Rail	521.95	521.95	521.95	9,499,490	9,499,490
Mini-Storage	41.80	41.80	41.80	760,760	760,760
Total	1,320.51	1,320.51	1,320.51	24,033,191	24,033,191

4.3 Trip Type Information

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	50.00	0.00	0.00	100.00	0.00	0.00	100	0	0
General Office Building	50.00	0.00	0.00	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No Rail	50.00	0.00	0.00	100.00	0.00	0.00	100	0	0
Mini-Storage	50.00	0.00	0.00	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.000000	0.000000	0.000000	0.000000	0.380000	0.000000	0.180000	0.440000	0.000000	0.000000	0.000000	0.000000	0.000000
General Office Building	0.000000	0.000000	0.000000	0.000000	0.250000	0.000000	0.210000	0.540000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.170000	0.000000	0.230000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000
Mini-Storage	0.000000	0.000000	0.000000	0.000000	0.250000	0.000000	0.210000	0.540000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,030.1049	2,030.1049	0.0838	0.0173	2,037.3676
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,041.9268	2,041.9268	0.0843	0.0174	2,049.2319
NaturalGas Mitigated	0.0514	0.4676	0.3927	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	508.9854	508.9854	9.7600e-003	9.3300e-003	512.0100
Mini-Storage	0.0523	0.4754	0.3993	2.8500e-003		0.0361	0.0361		0.0361	0.0361	0.0000	517.4770	517.4770	9.9200e-003	9.4900e-003	520.5521

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	7.62692e+006	0.0411	0.3739	0.3141	2.2400e-003		0.0284	0.0284		0.0284	0.0284	0.0000	407.0016	407.0016	7.8000e-003	7.4600e-003	409.4202
General Office Building	672680	3.6300e-003	0.0330	0.0277	2.0000e-004		2.5100e-003	2.5100e-003		2.5100e-003	2.5100e-003	0.0000	35.8968	35.8968	6.9000e-004	6.6000e-004	36.1101
Unrefrigerated Warehouse-No Rail	1.21121e+006	6.5300e-003	0.0594	0.0499	3.6000e-004		4.5100e-003	4.5100e-003		4.5100e-003	4.5100e-003	0.0000	64.6348	64.6348	1.2400e-003	1.1800e-003	65.0189
Mini-Storage	186340	1.0000e-003	9.1300e-003	7.6700e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	9.9438	9.9438	1.9000e-004	1.8000e-004	10.0029
Total		0.0523	0.4753	0.3993	2.8500e-003		0.0361	0.0361		0.0361	0.0361	0.0000	517.4770	517.4770	9.9200e-003	9.4800e-003	520.5521

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5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	7.52916e+006	0.0406	0.3691	0.3100	2.2100e-003		0.0281	0.0281		0.0281	0.0281	0.0000	401.7846	401.7846	7.7000e-003	7.3700e-003	404.1722
General Office Building	652500	3.5200e-003	0.0320	0.0269	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003	0.0000	34.8199	34.8199	6.7000e-004	6.4000e-004	35.0268
Unrefrigerated Warehouse-No Rail	1.17552e+006	6.3400e-003	0.0576	0.0484	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003	0.0000	62.7301	62.7301	1.2000e-003	1.1500e-003	63.1029
Mini-Storage	180849	9.8000e-004	8.8700e-003	7.4500e-003	5.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	9.6508	9.6508	1.8000e-004	1.8000e-004	9.7081
Total		0.0514	0.4676	0.3927	2.8000e-003		0.0355	0.0355		0.0355	0.0355	0.0000	508.9853	508.9853	9.7500e-003	9.3400e-003	512.0100

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	2.46595e+006	785.7051	0.0324	6.7100e-003	788.5160
General Office Building	2.06222e+006	657.0682	0.0271	5.6100e-003	659.4189
Unrefrigerated Warehouse-No Rail	1.62973e+006	519.2663	0.0214	4.4400e-003	521.1240
Mini-Storage	250727	79.8871	3.3000e-003	6.8000e-004	80.1729
Total		2,041.9268	0.0843	0.0174	2,049.2319

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	2.45279e+006	781.5117	0.0323	6.6800e-003	784.3076
General Office Building	2.04544e+006	651.7214	0.0269	5.5700e-003	654.0530
Unrefrigerated Warehouse-No Rail	1.62352e+006	517.2888	0.0214	4.4200e-003	519.1394
Mini-Storage	249773	79.5829	3.2900e-003	6.8000e-004	79.8676
Total		2,030.1048	0.0838	0.0174	2,037.3676

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348
Unmitigated	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.7445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5900e-003	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348
Total	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.7445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5900e-003	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348
Total	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348

7.0 Water Detail**7.1 Mitigation Measures Water**

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	65.5927	0.4181	0.0103	79.1251
Unmitigated	65.5927	0.4181	0.0103	79.1251

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.66906 / 0	11.9201	0.0874	2.1500e-003	14.7460
General Office Building	2.44094 / 2.44094	19.5419	0.0803	2.0400e-003	22.1572
Unrefrigerated Warehouse-No Rail	7.48706 / 0	33.4374	0.2453	6.0300e-003	41.3643
Mini-Storage	0.155236 / 0	0.6933	5.0800e-003	1.2000e-004	0.8576
Total		65.5927	0.4181	0.0103	79.1251

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.66906 / 0	11.9201	0.0874	2.1500e-003	14.7460
General Office Building	2.44094 / 2.44094	19.5419	0.0803	2.0400e-003	22.1572
Unrefrigerated Warehouse-No Rail	7.48706 / 0	33.4374	0.2453	6.0300e-003	41.3643
Mini-Storage	0.155236 / 0	0.6933	5.0800e-003	1.2000e-004	0.8576
Total		65.5927	0.4181	0.0103	79.1251

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	265.5914	15.6960	0.0000	657.9913
Unmitigated	265.5914	15.6960	0.0000	657.9913

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	316.2	64.1857	3.7933	0.0000	159.0175
General Office Building	216.69	43.9861	2.5995	0.0000	108.9737
Unrefrigerated Warehouse-No Rail	672.1	136.4302	8.0628	0.0000	338.0001
Mini-Storage	103.4	20.9893	1.2404	0.0000	52.0000
Total		265.5914	15.6960	0.0000	657.9913

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8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	316.2	64.1857	3.7933	0.0000	159.0175
General Office Building	216.69	43.9861	2.5995	0.0000	108.9737
Unrefrigerated Warehouse-No Rail	672.1	136.4302	8.0628	0.0000	338.0001
Mini-Storage	103.4	20.9893	1.2404	0.0000	52.0000
Total		265.5914	15.6960	0.0000	657.9913

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Off-Highway Tractors	2	4.00	365	200	0.44	CNG

Altitude Business Centre (Trucks) - San Bernardino-South Coast County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Off-Highway Tractors	0.0627	0.7295	0.3346	1.3800e-003		0.0244	0.0244		0.0225	0.0225	0.0000	121.0135	121.0135	0.0391	0.0000	121.9920
Total	0.0627	0.7295	0.3346	1.3800e-003		0.0244	0.0244		0.0225	0.0225	0.0000	121.0135	121.0135	0.0391	0.0000	121.9920

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

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

Altitude Business Centre (Passenger Cars - Mitigated)
San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	233.00	1000sqft	5.35	233,000.00	0
General Light Industry	255.00	1000sqft	5.85	255,000.00	0
Unrefrigerated Warehouse-No Rail	715.00	1000sqft	16.41	715,000.00	0
Mini-Storage	110.00	1000sqft	2.53	110,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

Project Characteristics -

Land Use -

Construction Phase - Operations (Passenger Car) Run Only.

Off-road Equipment - Operations (Passenger Car) Run Only.

Vehicle Trips - Trip Rates based on ITE 9th Edition (2012) and TIA Report prepared by Urban Crossroads (2017). Operations (Passenger Car) Run Only.

Fleet Mix - Operations (Passenger Car) Run Only.

Area Coating - Operations (Passenger Cars) Run Only.

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 21.8% and 16.8% respectively, to reflect 2013 Title 24 requirements. Source: Impact Analysis California's 2013 Building Energy Efficiency Standards (CEC 2013)

Water And Wastewater - Based on similar industrial projects and the 2004 City Water Master Plan Update- 1,250 gallons per day

Operational Off-Road Equipment - Included Yard Tractors

Area Mitigation - Based on Rule 1113

Energy Mitigation - Compliance with City of Chino CAP

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	656500	0
tblAreaCoating	Area_Nonresidential_Interior	1969500	0
tblEnergyUse	T24E	2.20	1.72
tblEnergyUse	T24E	3.07	2.40
tblEnergyUse	T24E	0.37	0.29
tblEnergyUse	T24E	0.37	0.29
tblEnergyUse	T24NG	15.36	12.78
tblEnergyUse	T24NG	3.47	2.89
tblEnergyUse	T24NG	2.00	1.66
tblEnergyUse	T24NG	2.00	1.66
tblFleetMix	HHD	0.06	0.00
tblFleetMix	HHD	0.06	0.00
tblFleetMix	HHD	0.06	0.00

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tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

tblOperationalOffRoadEquipment	OperHorsePower	124.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.46	2.56
tblVehicleTrips	ST_TR	1.68	2.83

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

tblVehicleTrips	ST_TR	1.68	2.13
tblVehicleTrips	SU_TR	1.05	1.29
tblVehicleTrips	SU_TR	1.68	2.83
tblVehicleTrips	SU_TR	1.68	2.13
tblVehicleTrips	WD_TR	6.97	5.48
tblVehicleTrips	WD_TR	11.03	10.82
tblVehicleTrips	WD_TR	1.68	2.83
tblVehicleTrips	WD_TR	1.68	2.13
tblWater	IndoorWaterUseRate	58,968,750.00	2,669,062.50
tblWater	IndoorWaterUseRate	41,411,963.28	2,440,937.50
tblWater	IndoorWaterUseRate	165,343,750.00	7,487,062.50
tblWater	IndoorWaterUseRate	25,437,500.00	1,155,235.95
tblWater	OutdoorWaterUseRate	25,381,525.88	2,440,937.50

2.0 Emissions Summary

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348
Energy	0.0523	0.4754	0.3993	2.8500e-003		0.0361	0.0361		0.0361	0.0361	0.0000	2,559.4038	2,559.4038	0.0942	0.0269	2,569.7840
Mobile	1.1981	2.3571	26.1322	0.0966	11.8375	0.0656	11.9031	3.1425	0.0605	3.2030	0.0000	8,740.6683	8,740.6683	0.1778	0.0000	8,745.1142
Offroad	0.0627	0.7295	0.3346	1.3800e-003		0.0244	0.0244		0.0225	0.0225	0.0000	121.0135	121.0135	0.0391	0.0000	121.9920
Waste						0.0000	0.0000		0.0000	0.0000	265.5914	0.0000	265.5914	15.6960	0.0000	657.9913
Water						0.0000	0.0000		0.0000	0.0000	4.3630	65.6958	70.0587	0.4508	0.0111	84.6499
Total	6.0592	3.5621	26.8830	0.1008	11.8375	0.1262	11.9637	3.1425	0.1191	3.2616	269.9543	11,486.8139	11,756.7683	16.4581	0.0381	12,179.5661

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348
Energy	0.0514	0.4676	0.3927	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	2,539.0902	2,539.0902	0.0936	0.0267	2,549.3776
Mobile	1.1981	2.3571	26.1322	0.0966	11.8375	0.0656	11.9031	3.1425	0.0605	3.2030	0.0000	8,740.6683	8,740.6683	0.1778	0.0000	8,745.1142
Offroad	0.0627	0.7295	0.3346	1.3800e-003		0.0244	0.0244		0.0225	0.0225	0.0000	121.0135	121.0135	0.0391	0.0000	121.9920
Waste						0.0000	0.0000		0.0000	0.0000	265.5914	0.0000	265.5914	15.6960	0.0000	657.9913
Water						0.0000	0.0000		0.0000	0.0000	4.3630	65.6958	70.0587	0.4508	0.0111	84.6499
Total	6.0584	3.5543	26.8764	0.1008	11.8375	0.1256	11.9631	3.1425	0.1185	3.2610	269.9543	11,466.5004	11,736.4547	16.4575	0.0378	12,159.1597

	ROG	NOx	CO	SO2	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	0.01	0.22	0.02	0.04	0.00	0.48	0.01	0.00	0.50	0.02	0.00	0.18	0.17	0.00	0.68	0.17

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2018	4/11/2018	5	30	

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

3.2 Demolition - 2018

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

3.2 Demolition - 2018**Mitigated Construction On-Site**

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1981	2.3571	26.1322	0.0966	11.8375	0.0656	11.9031	3.1425	0.0605	3.2030	0.0000	8,740.668 3	8,740.668 3	0.1778	0.0000	8,745.114 2
Unmitigated	1.1981	2.3571	26.1322	0.0966	11.8375	0.0656	11.9031	3.1425	0.0605	3.2030	0.0000	8,740.668 3	8,740.668 3	0.1778	0.0000	8,745.114 2

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1,397.40	336.60	173.40	6,471,410	6,471,410
General Office Building	2,521.06	596.48	300.57	11,655,229	11,655,229
Unrefrigerated Warehouse-No Rail	2,023.45	2,023.45	2023.45	12,226,494	12,226,494
Mini-Storage	234.30	234.30	234.30	1,415,734	1,415,734
Total	6,176.21	3,190.83	2,731.72	31,768,868	31,768,868

4.3 Trip Type Information

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
General Office Building	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Mini-Storage	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
General Office Building	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Mini-Storage	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,030.1049	2,030.1049	0.0838	0.0173	2,037.3676
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,041.9268	2,041.9268	0.0843	0.0174	2,049.2319
NaturalGas Mitigated	0.0514	0.4676	0.3927	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	508.9854	508.9854	9.7600e-003	9.3300e-003	512.0100
NaturalGas Unmitigated	0.0523	0.4754	0.3993	2.8500e-003		0.0361	0.0361		0.0361	0.0361	0.0000	517.4770	517.4770	9.9200e-003	9.4900e-003	520.5521

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	7.62692e+006	0.0411	0.3739	0.3141	2.2400e-003		0.0284	0.0284		0.0284	0.0284	0.0000	407.0016	407.0016	7.8000e-003	7.4600e-003	409.4202
General Office Building	672680	3.6300e-003	0.0330	0.0277	2.0000e-004		2.5100e-003	2.5100e-003		2.5100e-003	2.5100e-003	0.0000	35.8968	35.8968	6.9000e-004	6.6000e-004	36.1101
Unrefrigerated Warehouse-No Rail	1.21121e+006	6.5300e-003	0.0594	0.0499	3.6000e-004		4.5100e-003	4.5100e-003		4.5100e-003	4.5100e-003	0.0000	64.6348	64.6348	1.2400e-003	1.1800e-003	65.0189
Mini-Storage	186340	1.0000e-003	9.1300e-003	7.6700e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	9.9438	9.9438	1.9000e-004	1.8000e-004	10.0029
Total		0.0523	0.4753	0.3993	2.8500e-003		0.0361	0.0361		0.0361	0.0361	0.0000	517.4770	517.4770	9.9200e-003	9.4800e-003	520.5521

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	7.52916e+006	0.0406	0.3691	0.3100	2.2100e-003		0.0281	0.0281		0.0281	0.0281	0.0000	401.7846	401.7846	7.7000e-003	7.3700e-003	404.1722
General Office Building	652500	3.5200e-003	0.0320	0.0269	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003	0.0000	34.8199	34.8199	6.7000e-004	6.4000e-004	35.0268
Unrefrigerated Warehouse-No Rail	1.17552e+006	6.3400e-003	0.0576	0.0484	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003	0.0000	62.7301	62.7301	1.2000e-003	1.1500e-003	63.1029
Mini-Storage	180849	9.8000e-004	8.8700e-003	7.4500e-003	5.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	9.6508	9.6508	1.8000e-004	1.8000e-004	9.7081
Total		0.0514	0.4676	0.3927	2.8000e-003		0.0355	0.0355		0.0355	0.0355	0.0000	508.9853	508.9853	9.7500e-003	9.3400e-003	512.0100

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	2.46595e+006	785.7051	0.0324	6.7100e-003	788.5160
General Office Building	2.06222e+006	657.0682	0.0271	5.6100e-003	659.4189
Unrefrigerated Warehouse-No Rail	1.62973e+006	519.2663	0.0214	4.4400e-003	521.1240
Mini-Storage	250727	79.8871	3.3000e-003	6.8000e-004	80.1729
Total		2,041.9268	0.0843	0.0174	2,049.2319

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	2.45279e+006	781.5117	0.0323	6.6800e-003	784.3076
General Office Building	2.04544e+006	651.7214	0.0269	5.5700e-003	654.0530
Unrefrigerated Warehouse-No Rail	1.62352e+006	517.2888	0.0214	4.4200e-003	519.1394
Mini-Storage	249773	79.5829	3.2900e-003	6.8000e-004	79.8676
Total		2,030.1048	0.0838	0.0174	2,037.3676

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348
Unmitigated	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.7445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5900e-003	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348
Total	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.7445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5900e-003	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348
Total	4.7461	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0326	0.0326	9.0000e-005	0.0000	0.0348

7.0 Water Detail**7.1 Mitigation Measures Water**

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	70.0587	0.4508	0.0111	84.6499
Unmitigated	70.0587	0.4508	0.0111	84.6499

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.66906 / 0	11.9201	0.0874	2.1500e-003	14.7460
General Office Building	2.44094 / 2.44094	19.5419	0.0803	2.0400e-003	22.1572
Unrefrigerated Warehouse-No Rail	7.48706 / 0	33.4374	0.2453	6.0300e-003	41.3643
Mini-Storage	1.15524 / 0	5.1593	0.0378	9.3000e-004	6.3824
Total		70.0587	0.4508	0.0112	84.6499

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.66906 / 0	11.9201	0.0874	2.1500e-003	14.7460
General Office Building	2.44094 / 2.44094	19.5419	0.0803	2.0400e-003	22.1572
Unrefrigerated Warehouse-No Rail	7.48706 / 0	33.4374	0.2453	6.0300e-003	41.3643
Mini-Storage	1.15524 / 0	5.1593	0.0378	9.3000e-004	6.3824
Total		70.0587	0.4508	0.0112	84.6499

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	265.5914	15.6960	0.0000	657.9913
Unmitigated	265.5914	15.6960	0.0000	657.9913

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	316.2	64.1857	3.7933	0.0000	159.0175
General Office Building	216.69	43.9861	2.5995	0.0000	108.9737
Unrefrigerated Warehouse-No Rail	672.1	136.4302	8.0628	0.0000	338.0001
Mini-Storage	103.4	20.9893	1.2404	0.0000	52.0000
Total		265.5914	15.6960	0.0000	657.9913

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	316.2	64.1857	3.7933	0.0000	159.0175
General Office Building	216.69	43.9861	2.5995	0.0000	108.9737
Unrefrigerated Warehouse-No Rail	672.1	136.4302	8.0628	0.0000	338.0001
Mini-Storage	103.4	20.9893	1.2404	0.0000	52.0000
Total		265.5914	15.6960	0.0000	657.9913

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Off-Highway Tractors	2	4.00	365	200	0.44	CNG

Altitude Business Centre (Passenger Cars - Mitigated) - San Bernardino-South Coast County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Off-Highway Tractors	0.0627	0.7295	0.3346	1.3800e-003		0.0244	0.0244		0.0225	0.0225	0.0000	121.0135	121.0135	0.0391	0.0000	121.9920
Total	0.0627	0.7295	0.3346	1.3800e-003		0.0244	0.0244		0.0225	0.0225	0.0000	121.0135	121.0135	0.0391	0.0000	121.9920

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

APPENDIX 3.2:

EMFAC 2014 MODEL OUTPUTS

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: Air District

Region: South Coast AQMD

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Trips	Fuel_Consumpt	Fuel Consumpt	Total Fuel Consumption	VMT	Total VMT	Miles per C VehClass
South Coast AQMD	2020	HHDT	Aggregate	Aggregate	GAS	802.14405	104174.0551	16049.29814	22.12473	22124.72978	2,285,504.66	104174.0551	13,369,344.05	5.85 HHD
South Coast AQMD	2020	HHDT	Aggregate	Aggregate	DSL	94066.7916	13265170	0	2263.38	2263379.935		13265170		
South Coast AQMD	2020	LDA	Aggregate	Aggregate	GAS	6241441.31	215630250.8	39386955.64	7791.379	7791379.047	7,849,819.58	215630250.8	217,800,449.89	27.75 LDA
South Coast AQMD	2020	LDA	Aggregate	Aggregate	DSL	58578.6653	2170199.073	364866.7953	58.44053	58440.52993		2170199.073		
South Coast AQMD	2020	LDA	Aggregate	Aggregate	ELEC	139480.21	6499653.924	909115.0718	0	0		6499653.924		
South Coast AQMD	2020	LDT1	Aggregate	Aggregate	GAS	529468.923	17839921.58	3216558.901	767.6565	767656.5063	768,313.28	17839921.58	17,857,346.24	23.24 LDT1
South Coast AQMD	2020	LDT1	Aggregate	Aggregate	DSL	653.852392	17424.66748	3379.170836	0.656772	656.7715859		17424.66748		
South Coast AQMD	2020	LDT1	Aggregate	Aggregate	ELEC	394.892699	12300.5894	2385.192247	0	0		12300.5894		
South Coast AQMD	2020	LDT2	Aggregate	Aggregate	GAS	2196840.44	81691950.79	13902518.29	3942.877	3942876.61	3,948,206.78	81691950.79	81,842,773.79	20.73 LDT2
South Coast AQMD	2020	LDT2	Aggregate	Aggregate	DSL	3707.58247	150823.0049	23905.70434	5.330165	5330.165365		150823.0049		
South Coast AQMD	2020	LHDT1	Aggregate	Aggregate	GAS	122811.721	3538562.329	1829711.654	324.3272	324327.2067	487,711.18	3538562.329	6,867,749.01	14.08 LHDT1
South Coast AQMD	2020	LHDT1	Aggregate	Aggregate	DSL	93218.1085	3329186.678	1172566.536	163.384	163383.972		3329186.678		
South Coast AQMD	2020	LHDT2	Aggregate	Aggregate	GAS	25139.0886	867472.8869	374534.9624	85.31304	85313.03659	167,294.35	867472.8869	2,400,097.87	14.35 LHDT2
South Coast AQMD	2020	LHDT2	Aggregate	Aggregate	DSL	39016.923	1532624.982	490783.8077	81.98131	81981.31358		1532624.982		
South Coast AQMD	2020	MCY	Aggregate	Aggregate	GAS	289961.58	1955845.416	579865.1667	55.31832	55318.31514	55,318.32	1955845.416	1,955,845.42	35.36 MCY
South Coast AQMD	2020	MDV	Aggregate	Aggregate	GAS	1480427.17	49182321.35	9212204.674	3206.973	3206973.029	3,247,601.48	49182321.35	50,069,698.89	15.42 MDV
South Coast AQMD	2020	MDV	Aggregate	Aggregate	DSL	22607.5773	887377.5364	145171.8728	40.62845	40628.45112		887377.5364		
South Coast AQMD	2020	MH	Aggregate	Aggregate	GAS	37922.1013	307217.3044	3793.727011	41.47456	41474.56076	49,697.60	307217.3044	391,503.76	7.88 MH
South Coast AQMD	2020	MH	Aggregate	Aggregate	DSL	9968.3405	84286.45216	996.8340503	8.223037	8223.037177		84286.45216		
South Coast AQMD	2020	MHDT	Aggregate	Aggregate	GAS	19760.8031	980184.6784	395374.149	139.511	139510.9867	994,155.05	980184.6784	8,449,666.76	8.5 MHD
South Coast AQMD	2020	MHDT	Aggregate	Aggregate	DSL	134726.001	7469482.082	0	854.6441	854644.0674		7469482.082		
South Coast AQMD	2020	OBUS	Aggregate	Aggregate	GAS	8436.22703	392438.6707	168792.0304	54.40171	54401.71127	114,975.51	392438.6707	833,849.81	7.25 OBUS
South Coast AQMD	2020	OBUS	Aggregate	Aggregate	DSL	5358.43226	441411.1364	0	60.5738	60573.7995		441411.1364		
South Coast AQMD	2020	SBUS	Aggregate	Aggregate	GAS	2258.46776	86380.44602	9033.871041	7.60154	7601.539992	35,629.80	86380.44602	288,716.49	8.1 SBUS
South Coast AQMD	2020	SBUS	Aggregate	Aggregate	DSL	5309.12219	202336.044	0	28.02826	28028.26434		202336.044		
South Coast AQMD	2020	UBUS	Aggregate	Aggregate	GAS	2327.88044	267944.8976	9311.521753	53.57098	53570.98395	163,867.77	267944.8976	795,898.86	4.86 UBUS
South Coast AQMD	2020	UBUS	Aggregate	Aggregate	DSL	4588.15002	527953.961	18352.60009	110.2968	110296.7884		527953.961		