

AIR QUALITY ASSESSMENT

Riverside and Lincoln Commercial Development
15209 Lincoln Street
City of Lake Elsinore, CA

Prepared By:

Ldn Consulting, Inc.
42428 Chisolm Trail
Murrieta, CA 92562

Project For:

Sophia Mitchell & Associates
PO BOX 1700
Gualala, CA 95445

May 2, 2020

TABLE OF CONTENTS

TABLE OF CONTENTS.....	II
LIST OF FIGURES.....	III
LIST OF TABLES	III
ATTACHMENTS	III
EXECUTIVE SUMMARY	IV
1.0 INTRODUCTION	1
1.1 PURPOSE OF THIS STUDY	1
1.2 PROJECT LOCATION	1
1.3 PROJECT DESCRIPTION	1
2.0 EXISTING ENVIRONMENTAL SETTING.....	4
2.1 EXISTING SETTING	4
2.2 CLIMATE AND METEOROLOGY	4
2.3 REGULATORY STANDARDS.....	4
2.3.1 FEDERAL STANDARDS AND DEFINITIONS	4
2.3.2 STATE STANDARDS AND DEFINITIONS.....	6
2.3.3 REGIONAL STANDARDS.....	8
2.4 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) SIGNIFICANCE THRESHOLDS.....	9
2.5 AIR QUALITY IMPACT ASSESSMENT SCREENING THRESHOLDS	10
2.6 LOCAL AIR QUALITY.....	11
2.7 LOCALIZED SIGNIFICANCE THRESHOLDS	12
3.0 METHODOLOGY.....	14
3.1 CONSTRUCTION EMISSIONS CALCULATIONS.....	14
3.2 CONSTRUCTION ASSUMPTIONS.....	15
3.3 OPERATIONAL EMISSIONS.....	16
3.4 ODOR IMPACTS (ONSITE)	17
4.0 FINDINGS.....	18
4.1 CONSTRUCTION FINDINGS	18
4.2 OPERATIONAL FINDINGS.....	18
4.3 LOCALIZED SIGNIFICANCE THRESHOLDS	19
4.4 HEALTH RISK.....	20
4.5 ODOR IMPACT FINDINGS	20
4.6 CONCLUSION OF FINDINGS.....	20
5.0 REFERENCES	22

List of Figures

FIGURE 1-A: PROJECT VICINITY MAP	2
FIGURE 1-B: SITE PLAN MAP.....	3

List of Tables

TABLE 2.1: AMBIENT AIR QUALITY STANDARDS	7
TABLE 2.2: SOUTH COAST AIR BASIN ATTAINMENT STATUS BY POLLUTANT	9
TABLE 2.3: SCREENING THRESHOLD FOR CRITERIA POLLUTANTS	10
TABLE 2.4: THREE-YEAR AMBIENT AIR QUALITY SUMMARY NEAR THE PROJECT SITE	12
TABLE 2.5: LST EMISSION THRESHOLDS (5-ACRE SITE)	13
TABLE 3.1: EXPECTED CONSTRUCTION EQUIPMENT	16
TABLE 4.1: EXPECTED CONSTRUCTION EMISSIONS SUMMARY	18
TABLE 4.2: EXPECTED DAILY POLLUTANT GENERATION	19
TABLE 4.3: ON-SITE DAILY EMISSIONS FOR COMPARISON TO LSTS (UNMITIGATED)	20

Attachments

CALLEEMOD 2016.3.2.....	23
AERSCREEN – TIER IV WITH DPF EQUIPMENT	115
CANCER RISK CALCULATION SPREADSHEET	120

EXECUTIVE SUMMARY

This air quality impact study has been completed to determine the air quality impacts associated with the development of the proposed Riverside and Lincoln Commercial Development. The proposed Project site is located within the City of Lake Elsinore. The Project proposes to construct 39,463 square feet of self-storage, 4,456 square feet of fast-food restaurant with drive-thru, a 16 fueling position super convenience market/gas station, and an automated car wash. It's expected that the project would be fully operational in the year 2022.

During construction of the proposed Project, fugitive dust emissions would be expected but would not exceed thresholds established by the South Coast Air Quality Management District (SCAQMD). Given this, no construction mitigation will require mitigation. Furthermore, the project would not generate localized significance threshold impacts. It should be noted that the project would incorporate Project design features (PDFs) to only utilize Tier 4 construction equipment with Diesel Particulate Filters attached or equivalent and the Project will wet the construction site twice daily to reduce dust. These PDFs have been included in all air quality modeling and would therefore be a Project requirement under a conditional approval by the City of Lake Elsinore.

Additionally, emissions will be generated from both project area and operational sources once the project is fully operational in 2022 though no air quality impacts would be expected. The project was analyzed under localized significance thresholds for both construction and operations and was found to generate less than significant impacts.

Finally, the proposed Project would not be expected to generate offensive odors and would therefore not impact any sensitive receptors.

The proposed project was found to add vehicular trips impacted intersections and would be required to contribute traffic impact fees to mitigate these future cumulative impacts. Based on this, no cumulative impacts would be expected for air quality. Based on this, the project would not generate any significant air quality cumulative impacts. No additional mitigation measures are necessary per CEQA guidelines.

1.0 INTRODUCTION

1.1 Purpose of this Study

The purpose of this Air Quality study is to determine potential air quality impacts (if any) that may be created by construction, area or operational emissions (short term or long term) from the proposed Project. Should impacts be determined, the intent of this study would be to recommend suitable mitigation measures to bring those impacts to a level that would be considered less than significant.

1.2 Project Location

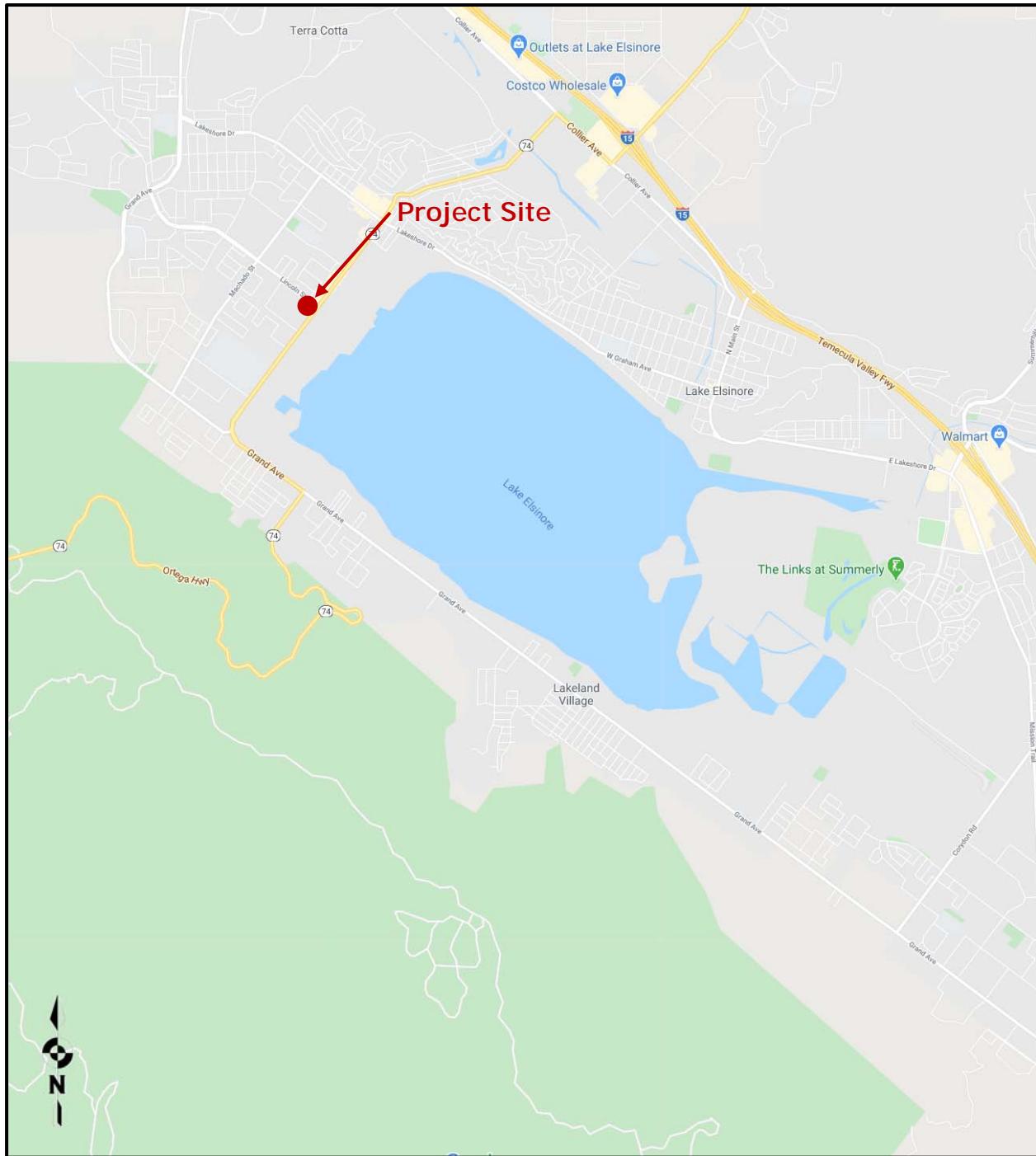
The proposed development is located in the City of Lake Elsinore which is located within the boundaries of the County of Riverside California within the South Coast Air Basin (SCAB). The project is located at 15209 Lincoln Street within the City. A general project vicinity map is shown in Figure 1-A.

1.3 Project Description

The 5.86-acre project site is located northwest corner of Lincoln Street and Riverside Drive in the City of Lake Elsinore, California. The Project proposes to construct 39,463 square feet of self-storage, 4,456 square feet of fast-food restaurant with drive-thru, a 16 fueling position super convenience market/gas station, and an automated car wash. Construction would begin early 2021 and be completed roughly 13 months later. A site development plan is shown in Figure 1-B. It should be noted that the following design features were assumed and are a condition of this project:

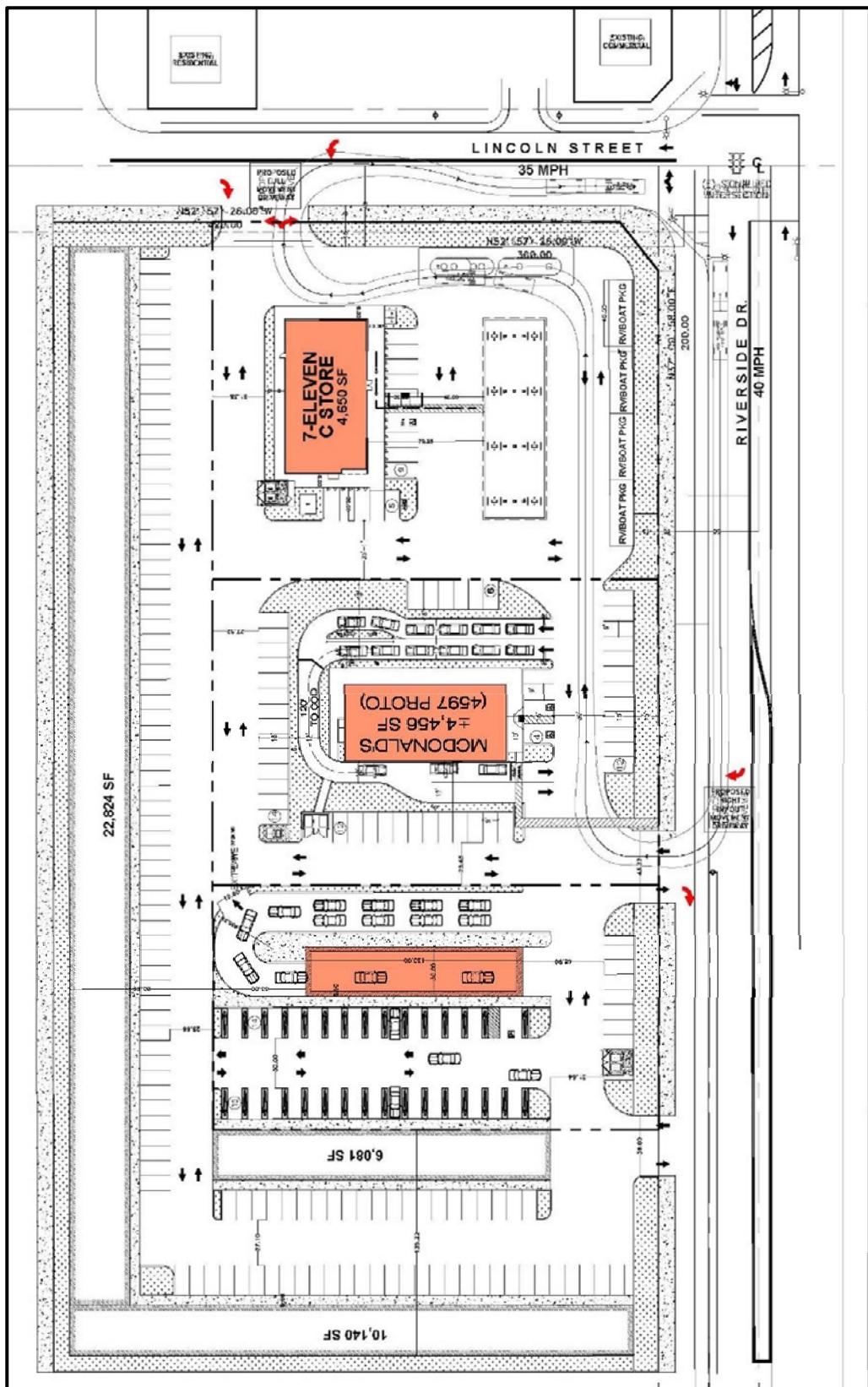
1. All diesel equipment will be Tier 4 and include Diesel Particulate Filters (DPF) or operate with similar air quality efficiencies as defined by the United States Environmental Protection Agency (EPA).
2. All soil will be wetted twice daily during earthwork activities.

Figure 1-A: Project Vicinity Map



Source: (Google, 2020)

Figure 1-B: Site Plan Map



Source: (Golcheh Group, 2019)

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

The existing Project site consist of an empty undeveloped lot. Adjacent surrounding land uses are mostly residential with commercial to the north east and a campground to the south east. The site topography is characterized by mostly flat approximately 1,280 feet above mean sea level.

2.2 Climate and Meteorology

Climate within the SCAB area often varies dramatically over short geographical distances due to the size and topography. Most of southern California is dominated by high-pressure systems for much of the year, which keeps Lake Elsinore mostly sunny and warm. Typically, during the winter months, the high-pressure system drops to the south and brings cooler, moister weather from the north.

It is common for inversion layers to develop within high-pressure areas, which mostly define pressure patterns over the SCAB. These inversions are caused when a thin layer of the atmosphere increases in temperature with height. An inversion acts like a lid preventing vertical mixing of air through convective overturning.

Daytime temperature highs within the City of Lake Elsinore typically range between 66 °F in the winter to approximately 99 °F in the summer with the month of August usually being the hottest month. Lake Elsinore usually receives an average seasonal precipitation of 12.45 inches of rain per year with the month of January usually being the wettest month of the year (U.S. Climate Data, 2020).

2.3 Regulatory Standards

2.3.1 Federal Standards and Definitions

The Federal Air Quality Standards were developed per the requirements of The Federal Clean Air Act, which is a federal law that was passed in 1970 and further amended in 1990. This law provides the basis for the national air pollution control effort. An important element of the act included the development of national ambient air quality standards (NAAQS) for major air pollutants. The Clean Air Act established two types of air quality standards otherwise known as primary and secondary standards. *Primary Standards* set limits for the intention of protecting public health, which includes sensitive populations such as asthmatics, children

and elderly. *Secondary Standards* set limits to protect public welfare to include the protection against decreased visibility, damage to animals, crops, vegetation and buildings.

The EPA Office of Air Quality Planning and Standards (OAQPS) has set National Ambient Air Quality Standards for principal pollutants, which are called "criteria" pollutants. These pollutants are defined below:

1. *Carbon Monoxide (CO): is a colorless, odorless, and tasteless gas and is produced from the partial combustion of carbon-containing compounds, notably in internal-combustion engines. Carbon monoxide usually forms when there is a reduced availability of oxygen present during the combustion process. Exposure to CO near the levels of the ambient air quality standards can lead to fatigue, headaches, confusion, and dizziness. CO interferes with the blood's ability to carry oxygen.*
2. *Lead (Pb): is a potent neurotoxin that accumulates in soft tissues and bone over time. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Because lead is only slowly excreted, exposures to small amounts of lead from a variety of sources can accumulate to harmful levels. Effects from inhalation of lead near the level of the ambient air quality standard include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms can include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children.*
3. *Nitrogen Dioxide (NO₂): is a reactive, oxidizing gas capable of damaging cells lining the respiratory tract and is one of the nitrogen oxides emitted from high-temperature combustion, such as those occurring in trucks, cars, power plants, home heaters, and gas stoves. In the presence of other air contaminants, NO₂ is usually visible as a reddish-brown air layer over urban areas. NO₂ along with other traffic-related pollutants is associated with respiratory symptoms, respiratory illness and respiratory impairment. Studies in animals have reported biochemical, structural, and cellular changes in the lung when exposed to NO₂ above the level of the current state air quality standard. Clinical studies of human subjects suggest that NO₂ exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children.*
4. *Particulate Matter (PM₁₀ or PM_{2.5}): is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary in shape, size and chemical composition, and can be made up of multiple materials such as metal, soot, soil, and dust. PM₁₀ particles are 10 microns (μm) or less and PM_{2.5} particles are 2.5 (μm) or less. These particles can contribute significantly to regional haze and reduction of visibility in California. Exposure to PM levels exceeding current air quality standards increases the risk of allergies such as asthma and respiratory illness.*
5. *Ozone (O₃): is a highly oxidative unstable gas capable of damaging the linings of the respiratory tract. This pollutant forms in the atmosphere through reactions between chemicals*

directly emitted from vehicles, industrial plants, and many other sources. Exposure to ozone above ambient air quality standards can lead to human health effects such as lung inflammation, tissue damage and impaired lung functioning. Ozone can also damage materials such as rubber, fabrics and plastics.

6. *Sulfur Dioxide (SO_2): is a gaseous compound of sulfur and oxygen and is formed when sulfur-containing fuel is burned by mobile sources, such as locomotives, ships, and off-road diesel equipment. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Effects from SO_2 exposures at levels near the one-hour standard include bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Children, the elderly, and people with asthma, cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most susceptible to these symptoms. Continued exposure at elevated levels of SO_2 results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.*

2.3.2 State Standards and Definitions

The State of California Air Resources Board (ARB) sets the laws and regulations for air quality on the state level. The California Ambient Air Quality Standards (CAAQS) are either the same as or more restrictive than the NAAQS and also restrict four additional contaminants. Table 2.1 on the following page identifies both the NAAQS and CAAQS. The additional contaminants as regulated by the CAAQS are defined below:

1. *Visibility Reducing Particles: Particles in the Air that obstruct the visibility.*
2. *Sulfates: are salts of Sulfuric Acid. Sulfates occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. They increase the acidity of the atmosphere and form acid rain.*
3. *Hydrogen Sulfide (H_2S): is a colorless, toxic and flammable gas with a recognizable smell of rotten eggs or flatulence. H_2S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Usually, H_2S is formed from bacterial breakdown of organic matter. Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulfide (greater than 500 ppm) can cause a loss of consciousness and possibly death.*
4. *Vinyl Chloride: also known as chloroethene and is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).*

Table 2.1: Ambient Air Quality Standards

Ambient Air Quality Standards											
Pollutant	Average Time	California Standards ¹		Federal Standards ²							
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷					
Ozone (O_3) ⁸	1 Hour	0.09 ppm (180 $\mu\text{g}/\text{m}^3$)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry					
	8 Hour	0.070 ppm (137 $\mu\text{g}/\text{m}^3$)		0.070 ppm (137 $\mu\text{g}/\text{m}^3$)							
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 $\mu\text{g}/\text{m}^3$	Gravimetric or Beta Attenuation	150 $\mu\text{g}/\text{m}^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis					
	Annual Arithmetic Mean	20 $\mu\text{g}/\text{m}^3$		-							
Fine Particulate Matter (PM2.5) ⁹	24 Hour	No Separate State Standard		35 $\mu\text{g}/\text{m}^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis					
	Annual Arithmetic Mean	12 $\mu\text{g}/\text{m}^3$	Gravimetric or Beta Attenuation	12.0 $\mu\text{g}/\text{m}^3$							
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	-	Non-Dispersive Infrared Photometry					
	1 hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)							
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		-							
Nitrogen Dioxide (NO ₂) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 $\mu\text{g}/\text{m}^3$)	Gas Phase Chemiluminescence	0.053 ppm (100 $\mu\text{g}/\text{m}^3$) ⁸	Same as Primary Standard	Gas Phase Chemiluminescence					
	1 Hour	0.18 ppm (339 $\mu\text{g}/\text{m}^3$)		0.100 ppm ⁸ (188/ $\mu\text{g}/\text{m}^3$)							
Sulfur Dioxide (SO ₂) ¹¹	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm ¹⁰ (for Certain Areas)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararoosaniline Method) ⁹					
	24 Hour	0.04 ppm (105 $\mu\text{g}/\text{m}^3$)		0.14 ppm ¹⁰ (for Certain Areas) (See Footnote 9)	-						
	3 Hour	-		-	0.5 ppm (1300 $\mu\text{g}/\text{m}^3$)						
	1 Hour	0.25 ppm (655 $\mu\text{g}/\text{m}^3$)		75 ppb (196 $\mu\text{g}/\text{m}^3$)	-						
Lead ^{12,13}	30 Day Average	1.5 $\mu\text{g}/\text{m}^3$	Atomic Absorption	-	-	-					
	Calendar Quarter	-		1.5 $\mu\text{g}/\text{m}^3$	Same as Primary Standard	High Volume Sampler and Atomic Absorption					
	Rolling 3-Month Average	-		0.15 $\mu\text{g}/\text{m}^3$							
Visibility Reducing Particles	8 Hour	See footnote 14									
Sulfates	24 Hour	25 $\mu\text{g}/\text{m}^3$	Ion Chromatography								
Hydrogen Sulfide	1 Hour	0.03 ppm (42 $\mu\text{g}/\text{m}^3$)	Ultraviolet Fluorescence								
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 $\mu\text{g}/\text{m}^3$)	Gas Chromatography								
<p>1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.</p> <p>2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.</p> <p>3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.</p> <p>4. Any equivalent procedure which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.</p> <p>5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.</p> <p>6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.</p> <p>7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.</p> <p>8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.</p> <p>9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu\text{g}/\text{m}^3$ to 12.0 $\mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu\text{g}/\text{m}^3$, as was the annual secondary standard of 15 $\mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.</p> <p>10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.</p> <p>11. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.</p> <p>12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.</p> <p>13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.</p> <p>14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.</p>											
Source: (California Air Resources Board, 5/4/2016)											

2.3.3 Regional Standards

The State of California has 35 specific air districts, which are each responsible for ensuring that the criteria pollutants are below the NAAQS and CAAQS. Air basins that exceed either the NAAQS or the CAAQS for any criteria pollutants for designated periods defined in the footnote of Table 2.1 above are designated as “non-attainment areas” for that pollutant. Currently, there are 15 non-attainment areas for the federal ozone standard and two non-attainment areas for the PM_{2.5} standard. The state therefore created the California State Implementation Plan (SIP), which is designed to provide control measures needed for California Air basins to attain ambient air quality standards.

The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the South Coast Air Basin, and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The district prepares Air Quality Management Plans (AQMP) to demonstrate how the region will reduce air pollution emissions to meet the federal and state health-based standards to comply with Clean Air Act requirements and will be ultimately a part of the SIP.

More specifically, the AQMP identifies the path South Coast Air Basin must take for the attainment of federal PM and ozone standards, and highlights the significant amount of reductions needed and the urgent need to engage in interagency coordinated planning to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the timeframes allowed under the federal Clean Air Act.

The City of Lake Elsinore lies within the SCAB. The SCAQMD is the government agency, which regulates sources of air pollution within the City of Lake Elsinore. A complete listing of the current attainment status by pollutants for the SCAB is shown on Table 2.2 on the following page.

Table 2.2: South Coast Air Basin Attainment Status by Pollutant

County Air Basin Attainment Status by Pollutant			
Pollutant	Average Time	California Standards	Federal Standards
Ozone (O ₃)	1 Hour	Non-attainment	No Federal Standard
	8 Hour		Extreme Nonattainment
Respirable Particulate Matter (PM10)	24 Hour	Non-attainment	Serious Nonattainment
	Annual Arithmetic Mean	No State Standard	Serious Nonattainment
Fine Particulate Matter PM2.5	24 Hour	No State Standard	Non-attainment
	Annual Arithmetic Mean	Non-attainment	Non-attainment
Carbon Monoxide (CO)	8 hour	Attainment	Attainment Maintenance ¹
	1 hour		
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	No State Standard	Attainment
	1 Hour	Non-attainment	No Federal Standard
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	No State Standard	Attainment
	24 Hour	Attainment	Attainment
	1 Hour	Attainment	No Federal Standard
Lead	30 Day Average	Attainment	No Federal Standard
	Calendar Quarter	No State Standard	Attainment

1. Maintenance Area (defined by U.S. Department of Transportation) is any geographic region of the United States previously designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended.

2.4 California Environmental Quality Act (CEQA) Significance Thresholds

The California Environmental Quality Act has provided a checklist to identify the significance of air quality impacts. These guidelines are found in a 2018 updated Appendix G of the CEQA guidelines (California, 2018) :

AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:

- A:** Conflict with or obstruct implementation of the SCAQMD AQMP or applicable portions of the State Implementation Plan (SIP)?
- B:** Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard.
- C:** Expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations?
- D:** Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

2.5 Air Quality Impact Assessment Screening Thresholds

To determine whether a project would create potential air quality impacts, the City of Lake Elsinore uses South Coast Air Quality Management District's (SCAQMD) Air Quality Thresholds. The screening thresholds for construction and daily operations are shown in Table 2.3 below. Demonstrating a projects compliance with SCAQMD Screening thresholds are a significant part of demonstrating compliance with SCAQMDs AQMP and is critical to insuring less than significant impacts to questions A and B identified in section 2.4 above.

Table 2.3: Screening Threshold for Criteria Pollutants

Pollutant	Total Emissions (Pounds per Day)
Construction Emissions	
Respirable Particulate Matter (PM ₁₀ and PM _{2.5})	150 and 55
Nitrogen Oxide (NO _x)	100
Sulfur Oxide (SO _x)	150
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	75
Operational Emissions	
Respirable Particulate Matter (PM ₁₀ and PM _{2.5})	150 and 55
Nitrogen Oxide (NO _x)	55
Sulfur Oxide (SO _x)	150
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3.2
Volatile Organic Compounds (VOCs)	55

In 1987, the California legislature adopted the Air Toxics "Hot Spots" Information and Assessment Act; also known as Assembly Bill 2588 (or AB 2588). The goals of the Assembly Bill are to collect emissions data, identify facilities having localized impacts to determine health risks, and notify affected individuals. High priority facilities must prepare a Health Risk Assessment (HRA). This Assembly bill is primarily geared toward mitigating long term fixed sources health risks above the action risk levels. SCAQMD has a number of rules which were prepared to meet AB 2588 goals (i.e. Rules 1401, 1402 and 212) (SCAQMD, 2015) but none specific to short term construction projects. Projects or facilities found to increase action risk levels require mitigation and reporting.

Toxic Air Contaminants (TACs) are regulated by the SCAQMD under Rule 1401, 1402 and 212 which were developed to identify requirements for reporting and requires evaluation of potential health risks for any new, relocated, or modified emission units (fixed sources) which

may increase emissions of one or more toxic air contaminants. The rule requires that projects that propose to increase cancer risk to greater than one in one million need to implement toxics best available control technology (T-BACT) or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk.

Diesel particulate matter emissions were identified as a TAC by California Air Resources Board (CARB) in 1998, and were added to SCAQMD Rule 1401 list of compounds on March 7, 2008. Under the current AB2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines Regulation, facility operators are required to include health risk impacts of any diesel exhaust particulate emissions from stationary emergency and prime compression ignition internal combustion engines, as well as portable diesel engines. The SCAQMD Governing Board has adopted risk levels for purposes of notification pursuant to the AB2588 program. Based on this guidance, if the cancer risk is Greater than 10 in a million the public must be notified. If the risk is Greater than 25 in one million the risk shall be mitigated.

The State of California's Office of Environmental Health Hazard Assessment (OEHHA) published revised health risk assessment guidance that places greater emphasis on early childhood exposure and suggests that construction projects as short as 2-6 months may warrant evaluation (OEHHA, 2015). Based on this guidance, this report assumes that if the cancer risks from TACs is Greater than 10 in a million the public must be notified. If the risk is Greater than 25 in one million the risk shall be mitigated. Risks below 10 in a million would be considered less than significant.

2.6 Local Air Quality

Criteria pollutants are measured continuously throughout the SCAB. This data is used to track ambient air quality patterns throughout the surrounding area. As mentioned earlier, this data is also used to determine attainment status when compared to the NAAQS and CAAQS. The SCAQMD is responsible for monitoring and reporting monitoring data. The District operates approximately 30 monitoring sites that collected data on criteria pollutants within the SCAB.

Ambient Data was obtained from the California Environmental Protection Agency's Air Resources Board Website (California Air Resources Board, 2020). Table 2.4 identifies the closest criteria pollutants monitored to the project as well as identifies the relative distance to the project site. The Lake Elsinore monitoring station is located approximately 2.6 miles from the proposed project site.

Table 2.4: Three-Year Ambient Air Quality Summary near the Project Site

Pollutant	Ambient Monitoring Site	Averaging Time	CAAQS	NAAQS	2016	2017	2018
O ₃ (ppm)	Lake Elsinore	1 Hour	0.09 ppm	-	0.124	0.121	0.116
	Lake Elsinore	8 Hour	0.070 ppm	0.075 ppm	0.093	0.098	0.095
PM ₁₀ (µg/m ³)	Lake Elsinore	24 Hour	50 µg/m ³	150 µg/m ³	99.7	134.1	105.3
	Lake Elsinore	Annual Arithmetic Mean	20 µg/m ³	-	22.4	23.6	23.3
PM _{2.5} (µg/m ³)	Lake Elsinore	24 Hour	-	35 µg/m ³	31.5	27.2	31.2
	Lake Elsinore	Annual Arithmetic Mean	12 µg/m ³	15 µg/m ³	9.7	11.3	6.7
NO ₂ (ppm)	Lake Elsinore	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	0.008	0.008	0.009
	Lake Elsinore	1 Hour	0.18 ppm	-	0.051	0.049	0.041
All ambient emissions reported are assumed to be taken by the district in compliance with both the NAAQS and CAAQS. Methodologies for those measurements are discussed in Table 2.1 of this report.							

2.7 Localized Significance Thresholds

In June 2003 the SCAQMD proposed a methodology for calculating Localized Significance Thresholds (LSTs) for NO₂, CO, PM_{2.5} and PM₁₀. The LST methodology was developed to be used as a tool to assist lead agencies to analyze localized impacts associated with project-specific level proposed projects and would not be applicable to regional projects such as general plans. The LST methodology was last updated to incorporate the most recent ambient air quality standards (July 2008). (South Coast Air Quality Management District, 2008). The LST methodology is often utilized by most agencies governed under SCAQMD CEQA review. SCAQMD developed mass rate look-up tables for projects to assist agencies with development of LSTs (South Coast Air Quality Management District, 2014).

Per the requirements of SCAQMDs LSTs methodology, emissions for gases in attainment such as NO₂ and CO are calculated by adding emission impacts from the project development to the peak background ambient NO₂ and CO concentrations and comparing the total concentration to the most stringent ambient air quality standards. Also, according to SCAQMD Rule 403, emissions for non-attainment particulate matter such as PM 10 and PM 2.5 can

produce no more than 10.4 µg/m³. The LSTs derived by SCAQMD differentiated by Source Receptor area for which the proposed project is would be represented by SRA #25 within the Lake Elsinore area. The project was analyzed using a worst-case construction schedule where all buildings and the parking are under construction simultaneously using the appropriate equipment and quantities for this scenario with a 5 acre disturbed area. Table 2.5 below shows the worst case project LST at 25 meters (SCAQMD, 2009).

Table 2.5: LST Emission Thresholds (5-Acre Site)

Pollutant	LST @ 25 meters (lb/day)
CO	1,965
PM ₁₀ (Construction)	13
PM ₁₀ (Operation)	4
PM _{2.5} (Construction)	8
PM _{2.5} (Operation)	2
NO ₂ (Corrected utilizing NO ₂ /NO _x Ratio) Construction and Operation	371

3.0 METHODOLOGY

3.1 Construction Emissions Calculations

Air Quality impacts related to construction and daily operations were calculated using the latest CalEEMod air quality model, which was developed by ENVIRON International Corporation for SCAQMD. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the project and uses methodologies presented in the US EPA AP-42 document with emphasis on Chapter 11.9. The CalEEMod input/output model is shown in *Attachment A* to this report.

Air dispersion modeling for diesel exhaust will be completed uses AERSCREEN. The worst case annual exhaust emissions generated from the Project from construction was calculated within the CalEEMod model as reported within the annual outputs.

Once the dispersed concentrations of diesel particulates are estimated in the surrounding air, they are used to evaluate estimated exposure to people. Exposure is evaluated by calculating the dose in milligrams per kilogram body weight per day (mg/kg/d). For residential exposure, the breathing rates are determined for specific age groups, so inhalation dose (Dose-air) is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. The following algorithms calculate this dose for exposure through the inhalation pathways. The worst case cancer risk dose calculation is defined in Equation 1 below (OEHHA, 2015).

Equation 1

$$Dose_{air} = C_{air} * (BR/BW) * A * EF * (1 \times 10^{-6})$$

Dose _{air}	=	Dose through inhalation (mg/kg/d)
		Concentration in air ($\mu\text{g}/\text{m}^3$) Annual average DPM concentration in $\mu\text{g}/\text{m}^3$ -
C _{air}	=	AERSCREEN predicts a 1-hr concentration and is corrected to an annual average by multiplying the 1-hr average by 0.08 (US EPA, 1992)
BR/BW	=	Daily breathing rate normalized to body weight (L/kg BW-day). See Table I.2 for the daily breathing rate for each age range.
A	=	Inhalation absorption factor (assumed to be 1)
EF	=	Exposure frequency (unitless, days/365 days)
1×10^{-6}	=	Milligrams to micrograms conversion (10^{-3} mg/ μg), cubic meters to liters conversion (10^{-3} m^3/l)

Once the dose is determined then you must calculate the cancer risk. The average daily inhalation dose (mg/kg-day) multiplied by the cancer potency factor (mg/kg-day)⁻¹ will give the inhalation cancer risk (unitless), which is an expression of the chemical's cancer risk during a 70-year lifespan of exposure. For example, an inhalation cancer risk of 5×10^{-6} is the same as stating that an individual has an estimated probability of developing cancer from their exposure of 5 chances per million people exposed.

Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. As described below, the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk for any given location. Specific factors as modeled are shown within the project models attached to this report. The worst case cancer risk calculation is defined in Equation 2 below (OEHHA, 2015).

Equation 2

$$\text{RISKinh-res} = \text{DOSEair} \times \text{CPF} \times \text{ASF} \times \text{ED/AT} \times \text{FAH}$$

RISKinh-res	=	Residential inhalation cancer risk
DOSEair	=	Daily inhalation dose (mg/kg-day)
CPF	=	Inhalation cancer potency factor (mg/kg-day ⁻¹)
ASF	=	Age sensitivity factor for a specified age group (unitless)
ED	=	Exposure duration (in years) for a specified age group
AT	=	Averaging time for lifetime cancer risk (years)
FAH	=	Fraction of time spent at home (unitless)

OEHHA recommends that an exposure duration (residency time) of 30 years be used to estimate individual cancer risk for the Maximally Exposed Individual Resident (MEIR). OEHHA also recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans.

Exposure durations of 9-years and 70-years are also recommended to be evaluated for the MEIR to show the range of cancer risk based on residency periods. If a facility is notifying the public regarding cancer risk, the 9-and 70-year cancer risk estimates are useful for people who have resided in their current residence for periods shorter and longer than 30 years.

Demonstrating a projects compliance with OEHHA Cancer Risk thresholds are a significant part of demonstrating compliance with SCAQMDs AQMP and is critical to insuring less than significant impacts to question D identified in Section 2.4 above.

3.2 Construction Assumptions

The Project construction dates were estimated based on a construction kickoff starting in early 2021 and completing the project roughly 13 months later. Construction of the project is likely to be phased however, for purposes of this air quality analysis, a worst-case scenario was used assuming all construction operations would occur simultaneously. Also, as a design feature the project would utilize Tier 4 diesel equipment with DPF or equivalent and will wet the construction site twice daily. Finally, based on the site review of the site development plan, roughly 5 acres of the project site would be disturbed at any given time. Table 3.1 on

the following page shows the expected timeframes as well as the expected number of pieces of equipment to complete the project for the scenario identified.

Table 3.1: Expected Construction Equipment

Equipment Identification	Start Dates	Completion Dates	Quantity
Site Preparation	01/01/2021	01/14/2021	
Rubber Tired Dozers			3
Tractors/Loaders/Backhoes			4
Grading	01/15/2021	02/11/2021	
Excavators			1
Graders			1
Rubber Tired Dozers			1
Tractors/Loaders/Backhoes			3
Paving	02/12/2021	03/11/2021	
Pavers			2
Paving Equipment			2
Rollers			2
Building Construction	03/13/2021	01/28/2022	
Cranes			1
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Architectural Coating	01/01/2022	01/28/2022	
Air Compressors			1
This equipment list is based upon equipment inventory within CALLEEMOD 2016.3.2. The quantity and types are based upon discussions with the project applicant.			

3.3 Operational Emissions

Once construction is completed the proposed project would generate emissions from daily operations which would include sources such as Area, Energy, Mobile, Waste and Water uses, which are also calculated within CalEEMod. Area Sources include consumer products, landscaping and architectural coatings as part of regular maintenance. Energy sources would be from uses such as electricity and natural gas. Finally, mobile or transportation related emissions are calculated in CalEEMod through the use of EMFAC2014 and is based on trip generation rates provided by the project traffic engineer. Based on that study, the proposed project would generate 7,783 trips not including internal capture and pass by reductions (GANDDINI GROUP, 2020). CalEEMod was updated to reflect these trips. The operational model is also included in CalEEMod *Attachments A* at the end of this report.

Additionally, it should be noted that the Traffic Analysis indicated that projects such as these would shorten existing regional trips within the area since the Project would be serving the heavily residential areas in the Lake View and Lake View Sphere Districts which currently travel further distances for proposed uses (GANDDINI GROUP, 2020). CalEEMod was adjusted to reflect vehicle miles traveled (VMT) from these residential areas though no region reductions in VMT was assumed within this analysis.

In the EMFAC model, the emission rates are multiplied with vehicle activity data provided by the regional transportation agencies to calculate the statewide or regional emission inventories. An emission inventory is based on the emission rate (e.g., grams per pollutant emitted over a mile) and vehicle activity (e.g., miles driven per day). Area sources originate from daily onsite uses, which require either burning fuel to generate energy (i.e. natural gas fireplaces, gas furnaces, gas water heaters and small engines) or the evaporation of organic gases such as from paints (architectural coatings).

The CalEEMod model estimates emission predictions for ROG, NO_x, CO, SO₂, PM₁₀ and PM_{2.5} for area source assumptions. It is assumed that 100% of the facilities will have access to Natural Gas as opposed to propane. Additionally, it was assumed that 10% of the structural surface area will be re-painted each year.

Consumer product emissions are generated by a wide range of product categories, including air fresheners, automotive products, household cleaners, and personal care products. Emissions associated with these products primarily depend on the increased population associated with residential development.

3.4 Odor Impacts (Onsite)

Potential onsite odor generators would include short term construction odors from activities such as paving and possibly painting. The construction odors would be considered short term and would not be considered an impact. Given this the Project will not have a potential to create offensive odors and would therefore not be considered an impact under CEQA.

4.0 FINDINGS

4.1 Construction Findings

Based on the input parameters identified in Section 3.2 of this report, no significant construction impacts are expected. Table 4.1 below shows the calculated emissions from construction. As shown in Table 4.1, construction emission would be below the screening thresholds.

Table 4.1: Expected Construction Emissions Summary

Year	ROG	NO _x	CO	SO ₂	PM ₁₀ (Dust)	PM ₁₀ (Exhaust)	PM ₁₀ (Total)	PM _{2.5} (Dust)	PM _{2.5} (Exhaust)	PM _{2.5} (Total)
2021 (lb/day)	0.62	4.22	21.53	0.04	8.33	0.01	8.34	4.52	0.01	4.53
2022 (lb/day)	24.09	4.26	21.68	0.04	0.81	0.01	0.82	0.22	0.01	0.23
Significance Threshold (lb/day)	75	100	550	150	-	-	150	-	-	55
Exceeds Screening Threshold	No	No	No	No	-	-	No	-	-	No

4.2 Operational Findings

Once construction is completed the proposed project would generate air quality emissions from daily operations which would include sources such as Area, Energy, Mobile, Solid Waste and Water uses, which are calculated within CalEEMod. Area sources are from consumer products, landscaping and architectural coatings which can be attributed to regular maintenance. Energy sources would be from uses such as electricity and natural gas. Based on the input parameters identified in Section 3.3 of this report no operational impacts would be expected. Operational emissions for the first assumed operational year 2022 are shown in Table 4.2 on the following page.

Table 4.2: Expected Daily Pollutant Generation

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer Scenario						
Area Source Emission Estimates (Lb/Day)	1.11	0.00	0.03	0.00	0.00	0.00
Energy Source Emissions (Lb/Day)	0.04	0.35	0.30	0.00	0.03	0.03
Operational Vehicle Emissions (Lb/Day)	11.09	49.62	40.13	0.12	4.77	1.33
Total with Design Features (Lb/Day)	12.25	49.98	40.45	0.12	4.80	1.36
SCAQMD Thresholds	55	55	550	150	150	55
Significant?	No	No	No	No	No	No
Winter Scenario						
Area Source Emission Estimates (Lb/Day)	1.11	0.00	0.03	0.00	0.00	0.00
Energy Source Emissions (Lb/Day)	0.04	0.35	0.30	0.00	0.03	0.03
Operational Vehicle Emissions (Lb/Day)	8.85	48.13	43.09	0.11	4.77	1.33
Total with Design Features (Lb/Day)	10.00	48.48	43.41	0.11	4.80	1.36
Significant?	No	No	No	No	No	No
Daily pollutant generation assumes trip distances within CALLEEMOD 2016.3.2						

4.3 Localized Significance Thresholds

SCAQMD also recommends using LST methodology which incorporates background ambient air quality data. Table 4.3 shows the modeled estimates for both construction and operations excluding offsite mobile emissions. Furthermore, the worst case LST is at 25 meters from the project centroid and will be utilized for this project. Since this is worst case, if the project complies at 25 meters, it will comply at all locations beyond this distance. Based on the modeling results, no LST impacts are expected.

Table 4.3: On-Site Daily Emissions for Comparison to LSTs (Unmitigated)

Pollutant	Project without Offsite mobile emissions (lb/day)	Localized Significance Threshold SRA 25 5-Acre (lb/day)	Significant?
CO (Construction)	21.81	1,965	No
CO (Operation)	0.33	1,965	No
PM ₁₀ (Construction)	10.17	13	No
PM ₁₀ (Operation)	0.03	4	No
PM _{2.5} (Construction)	6.34	8	No
PM _{2.5} (Operation)	0.03	2	No
NO _x (Construction)	40.50	371	No
NO _x (Operation)	0.35	371	No

4.4 Health Risk

Based upon the air quality modeling, worst-case onsite PM₁₀ from onsite construction equipment would cumulatively produce 0.00089 tons over the construction duration (280-working days) or an average of 0.000099 grams/second. It should be noted the project would utilize Tier IV equipment with DPF.

Utilizing the AERSCREEN dispersion model, we find that the peak maximum concentration is 0.158 µg/m³ during construction. Therefore, utilizing the risk equation identified above in Section 3.1, the inhalation cancer risk for 70 years is 1.77 which will not exceed the 10 in one million thresholds. Given this, the construction scenario as analyzed would be considered less than significant under CEQA and would be in compliance. The PM₁₀ exhaust AERSCREEN input/output is provided in *Attachment B*. Also, the Cancer Risk calculations is provided in *Attachment C*.

4.5 Odor Impact Findings

Odor impacts from construction operations would be considered short term events and would not be considered an impact. Long term operations will not create offensive odors and would not create any operational odor impacts.

4.6 Conclusion of Findings

During construction of the proposed Project, fugitive dust emissions would be expected but would not exceed thresholds established by the South Coast Air Quality Management District

(SCAQMD). Given this, no construction mitigation will require mitigation. Furthermore, the project would not generate localized significance threshold impacts. It should be noted that the project will only utilize Tier IV construction equipment and was analyzed as such. Based on this, Tier IV construction equipment would be required and would be a condition to this project's approval.

Additionally, emissions will be generated from both project area and operational sources once the project is fully operational in 2022 though no air quality impacts would be expected. The project was analyzed under localized significance thresholds for both construction and operations and was found to generate less than significant impacts.

Finally, the proposed Project would not be expected to generate offensive odors and would therefore not impact any sensitive receptors.

The proposed project was found to add vehicular trips impacted intersections and would be required to contribute traffic impact fees to mitigate these future cumulative impacts. Based on this, no cumulative impacts would be expected for air quality. Based on this, the project would not generate any significant air quality cumulative impacts. No additional mitigation measures are necessary per CEQA guidelines.

5.0 REFERENCES

- California. (2018). *Final Adopted Text for Revisions to the CEQA Guidelines*. Retrieved from http://resources.ca.gov/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf
- California Air Resources Board. (2020). *www.arb.gov*. Retrieved from iADAM: Air Quality Data Statistics:
<https://www.arb.ca.gov/adam/topfour/topfourmap.php?SummaryType=site&ADAMParm=ozone8hr&LastAllowedYear=2018&YearRangeEnd=2018&County=RIV&AirBasis=&PA8=&Sites=3168%2C3673%2C2878%2C3697%2C3732%2C3838%2C2943%2C3702%2C2199%2C2525%2C2596%2C3777&TitleParm=Ozone->
- California Air Resources Board. (5/4/2016). *www.arb.ca.gov*. Retrieved from Ambient Air Quality Standards: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>
- GANDINI GROUP, I. (2020). *RIVERSIDE AT LINCOLN RETAIL TRAFFIC IMPACT ANALYSIS*.
- Golcheh Group. (2019). *Preliminary Site Plan*.
- Google. (2020). Retrieved from www.maps.google.com
- OEHHA. (2015). *Risk Assessment Guidelines - Guidance Manual for Preparation of Health Risk Assessments*. OEHHHA. Retrieved from http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf
- SCAQMD. (2009, Oct 21). *Localized Significance Thresholds Lookup Tables*. Retrieved 2015, from <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2>
- SCAQMD. (2015). Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act. Diamond Bar: South Coast Air Quality Management District. Retrieved 2016, from <http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-risk-assessment-guidelines.pdf?sfvrsn=6>
- South Coast Air Quality Management District. (2008, July). *Finalized Localized Significance Threshold Methodology*. Retrieved from <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>
- South Coast Air Quality Management District. (2014). *Localized Significance Thresholds*. Retrieved 2014, from <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>
- U.S. Climate Data. (2020). *Wildomar Climate Data*. Retrieved 2017, from <https://www.usclimatedata.com/climate/lake-elsinore/california/united-states/usca1648>
- US EPA. (1992). *Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised*. US EPA. Retrieved from http://www.epa.gov/scram001/guidance/guide/EPA-454R-92-019_OCR.pdf

ATTACHMENT A

CALLEEMOD 2016.3.2

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

Riverside at Lincoln Retail
Riverside-South Coast County, Summer

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	39.50	1000sqft	2.50	39,500.00	0
User Defined Industrial	1.00	User Defined Unit	0.50	2,000.00	0
Parking Lot	188.00	Space	1.69	75,200.00	0
Fast Food Restaurant with Drive Thru	4.50	1000sqft	0.50	4,500.00	0
Convenience Market With Gas Pumps	16.00	Pump	0.71	2,258.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
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

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - 5.9 acre; user defined industrial for Carwash

Construction Phase -

Vehicle Trips - Per TS. Project would service nearby developments per TS

Construction Off-road Equipment Mitigation - T4

Architectural Coating -

Fleet Mix - Carwash to service LDA and LDT1 vehicles

Area Coating -

Energy Use - Carwash assumed to have same energy as Convenience Market with Gas Pumps

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	3.00

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblEnergyUse	LightingElect	0.00	5.61
tblEnergyUse	NT24E	0.00	2.44
tblEnergyUse	NT24NG	0.00	0.30
tblEnergyUse	T24E	0.00	4.58
tblEnergyUse	T24NG	0.00	1.92
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.60

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

tblFleetMix	LDT1	0.04	0.40
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LandUseSquareFeet	0.00	2,000.00
tblLandUse	LotAcreage	0.91	2.50
tblLandUse	LotAcreage	0.00	0.50
tblLandUse	LotAcreage	0.10	0.50
tblLandUse	LotAcreage	0.05	0.71
tblTripsAndVMT	WorkerTripNumber	52.00	51.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TL	6.90	3.00

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TLP	0.00	0.80
tblVehicleTrips	DV_TP	0.00	21.00
tblVehicleTrips	PB_TP	0.00	65.00
tblVehicleTrips	PR_TP	0.00	14.00
tblVehicleTrips	ST_TR	204.47	230.52
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	1.68	1.51
tblVehicleTrips	ST_TR	0.00	1,936.00
tblVehicleTrips	SU_TR	166.88	230.52
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	1.68	1.51
tblVehicleTrips	SU_TR	0.00	1,936.00
tblVehicleTrips	WD_TR	542.60	230.52
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	1.68	1.51
tblVehicleTrips	WD_TR	0.00	1,936.00

2.0 Emissions Summary

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9735	40.5457	21.8198	0.0399	18.2675	2.0457	20.3131	9.9840	1.8820	11.8660	0.0000	3,877.3120	3,877.3120	1.1966	0.0000	3,907.2267
2022	25.6383	18.9186	20.5643	0.0413	0.8099	0.8976	1.7075	0.2177	0.8493	1.0670	0.0000	4,003.3981	4,003.3981	0.6812	0.0000	4,020.4283
Maximum	25.6383	40.5457	21.8198	0.0413	18.2675	2.0457	20.3131	9.9840	1.8820	11.8660	0.0000	4,003.3981	4,003.3981	1.1966	0.0000	4,020.4283

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.6163	4.2232	21.5345	0.0399	8.3310	0.0130	8.3415	4.5222	0.0126	4.5326	0.0000	3,877.3120	3,877.3120	1.1966	0.0000	3,907.2267
2022	24.0851	4.2579	21.6800	0.0413	0.8099	0.0136	0.8235	0.2177	0.0131	0.2308	0.0000	4,003.3981	4,003.3981	0.6812	0.0000	4,020.4283
Maximum	24.0851	4.2579	21.6800	0.0413	8.3310	0.0136	8.3415	4.5222	0.0131	4.5326	0.0000	4,003.3981	4,003.3981	1.1966	0.0000	4,020.4283

	ROG	NOx	CO	SO2	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	16.58	85.74	-1.96	0.00	52.08	99.10	58.38	53.54	99.06	63.17	0.00	0.00	0.00	0.00	0.00	0.00

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Area	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0545	0.0545	1.4000e-004			0.0581	
Energy	0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003		428.0304	
Mobile	11.0938	49.6238	40.1272	0.1220	4.6868	0.0829	4.7696	1.2516	0.0771	1.3287	12,569.09 89	12,569.09 89	1.5118			12,606.89 31	
Total	12.2456	49.9786	40.4505	0.1241	4.6868	0.1099	4.7967	1.2516	0.1041	1.3557	12,994.65 53	12,994.65 53	1.5201	7.8000e-003	13,034.98 16		

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Area	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0545	0.0545	1.4000e-004			0.0581	
Energy	0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003		428.0304	
Mobile	11.0938	49.6238	40.1272	0.1220	4.6868	0.0829	4.7696	1.2516	0.0771	1.3287	12,569.09 89	12,569.09 89	1.5118			12,606.89 31	
Total	12.2456	49.9786	40.4505	0.1241	4.6868	0.1099	4.7967	1.2516	0.1041	1.3557	12,994.65 53	12,994.65 53	1.5201	7.8000e-003	13,034.98 16		

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Paving	Paving	2/12/2021	3/11/2021	5	20	
4	Building Construction	Building Construction	3/13/2021	1/28/2022	5	230	
5	Architectural Coating	Architectural Coating	1/1/2022	1/28/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 72,388; Non-Residential Outdoor: 24,129; Striped Parking Area: 4,512 (Architectural Coating – sqft)

OffRoad Equipment

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
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
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	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
Building Construction	9	51.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000	
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	3,685.656 9	3,685.656 9	1.1920			3,715.457 3	
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	3,685.656 9	3,685.656 9	1.1920			3,715.457 3	

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.2 Site Preparation - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545	191.6552	191.6552	4.5700e-003	191.7694		
Total	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	0.4656	2.0175	20.8690	0.0380	8.1298	9.3100e-003	8.1391	4.4688	9.3100e-003	4.4781	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.2 Site Preparation - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545	191.6552	191.6552	4.5700e-003	191.7694		
Total	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694

3.3 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675		0.0000				0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	2,871.9285	2,871.9285	0.9288			2,895.1495
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.9285	2,871.9285	0.9288		2,895.1495

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.3 Grading - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454	159.7126	159.7126	3.8100e-003			159.8078
Total	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154	0.0000	0.0000	2.871.928	0.9288		0.0000
Off-Road	0.3632	1.5737	17.7527	0.0296		7.2600e-003	7.2600e-003		7.2600e-003	7.2600e-003	0.0000	2,871.928	2,871.928	0.9288		2,895.149
Total	0.3632	1.5737	17.7527	0.0296	2.9486	7.2600e-003	2.9558	1.5154	7.2600e-003	1.5226	0.0000	2,871.928	2,871.928	0.9288		2,895.149

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.3 Grading - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454	159.7126	159.7126	3.8100e-003			159.8078
Total	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078

3.4 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	2,207.210 9	2,207.210 9	0.7139			2,225.057 3
Paving	0.2214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4769	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.4 Paving - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078	
Total	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003	5.6100e-003	5.6100e-003	0.0000	2,207.210	2,207.210	0.7139		2,225.057		
Paving	0.2214					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000		
Total	0.5019	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003		2,207.210	2,207.210	0.7139		2,225.057	

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.4 Paving - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454	159.7126	159.7126	3.8100e-003			159.8078
Total	0.0711	0.0405	0.5546	1.6000e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		159.7126	159.7126	3.8100e-003		159.8078

3.5 Building Construction - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	2,553.363 9	2,553.363 9	0.6160			2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.5 Building Construction - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0467	1.8508	0.3302	5.1800e-003	0.1281	3.5200e-003	0.1316	0.0369	3.3700e-003	0.0402	546.5020	546.5020	0.0391			547.4795	
Worker	0.2418	0.1378	1.8855	5.4500e-003	0.5701	3.3600e-003	0.5734	0.1512	3.0900e-003	0.1543	543.0230	543.0230	0.0130			543.3467	
Total	0.2885	1.9885	2.2157	0.0106	0.6981	6.8800e-003	0.7050	0.1881	6.4600e-003	0.1945		1,089.5250	1,089.5250	0.0521		1,090.8261	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003	6.1200e-003	6.1200e-003	0.0000	2,553.3639	2,553.3639	0.6160			2,568.7643	
Total	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643	

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.5 Building Construction - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0467	1.8508	0.3302	5.1800e-003	0.1281	3.5200e-003	0.1316	0.0369	3.3700e-003	0.0402	546.5020	546.5020	0.0391			547.4795	
Worker	0.2418	0.1378	1.8855	5.4500e-003	0.5701	3.3600e-003	0.5734	0.1512	3.0900e-003	0.1543	543.0230	543.0230	0.0130			543.3467	
Total	0.2885	1.9885	2.2157	0.0106	0.6981	6.8800e-003	0.7050	0.1881	6.4600e-003	0.1945	1,089.5250	1,089.5250	0.0521			1,090.8261	

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	2,554.3336	2,554.3336	0.6120			2,569.6322	
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	2,554.3336	2,554.3336	0.6120			2,569.6322	

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0435	1.7462	0.3071	5.1400e-003	0.1281	2.9600e-003	0.1310	0.0369	2.8300e-003	0.0397	541.8504	541.8504	0.0370			542.7761
Worker	0.2262	0.1240	1.7392	5.2500e-003	0.5701	3.2700e-003	0.5733	0.1512	3.0100e-003	0.1542	523.1815	523.1815	0.0116			523.4722
Total	0.2697	1.8701	2.0463	0.0104	0.6981	6.2300e-003	0.7044	0.1881	5.8400e-003	0.1939	1,065.0318	1,065.0318	0.0487			1,066.2483

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0435	1.7462	0.3071	5.1400e-003	0.1281	2.9600e-003	0.1310	0.0369	2.8300e-003	0.0397	541.8504	541.8504	0.0370			542.7761
Worker	0.2262	0.1240	1.7392	5.2500e-003	0.5701	3.2700e-003	0.5733	0.1512	3.0100e-003	0.1542	523.1815	523.1815	0.0116			523.4722
Total	0.2697	1.8701	2.0463	0.0104	0.6981	6.2300e-003	0.7044	0.1881	5.8400e-003	0.1939	1,065.0318	1,065.0318	0.0487			1,066.2483

3.6 Architectural Coating - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.4135						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	281.4481	281.4481	0.0183			281.9062
Total	23.6180	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	281.4481	281.4481	0.0183			281.9062

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.6 Architectural Coating - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302	102.5846	102.5846	2.2800e-003	102.6416		
Total	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		102.5846	102.5846	2.2800e-003		102.6416

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.4135						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0183		281.9062
Total	23.4432	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0183		281.9062

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

3.6 Architectural Coating - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302	102.5846	102.5846	2.2800e-003			102.6416	
Total	0.0444	0.0243	0.3410	1.0300e-003	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		102.5846	102.5846	2.2800e-003		102.6416	

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

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	11.0938	49.6238	40.1272	0.1220	4.6868	0.0829	4.7696	1.2516	0.0771	1.3287	12,569.09 89	12,569.09 89	1.5118			12,606.89 31	
Unmitigated	11.0938	49.6238	40.1272	0.1220	4.6868	0.0829	4.7696	1.2516	0.0771	1.3287	12,569.09 89	12,569.09 89	1.5118			12,606.89 31	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,688.32	3,688.32	3688.32	862,587		862,587	
Fast Food Restaurant with Drive Thru	2,119.28	2,119.28	2119.28	831,201		831,201	
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	59.65	59.65	59.65	60,801		60,801	
User Defined Industrial	1,936.00	1,936.00	1936.00	452,772		452,772	
Total	7,803.24	7,803.24	7,803.24	2,207,362		2,207,362	

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
Convenience Market With Gas	3.00	3.00	3.00	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	3.00	3.00	3.00	2.20	78.80	19.00	29	21	50
Parking Lot	3.00	3.00	3.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	3.00	3.00	3.00	59.00	0.00	41.00	92	5	3
User Defined Industrial	3.00	3.00	3.00	0.80	80.20	19.00	14	21	65

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Fast Food Restaurant with Drive Thru	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Unrefrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
User Defined Industrial	0.600000	0.400000	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003	428.0304	
NaturalGas Unmitigated	0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003	428.0304	

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

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

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Convenience Market With Gas Pumps	13.7385	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	1.6163	1.6163	3.0000e-005	3.0000e-005	1.6259	
Fast Food Restaurant with Drive Thru	3371.18	0.0364	0.3305	0.2776	1.9800e-003		0.0251	0.0251		0.0251	0.0251	396.6092	396.6092	7.6000e-003	7.2700e-003	398.9660	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	219.685	2.3700e-003	0.0215	0.0181	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	25.8453	25.8453	5.0000e-004	4.7000e-004	25.9989	
User Defined Industrial	12.1644	1.3000e-004	1.1900e-003	1.0000e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	1.4311	1.4311	3.0000e-005	3.0000e-005	1.4396	
Total		0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003	428.0304	

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

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	lb/day										lb/day					
Convenience Market With Gas Pumps	0.0137385	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	1.6163	1.6163	3.0000e-005	3.0000e-005	1.6259	
Fast Food Restaurant with Drive Thru	3.37118	0.0364	0.3305	0.2776	1.9800e-003		0.0251	0.0251		0.0251	0.0251	396.6092	396.6092	7.6000e-003	7.2700e-003	398.9660	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	0.219685	2.3700e-003	0.0215	0.0181	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	25.8453	25.8453	5.0000e-004	4.7000e-004	25.9989	
User Defined Industrial	0.0121644	1.3000e-004	1.1900e-003	1.0000e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	1.4311	1.4311	3.0000e-005	3.0000e-005	1.4396	
Total		0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003	428.0304	

6.0 Area Detail**6.1 Mitigation Measures Area**

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0545	0.0545	1.4000e-004			0.0581
Unmitigated	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0545	0.0545	1.4000e-004			0.0581

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1283					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9822					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3700e-003	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0545	0.0545	1.4000e-004		0.0581
Total	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0545	0.0545	1.4000e-004		0.0581

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1283						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	0.9822						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	2.3700e-003	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0545	0.0545	1.4000e-004		0.0581
Total	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0545	0.0545	1.4000e-004		0.0581

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Riverside at Lincoln Retail - Riverside-South Coast County, Summer

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

Riverside at Lincoln Retail
Riverside-South Coast County, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	39.50	1000sqft	2.50	39,500.00	0
User Defined Industrial	1.00	User Defined Unit	0.50	2,000.00	0
Parking Lot	188.00	Space	1.69	75,200.00	0
Fast Food Restaurant with Drive Thru	4.50	1000sqft	0.50	4,500.00	0
Convenience Market With Gas Pumps	16.00	Pump	0.71	2,258.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
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

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - 5.9 acre; user defined industrial for Carwash

Construction Phase -

Vehicle Trips - Per TS. Project would service nearby developments per TS

Construction Off-road Equipment Mitigation - T4**Architectural Coating -**

Fleet Mix - Carwash to service LDA and LDT1 vehicles

Area Coating -

Energy Use - Carwash assumed to have same energy as Convenience Market with Gas Pumps

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblEnergyUse	LightingElect	0.00	5.61
tblEnergyUse	NT24E	0.00	2.44
tblEnergyUse	NT24NG	0.00	0.30
tblEnergyUse	T24E	0.00	4.58
tblEnergyUse	T24NG	0.00	1.92
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.60

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

tblFleetMix	LDT1	0.04	0.40
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LandUseSquareFeet	0.00	2,000.00
tblLandUse	LotAcreage	0.91	2.50
tblLandUse	LotAcreage	0.00	0.50
tblLandUse	LotAcreage	0.10	0.50
tblLandUse	LotAcreage	0.05	0.71
tblTripsAndVMT	WorkerTripNumber	52.00	51.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TL	6.90	3.00

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TLP	0.00	0.80
tblVehicleTrips	DV_TP	0.00	21.00
tblVehicleTrips	PB_TP	0.00	65.00
tblVehicleTrips	PR_TP	0.00	14.00
tblVehicleTrips	ST_TR	204.47	230.52
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	1.68	1.51
tblVehicleTrips	ST_TR	0.00	1,936.00
tblVehicleTrips	SU_TR	166.88	230.52
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	1.68	1.51
tblVehicleTrips	SU_TR	0.00	1,936.00
tblVehicleTrips	WD_TR	542.60	230.52
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	1.68	1.51
tblVehicleTrips	WD_TR	0.00	1,936.00

2.0 Emissions Summary

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9719	40.5474	21.6914	0.0397	18.2675	2.0457	20.3131	9.9840	1.8820	11.8660	0.0000	3,857.5917	3,857.5917	1.1960	0.0000	3,887.4915
2022	25.6368	18.9061	20.2182	0.0405	0.8099	0.8977	1.7076	0.2177	0.8494	1.0671	0.0000	3,918.5426	3,918.5426	0.6837	0.0000	3,935.6345
Maximum	25.6368	40.5474	21.6914	0.0405	18.2675	2.0457	20.3131	9.9840	1.8820	11.8660	0.0000	3,918.5426	3,918.5426	1.1960	0.0000	3,935.6345

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.6147	4.2120	21.4062	0.0397	8.3310	0.0131	8.3415	4.5222	0.0127	4.5326	0.0000	3,857.5917	3,857.5917	1.1960	0.0000	3,887.4915
2022	24.0836	4.2454	21.3338	0.0405	0.8099	0.0137	0.8236	0.2177	0.0132	0.2309	0.0000	3,918.5426	3,918.5426	0.6837	0.0000	3,935.6345
Maximum	24.0836	4.2454	21.4062	0.0405	8.3310	0.0137	8.3415	4.5222	0.0132	4.5326	0.0000	3,918.5426	3,918.5426	1.1960	0.0000	3,935.6345

	ROG	NOx	CO	SO2	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	16.58	85.77	-1.98	0.00	52.08	99.09	58.38	53.54	99.05	63.17	0.00	0.00	0.00	0.00	0.00	0.00

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Area	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0545	0.0545	1.4000e-004			0.0581	
Energy	0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003		428.0304	
Mobile	8.8452	48.1270	43.0860	0.1102	4.6868	0.0866	4.7733	1.2516	0.0806	1.3322	11,344.919 5	11,344.919 5	1.6923			11,387.226 2	
Total	9.9970	48.4818	43.4093	0.1124	4.6868	0.1136	4.8004	1.2516	0.1076	1.3593	11,770.47 58	11,770.47 58	1.7006	7.8000e-003	11,815.31 47		

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Area	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0545	0.0545	1.4000e-004			0.0581	
Energy	0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003		428.0304	
Mobile	8.8452	48.1270	43.0860	0.1102	4.6868	0.0866	4.7733	1.2516	0.0806	1.3322	11,344.919 5	11,344.919 5	1.6923			11,387.226 2	
Total	9.9970	48.4818	43.4093	0.1124	4.6868	0.1136	4.8004	1.2516	0.1076	1.3593	11,770.47 58	11,770.47 58	1.7006	7.8000e-003	11,815.31 47		

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Paving	Paving	2/12/2021	3/11/2021	5	20	
4	Building Construction	Building Construction	3/13/2021	1/28/2022	5	230	
5	Architectural Coating	Architectural Coating	1/1/2022	1/28/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 72,388; Non-Residential Outdoor: 24,129; Striped Parking Area: 4,512 (Architectural Coating – sqft)

OffRoad Equipment

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
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
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	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
Building Construction	9	51.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	3,685.656 9	3,685.656 9	1.1920			3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	3,685.656 9	3,685.656 9	1.1920			3,715.457 3

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.2 Site Preparation - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545	171.9348	171.9348	3.9700e-003			172.0342
Total	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	0.4656	2.0175	20.8690	0.0380	8.1298	9.3100e-003	8.1391	4.4688	9.3100e-003	4.4781	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.2 Site Preparation - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545	171.9348	171.9348	3.9700e-003			172.0342
Total	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342

3.3 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675		0.0000				0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	2,871.9285	2,871.9285	0.9288			2,895.1495
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.9285	2,871.9285	0.9288		2,895.1495

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.3 Grading - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454	143.2790	143.2790	3.3100e-003			143.3618
Total	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		143.2790	143.2790	3.3100e-003		143.3618

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154	0.0000	0.0000	2.871.928	0.9288		0.0000
Off-Road	0.3632	1.5737	17.7527	0.0296	2.9486	7.2600e-003	7.2600e-003	7.2600e-003	7.2600e-003	0.0000	2,871.928	2,871.928	0.9288			2,895.149
Total	0.3632	1.5737	17.7527	0.0296	2.9486	7.2600e-003	2.9558	1.5154	7.2600e-003	1.5226	0.0000	2,871.928	2,871.928	0.9288		2,895.149

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.3 Grading - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454	143.2790	143.2790	3.3100e-003			143.3618
Total	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		143.2790	143.2790	3.3100e-003		143.3618

3.4 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	2,207.210 9	2,207.210 9	0.7139			2,225.057 3
Paving	0.2214					0.0000	0.0000		0.0000	0.0000		0.0000				0.0000
Total	1.4769	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	2,207.210 9	2,207.210 9	0.7139			2,225.057 3

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.4 Paving - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454	143.2790	143.2790	3.3100e-003			143.3618
Total	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		143.2790	143.2790	3.3100e-003		143.3618

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003	5.6100e-003	5.6100e-003	0.0000	2,207.210	2,207.210	0.7139			2,225.057
Paving	0.2214					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000
Total	0.5019	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003		2,207.210	2,207.210	0.7139		2,225.057

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.4 Paving - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454	143.2790	143.2790	3.3100e-003	143.3618		
Total	0.0698	0.0419	0.4476	1.4400e-003	0.1677	9.9000e-004	0.1687	0.0445	9.1000e-004	0.0454		143.2790	143.2790	3.3100e-003		143.3618

3.5 Building Construction - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	2,553.363 9	2,553.363 9	0.6160			2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	2,553.363 9	2,553.363 9	0.6160			2,568.764 3

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.5 Building Construction - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0496	1.8349	0.3906	4.9900e-003	0.1281	3.6300e-003	0.1317	0.0369	3.4700e-003	0.0403	525.9464	525.9464	0.0436			527.0355	
Worker	0.2373	0.1425	1.5220	4.8900e-003	0.5701	3.3600e-003	0.5734	0.1512	3.0900e-003	0.1543	487.1487	487.1487	0.0113			487.4301	
Total	0.2869	1.9773	1.9126	9.8800e-003	0.6981	6.9900e-003	0.7051	0.1881	6.5600e-003	0.1946		1,013.0952	1,013.0952	0.0548			1,014.4657

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,553.3639	2,553.3639	0.6160			2,568.7643
Total	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,553.3639	2,553.3639	0.6160			2,568.7643

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.5 Building Construction - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0496	1.8349	0.3906	4.9900e-003	0.1281	3.6300e-003	0.1317	0.0369	3.4700e-003	0.0403	525.9464	525.9464	0.0436			527.0355	
Worker	0.2373	0.1425	1.5220	4.8900e-003	0.5701	3.3600e-003	0.5734	0.1512	3.0900e-003	0.1543	487.1487	487.1487	0.0113			487.4301	
Total	0.2869	1.9773	1.9126	9.8800e-003	0.6981	6.9900e-003	0.7051	0.1881	6.5600e-003	0.1946	1,013.0952	1,013.0952	0.0548			1,014.4657	

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	2,554.3336	2,554.3336	0.6120			2,569.6322	
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	2,554.3336	2,554.3336	0.6120			2,569.6322	

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0463	1.7287	0.3646	4.9400e-003	0.1281	3.0500e-003	0.1311	0.0369	2.9200e-003	0.0398	521.3543	521.3543	0.0413			522.3868
Worker	0.2226	0.1282	1.4017	4.7100e-003	0.5701	3.2700e-003	0.5733	0.1512	3.0100e-003	0.1542	469.3728	469.3728	0.0101			469.6259
Total	0.2689	1.8568	1.7663	9.6500e-003	0.6981	6.3200e-003	0.7045	0.1881	5.9300e-003	0.1940	990.7271	990.7271	0.0514			992.0127

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0463	1.7287	0.3646	4.9400e-003	0.1281	3.0500e-003	0.1311	0.0369	2.9200e-003	0.0398	521.3543	521.3543	0.0413			522.3868
Worker	0.2226	0.1282	1.4017	4.7100e-003	0.5701	3.2700e-003	0.5733	0.1512	3.0100e-003	0.1542	469.3728	469.3728	0.0101			469.6259
Total	0.2689	1.8568	1.7663	9.6500e-003	0.6981	6.3200e-003	0.7045	0.1881	5.9300e-003	0.1940	990.7271	990.7271	0.0514			992.0127

3.6 Architectural Coating - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.4135						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	281.4481	281.4481	0.0183			281.9062
Total	23.6180	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	281.4481	281.4481	0.0183			281.9062

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.6 Architectural Coating - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302	92.0339	92.0339	1.9800e-003			92.0835
Total	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		92.0339	92.0339	1.9800e-003		92.0835

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.4135						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0183		281.9062
Total	23.4432	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0183		281.9062

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

3.6 Architectural Coating - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302	92.0339	92.0339	1.9800e-003			92.0835
Total	0.0437	0.0251	0.2748	9.2000e-004	0.1118	6.4000e-004	0.1124	0.0296	5.9000e-004	0.0302		92.0339	92.0339	1.9800e-003		92.0835

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

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	8.8452	48.1270	43.0860	0.1102	4.6868	0.0866	4.7733	1.2516	0.0806	1.3322	11,344.919 5	11,344.919 5	1.6923			11,387.226 2	
Unmitigated	8.8452	48.1270	43.0860	0.1102	4.6868	0.0866	4.7733	1.2516	0.0806	1.3322	11,344.919 5	11,344.919 5	1.6923			11,387.226 2	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,688.32	3,688.32	3688.32	862,587		862,587	
Fast Food Restaurant with Drive Thru	2,119.28	2,119.28	2119.28	831,201		831,201	
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	59.65	59.65	59.65	60,801		60,801	
User Defined Industrial	1,936.00	1,936.00	1936.00	452,772		452,772	
Total	7,803.24	7,803.24	7,803.24	2,207,362		2,207,362	

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
Convenience Market With Gas	3.00	3.00	3.00	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	3.00	3.00	3.00	2.20	78.80	19.00	29	21	50
Parking Lot	3.00	3.00	3.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	3.00	3.00	3.00	59.00	0.00	41.00	92	5	3
User Defined Industrial	3.00	3.00	3.00	0.80	80.20	19.00	14	21	65

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Fast Food Restaurant with Drive Thru	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Unrefrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
User Defined Industrial	0.600000	0.400000	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003	428.0304	
NaturalGas Unmitigated	0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003	428.0304	

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

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

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Convenience Market With Gas Pumps	13.7385	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004			1.6163	1.6163	3.0000e-005	3.0000e-005	1.6259
Fast Food Restaurant with Drive Thru	3371.18	0.0364	0.3305	0.2776	1.9800e-003		0.0251	0.0251		0.0251	0.0251			396.6092	396.6092	7.6000e-003	7.2700e-003	398.9660
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	219.685	2.3700e-003	0.0215	0.0181	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003			25.8453	25.8453	5.0000e-004	4.7000e-004	25.9989
User Defined Industrial	12.1644	1.3000e-004	1.1900e-003	1.0000e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005			1.4311	1.4311	3.0000e-005	3.0000e-005	1.4396
Total		0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270			425.5019	425.5019	8.1600e-003	7.8000e-003	428.0304

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

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	lb/day										lb/day					
Convenience Market With Gas Pumps	0.0137385	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	1.6163	1.6163	3.0000e-005	3.0000e-005	1.6259	
Fast Food Restaurant with Drive Thru	3.37118	0.0364	0.3305	0.2776	1.9800e-003		0.0251	0.0251		0.0251	0.0251	396.6092	396.6092	7.6000e-003	7.2700e-003	398.9660	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	0.219685	2.3700e-003	0.0215	0.0181	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	25.8453	25.8453	5.0000e-004	4.7000e-004	25.9989	
User Defined Industrial	0.0121644	1.3000e-004	1.1900e-003	1.0000e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	1.4311	1.4311	3.0000e-005	3.0000e-005	1.4396	
Total		0.0390	0.3546	0.2979	2.1300e-003		0.0270	0.0270		0.0270	0.0270	425.5019	425.5019	8.1600e-003	7.8000e-003	428.0304	

6.0 Area Detail**6.1 Mitigation Measures Area**

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0545	0.0545	1.4000e-004			0.0581
Unmitigated	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0545	0.0545	1.4000e-004			0.0581

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1283					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9822					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3700e-003	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0545	0.0545	1.4000e-004		0.0581
Total	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0545	0.0545	1.4000e-004		0.0581

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1283						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	0.9822						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	2.3700e-003	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0545	0.0545	1.4000e-004		0.0581
Total	1.1128	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0545	0.0545	1.4000e-004		0.0581

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Riverside at Lincoln Retail - Riverside-South Coast County, Winter

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

Riverside at Lincoln Retail
Riverside-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	39.50	1000sqft	2.50	39,500.00	0
User Defined Industrial	1.00	User Defined Unit	0.50	2,000.00	0
Parking Lot	188.00	Space	1.69	75,200.00	0
Fast Food Restaurant with Drive Thru	4.50	1000sqft	0.50	4,500.00	0
Convenience Market With Gas Pumps	16.00	Pump	0.71	2,258.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
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

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - 5.9 acre; user defined industrial for Carwash

Construction Phase -

Vehicle Trips - Per TS. Project would service nearby developments per TS

Construction Off-road Equipment Mitigation - T4

Architectural Coating -

Fleet Mix - Carwash to service LDA and LDT1 vehicles

Area Coating -

Energy Use - Carwash assumed to have same energy as Convenience Market with Gas Pumps

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblEnergyUse	LightingElect	0.00	5.61
tblEnergyUse	NT24E	0.00	2.44
tblEnergyUse	NT24NG	0.00	0.30
tblEnergyUse	T24E	0.00	4.58
tblEnergyUse	T24NG	0.00	1.92
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.60

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

tblFleetMix	LDT1	0.04	0.40
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.6500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3970e-003	0.00
tblFleetMix	SBUS	9.3200e-004	0.00
tblFleetMix	UBUS	1.1600e-003	0.00
tblLandUse	LandUseSquareFeet	0.00	2,000.00
tblLandUse	LotAcreage	0.91	2.50
tblLandUse	LotAcreage	0.00	0.50
tblLandUse	LotAcreage	0.10	0.50
tblLandUse	LotAcreage	0.05	0.71
tblTripsAndVMT	WorkerTripNumber	52.00	51.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TL	8.40	3.00
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TL	6.90	3.00

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

tblVehicleTrips	CNW_TL	6.90	3.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TL	16.60	3.00
tblVehicleTrips	CW_TLP	0.00	0.80
tblVehicleTrips	DV_TP	0.00	21.00
tblVehicleTrips	PB_TP	0.00	65.00
tblVehicleTrips	PR_TP	0.00	14.00
tblVehicleTrips	ST_TR	204.47	230.52
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	1.68	1.51
tblVehicleTrips	ST_TR	0.00	1,936.00
tblVehicleTrips	SU_TR	166.88	230.52
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	1.68	1.51
tblVehicleTrips	SU_TR	0.00	1,936.00
tblVehicleTrips	WD_TR	542.60	230.52
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	1.68	1.51
tblVehicleTrips	WD_TR	0.00	1,936.00

2.0 Emissions Summary

Riverside at Lincoln Retail - Riverside-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					
2021	0.2864	2.6218	2.3698	4.6400e-003	0.2323	0.1300	0.3623	0.1039	0.1217	0.2256	0.0000	408.3128	408.3128	0.0841	0.0000	410.4149
2022	0.2561	0.1894	0.2028	4.1000e-004	7.9700e-003	8.9800e-003	0.0169	2.1400e-003	8.4900e-003	0.0106	0.0000	35.7874	35.7874	6.1800e-003	0.0000	35.9420
Maximum	0.2864	2.6218	2.3698	4.6400e-003	0.2323	0.1300	0.3623	0.1039	0.1217	0.2256	0.0000	408.3128	408.3128	0.0841	0.0000	410.4149

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0750	0.4850	2.5067	4.6400e-003	0.1465	1.5700e-003	0.1481	0.0581	1.5200e-003	0.0596	0.0000	408.3124	408.3124	0.0841	0.0000	410.4145
2022	0.2406	0.0428	0.2140	4.1000e-004	7.9700e-003	1.4000e-004	8.1000e-003	2.1400e-003	1.3000e-004	2.2800e-003	0.0000	35.7874	35.7874	6.1800e-003	0.0000	35.9419
Maximum	0.2406	0.4850	2.5067	4.6400e-003	0.1465	1.5700e-003	0.1481	0.0581	1.5200e-003	0.0596	0.0000	408.3124	408.3124	0.0841	0.0000	410.4145

	ROG	NOx	CO	SO2	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	41.81	81.22	-5.75	0.00	35.68	98.77	58.81	43.21	98.73	73.79	0.00	0.00	0.00	0.00	0.00	0.00

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.7856	0.0846
2	4-1-2021	6-30-2021	0.7023	0.1573
3	7-1-2021	9-30-2021	0.7100	0.1590
4	10-1-2021	12-31-2021	0.7096	0.1586
5	1-1-2022	3-31-2022	0.4454	0.2833
		Highest	0.7856	0.2833

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.2030	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003	
Energy	7.1200e-003	0.0647	0.0544	3.9000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	193.7495	193.7495	6.4400e-003	2.3400e-003	194.6092	
Mobile	1.5986	8.9401	7.6446	0.0210	0.8390	0.0153	0.8544	0.2244	0.0143	0.2386	0.0000	1,964.4223	1,964.4223	0.2628	0.0000	1,970.9926	
Waste						0.0000	0.0000		0.0000	0.0000	18.0601	0.0000	18.0601	1.0673	0.0000	44.7432	
Water						0.0000	0.0000		0.0000	0.0000	3.3843	44.9290	48.3134	0.3495	8.5900e-003	59.6101	
Total	1.8087	9.0049	7.7021	0.0214	0.8390	0.0203	0.8593	0.2244	0.0192	0.2436	21.4444	2,203.1069	2,224.5514	1.6861	0.0109	2,269.9617	

Riverside at Lincoln Retail - Riverside-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	0.2030	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003	
Energy	7.1200e-003	0.0647	0.0544	3.9000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	193.7495	193.7495	6.4400e-003	2.3400e-003	194.6092	
Mobile	1.5986	8.9401	7.6446	0.0210	0.8390	0.0153	0.8544	0.2244	0.0143	0.2386	0.0000	1,964.4223	1,964.4223	0.2628	0.0000	1,970.9926	
Waste						0.0000	0.0000		0.0000	0.0000	18.0601	0.0000	18.0601	1.0673	0.0000	44.7432	
Water						0.0000	0.0000		0.0000	0.0000	3.3843	44.9290	48.3134	0.3495	8.5900e-003	59.6101	
Total	1.8087	9.0049	7.7021	0.0214	0.8390	0.0203	0.8593	0.2244	0.0192	0.2436	21.4444	2,203.1069	2,224.5514	1.6861	0.0109	2,269.9617	

	ROG	NOx	CO	SO2	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**

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Paving	Paving	2/12/2021	3/11/2021	5	20	
4	Building Construction	Building Construction	3/13/2021	1/28/2022	5	230	
5	Architectural Coating	Architectural Coating	1/1/2022	1/28/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 72,388; Non-Residential Outdoor: 24,129; Striped Parking Area: 4,512 (Architectural Coating – sqft)

OffRoad Equipment

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
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
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	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
Building Construction	9	51.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0903	0.0102	0.1006	0.0497	9.4000e-003	0.0591	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.2 Site Preparation - 2021**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	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004	
Total	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3300e-003	0.0101	0.1043	1.9000e-004	0.0407	5.0000e-005	5.0000e-005	0.0223	5.0000e-005	5.0000e-005	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	2.3300e-003	0.0101	0.1043	1.9000e-004	0.0407	5.0000e-005	0.0407	0.0223	5.0000e-005	0.0224	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.2 Site Preparation - 2021**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	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004	
Total	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004	

3.3 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	0.0229	0.2474	0.1586	3.0000e-004	0.0655	0.0116	0.0771	0.0337	0.0107	0.0443	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.3 Grading - 2021**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	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341	
Total	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341	

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					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6300e-003	0.0157	0.1775	3.0000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	3.6300e-003	0.0157	0.1775	3.0000e-004	0.0295	7.0000e-005	0.0296	0.0152	7.0000e-005	0.0152	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.3 Grading - 2021**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	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341	
Total	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341	

3.4 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	2.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0148	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.4 Paving - 2021**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	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341	
Total	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	2.8000e-003	0.0122	0.1730	2.3000e-004		6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854		
Paving	2.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total	5.0100e-003	0.0122	0.1730	2.3000e-004		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854	

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.4 Paving - 2021**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	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341	
Total	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341	

3.5 Building Construction - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1996	1.8304	1.7404	2.8300e-003		0.1007	0.1007		0.0946	0.0946	0.0000	243.2191	243.2191	0.0587	0.0000	244.6861
Total	0.1996	1.8304	1.7404	2.8300e-003		0.1007	0.1007		0.0946	0.0946	0.0000	243.2191	243.2191	0.0587	0.0000	244.6861

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.5 Building Construction - 2021**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	5.0100e-003	0.1958	0.0377	5.4000e-004	0.0133	3.7000e-004	0.0136	3.8300e-003	3.6000e-004	4.1800e-003	0.0000	51.2344	51.2344	3.9100e-003	0.0000	51.3321	
Worker	0.0230	0.0155	0.1686	5.3000e-004	0.0589	3.5000e-004	0.0592	0.0156	3.2000e-004	0.0160	0.0000	47.5977	47.5977	1.1100e-003	0.0000	47.6254	
Total	0.0280	0.2113	0.2063	1.0700e-003	0.0721	7.2000e-004	0.0729	0.0195	6.8000e-004	0.0201	0.0000	98.8321	98.8321	5.0200e-003	0.0000	98.9575	

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	0.0344	0.2346	1.8333	2.8300e-003		6.4000e-004	6.4000e-004	6.4000e-004	6.4000e-004	0.0000	243.2189	243.2189	0.0587	0.0000	244.6858		
Total	0.0344	0.2346	1.8333	2.8300e-003		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	243.2189	243.2189	0.0587	0.0000	244.6858	

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.5 Building Construction - 2021**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	5.0100e-003	0.1958	0.0377	5.4000e-004	0.0133	3.7000e-004	0.0136	3.8300e-003	3.6000e-004	4.1800e-003	0.0000	51.2344	51.2344	3.9100e-003	0.0000	51.3321	
Worker	0.0230	0.0155	0.1686	5.3000e-004	0.0589	3.5000e-004	0.0592	0.0156	3.2000e-004	0.0160	0.0000	47.5977	47.5977	1.1100e-003	0.0000	47.6254	
Total	0.0280	0.2113	0.2063	1.0700e-003	0.0721	7.2000e-004	0.0729	0.0195	6.8000e-004	0.0201	0.0000	98.8321	98.8321	5.0200e-003	0.0000	98.9575	

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0171	0.1562	0.1636	2.7000e-004		8.0900e-003	8.0900e-003		7.6100e-003	7.6100e-003	0.0000	23.1725	23.1725	5.5500e-003	0.0000	23.3113
Total	0.0171	0.1562	0.1636	2.7000e-004		8.0900e-003	8.0900e-003		7.6100e-003	7.6100e-003	0.0000	23.1725	23.1725	5.5500e-003	0.0000	23.3113

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.5000e-004	0.0176	3.3400e-003	5.0000e-005	1.2600e-005	3.0000e-005	1.2900e-003	3.6000e-004	3.0000e-005	3.9000e-004	0.0000	4.8375	4.8375	3.5000e-004	0.0000	4.8463	
Worker	2.0500e-003	1.3300e-003	0.0148	5.0000e-005	5.6100e-003	3.0000e-005	5.6400e-003	1.4900e-003	3.0000e-005	1.5200e-003	0.0000	4.3677	4.3677	9.0000e-005	0.0000	4.3701	
Total	2.5000e-003	0.0189	0.0181	1.0000e-004	6.8700e-003	6.0000e-005	6.9300e-003	1.8500e-003	6.0000e-005	1.9100e-003	0.0000	9.2052	9.2052	4.4000e-004	0.0000	9.2164	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2800e-003	0.0224	0.1746	2.7000e-004		6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	0.0000	23.1725	23.1725	5.5500e-003	0.0000	23.3113	
Total	3.2800e-003	0.0224	0.1746	2.7000e-004		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	23.1725	23.1725	5.5500e-003	0.0000	23.3113

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.5000e-004	0.0176	3.3400e-003	5.0000e-005	1.2600e-003	3.0000e-005	1.2900e-003	3.6000e-004	3.0000e-005	3.9000e-004	0.0000	4.8375	4.8375	3.5000e-004	0.0000	4.8463	
Worker	2.0500e-003	1.3300e-003	0.0148	5.0000e-005	5.6100e-003	3.0000e-005	5.6400e-003	1.4900e-003	3.0000e-005	1.5200e-003	0.0000	4.3677	4.3677	9.0000e-005	0.0000	4.3701	
Total	2.5000e-003	0.0189	0.0181	1.0000e-004	6.8700e-003	6.0000e-005	6.9300e-003	1.8500e-003	6.0000e-005	1.9100e-003	0.0000	9.2052	9.2052	4.4000e-004	0.0000	9.2164	

3.6 Architectural Coating - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2341						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	0.2362	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.6 Architectural Coating - 2022**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	2.6000e-004	2.9000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8564	0.8564	2.0000e-005	0.0000	0.8569	
Total	4.0000e-004	2.6000e-004	2.9000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8564	0.8564	2.0000e-005	0.0000	0.8569	

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	0.2341						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	3.0000e-004	1.2900e-003	0.0183	3.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574	
Total	0.2344	1.2900e-003	0.0183	3.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574	

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

3.6 Architectural Coating - 2022**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	2.6000e-004	2.9000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8564	0.8564	2.0000e-005	0.0000	0.8569	
Total	4.0000e-004	2.6000e-004	2.9000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8564	0.8564	2.0000e-005	0.0000	0.8569	

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

Riverside at Lincoln Retail - Riverside-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	1.5986	8.9401	7.6446	0.0210	0.8390	0.0153	0.8544	0.2244	0.0143	0.2386	0.0000	1,964.422 3	1,964.422 3	0.2628	0.0000	1,970.992 6	
Unmitigated	1.5986	8.9401	7.6446	0.0210	0.8390	0.0153	0.8544	0.2244	0.0143	0.2386	0.0000	1,964.422 3	1,964.422 3	0.2628	0.0000	1,970.992 6	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,688.32	3,688.32	3688.32	862,587	862,587	862,587	862,587
Fast Food Restaurant with Drive Thru	2,119.28	2,119.28	2119.28	831,201	831,201	831,201	831,201
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	59.65	59.65	59.65	60,801	60,801	60,801	60,801
User Defined Industrial	1,936.00	1,936.00	1936.00	452,772	452,772	452,772	452,772
Total	7,803.24	7,803.24	7,803.24	2,207,362	2,207,362	2,207,362	2,207,362

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
Convenience Market With Gas	3.00	3.00	3.00	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	3.00	3.00	3.00	2.20	78.80	19.00	29	21	50
Parking Lot	3.00	3.00	3.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	3.00	3.00	3.00	59.00	0.00	41.00	92	5	3
User Defined Industrial	3.00	3.00	3.00	0.80	80.20	19.00	14	21	65

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Fast Food Restaurant with Drive Thru	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Unrefrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
User Defined Industrial	0.600000	0.400000	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	123.3029	123.3029	5.0900e-003	1.0500e-003	123.7440
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	123.3029	123.3029	5.0900e-003	1.0500e-003	123.7440
NaturalGas Mitigated	7.1200e-003	0.0647	0.0544	3.9000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	70.4466	70.4466	1.3500e-003	1.2900e-003	70.8652
NaturalGas Unmitigated	7.1200e-003	0.0647	0.0544	3.9000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	70.4466	70.4466	1.3500e-003	1.2900e-003	70.8652

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

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					
Convenience Market With Gas Pumps	5014.54	3.0000e-005	2.5000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2676	0.2676	1.0000e-005	0.0000	0.2692	
Fast Food Restaurant with Drive Thru	1.23048e+006	6.6300e-003	0.0603	0.0507	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003	0.0000	65.6631	65.6631	1.2600e-003	1.2000e-003	66.0533	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	80185	4.3000e-004	3.9300e-003	3.3000e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	4.2790	4.2790	8.0000e-005	8.0000e-005	4.3044	
User Defined Industrial	4440	2.0000e-005	2.2000e-004	1.8000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2369	0.2369	0.0000	0.0000	0.2383	
Total		7.1100e-003	0.0647	0.0544	3.8000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	70.4466	70.4466	1.3500e-003	1.2800e-003	70.8652	

Riverside at Lincoln Retail - Riverside-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					
Convenience Market With Gas Pumps	5014.54	3.0000e-005	2.5000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2676	0.2676	1.0000e-005	0.0000	0.2692	
Fast Food Restaurant with Drive Thru	1.23048e+006	6.6300e-003	0.0603	0.0507	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003	0.0000	65.6631	65.6631	1.2600e-003	1.2000e-003	66.0533	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	80185	4.3000e-004	3.9300e-003	3.3000e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	4.2790	4.2790	8.0000e-005	8.0000e-005	4.3044	
User Defined Industrial	4440	2.0000e-005	2.2000e-004	1.8000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2369	0.2369	0.0000	0.0000	0.2383	
Total		7.1100e-003	0.0647	0.0544	3.8000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	70.4466	70.4466	1.3500e-003	1.2800e-003	70.8652	

Riverside at Lincoln Retail - Riverside-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			
Convenience Market With Gas Pumps	28528.6	9.0898	3.8000e-004	8.0000e-005	9.1224
Fast Food Restaurant with Drive Thru	213660	68.0767	2.8100e-003	5.8000e-004	68.3202
Parking Lot	26320	8.3861	3.5000e-004	7.0000e-005	8.4161
Unrefrigerated Warehouse-No Rail	93220	29.7019	1.2300e-003	2.5000e-004	29.8082
User Defined Industrial	25260	8.0484	3.3000e-004	7.0000e-005	8.0772
Total		123.3029	5.1000e-003	1.0500e-003	123.7440

Riverside at Lincoln Retail - Riverside-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			
Convenience Market With Gas Pumps	28528.6	9.0898	3.8000e-004	8.0000e-005	9.1224
Fast Food Restaurant with Drive Thru	213660	68.0767	2.8100e-003	5.8000e-004	68.3202
Parking Lot	26320	8.3861	3.5000e-004	7.0000e-005	8.4161
Unrefrigerated Warehouse-No Rail	93220	29.7019	1.2300e-003	2.5000e-004	29.8082
User Defined Industrial	25260	8.0484	3.3000e-004	7.0000e-005	8.0772
Total		123.3029	5.1000e-003	1.0500e-003	123.7440

6.0 Area Detail**6.1 Mitigation Measures Area**

Riverside at Lincoln Retail - Riverside-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	0.2030	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003		
Unmitigated	0.2030	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003		

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0234					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1792					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003	
Total	0.2030	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003

Riverside at Lincoln Retail - Riverside-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	0.0234						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1792						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003
Total	0.2030	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	48.3134	0.3495	8.5900e-003	59.6101
Unmitigated	48.3134	0.3495	8.5900e-003	59.6101

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.167315 / 0.102548	1.1102	5.5000e-003	1.4000e-004	1.2887
Fast Food Restaurant with Drive Thru	1.3659 / 0.0871852	6.4088	0.0448	1.1000e-003	7.8560
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.13438 / 0	40.7943	0.2992	7.3500e-003	50.4654
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		48.3133	0.3495	8.5900e-003	59.6101

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.167315 / 0.102548	1.1102	5.5000e-003	1.4000e-004	1.2887
Fast Food Restaurant with Drive Thru	1.3659 / 0.0871852	6.4088	0.0448	1.1000e-003	7.8560
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.13438 / 0	40.7943	0.2992	7.3500e-003	50.4654
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		48.3133	0.3495	8.5900e-003	59.6101

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.0601	1.0673	0.0000	44.7432
Unmitigated	18.0601	1.0673	0.0000	44.7432

8.2 Waste by Land UseUnmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	51.84	10.5231	0.6219	0.0000	26.0704
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	37.13	7.5371	0.4454	0.0000	18.6727
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		18.0601	1.0673	0.0000	44.7431

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	51.84	10.5231	0.6219	0.0000	26.0704
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	37.13	7.5371	0.4454	0.0000	18.6727
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		18.0601	1.0673	0.0000	44.7431

9.0 Operational Offroad

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

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

Boilers

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

User Defined Equipment

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

Equipment Type	Number
----------------	--------

11.0 Vegetation

ATTACHMENT B

AERSCREEN – Tier IV with DPF Equipment

AERSCREEN 11126 / AERMOD 1206

04/30/20
11:08:30

TITLE: Riverside and Lincoln Commercial Development

***** AREA PARAMETERS *****

SOURCE EMISSION RATE:	0.990E-04 g/s	0.786E-03 lb/hr
AREA EMISSION RATE:	0.417E-08 g/(s-m ²)	0.331E-07 lb/(hr-m ²)
AREA HEIGHT:	3.00 meters	9.84 feet
AREA SOURCE LONG SIDE:	153.99 meters	505.22 feet
AREA SOURCE SHORT SIDE:	153.99 meters	505.22 feet
INITIAL VERTICAL DIMENSION:	1.00 meters	3.28 feet
RURAL OR URBAN:	URBAN	
POPULATION:	69000	
FLAGPOLE RECEPTOR HEIGHT:	1.50 meters	4.92 feet
INITIAL PROBE DISTANCE =	5000. meters	16404. feet

***** BUILDING DOWNWASH PARAMETERS *****

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

***** FLOW SECTOR ANALYSIS *****
25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m ³)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	0.150	0.1578	45	100.0	WIN

* = worst case diagonal

***** MAKEMET METEOROLOGY PARAMETERS *****

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Desert Shrubland
DOMINANT CLIMATE TYPE: Dry Conditions
DOMINANT SEASON: Winter

ALBEDO: 0.45
BOWEN RATIO: 10.00

ROUGHNESS LENGTH: 0.150 (meters)

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR MO DY JDY HR

10 01 16 16 01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS
-0.16	0.024	-9.000	0.020	-999.	8.	7.8	0.150	10.00	0.45	0.50		
HT	REF	TA	HT									
10.0	310.0	2.0										

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

YR MO DY JDY HR

10 01 16 16 01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS
-0.16	0.024	-9.000	0.020	-999.	8.	7.8	0.150	10.00	0.45	0.50		
HT	REF	TA	HT									
10.0	310.0	2.0										

***** AERSCREEN AUTOMATED DISTANCES *****
OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	0.1104	2524.99	0.5807E-02
25.00	0.1239	2550.00	0.5736E-02
50.01	0.1366	2575.00	0.5666E-02
75.00	0.1477	2600.00	0.5597E-02
100.00	0.1578	2625.00	0.5953E-02
125.00	0.1369	2650.00	0.5877E-02
150.01	0.1088	2675.00	0.5803E-02
174.99	0.9217E-01	2700.00	0.5731E-02
200.00	0.8117E-01	2725.00	0.5660E-02
225.00	0.7284E-01	2750.00	0.5591E-02
250.00	0.6625E-01	2775.00	0.5523E-02
274.99	0.6085E-01	2800.00	0.5457E-02
300.00	0.5632E-01	2825.00	0.5392E-02
325.00	0.5245E-01	2850.00	0.5329E-02
350.00	0.4910E-01	2875.00	0.5267E-02
375.01	0.4600E-01	2900.00	0.5206E-02
400.00	0.4329E-01	2925.00	0.5147E-02
425.00	0.4087E-01	2950.00	0.5089E-02
450.00	0.3872E-01	2975.00	0.5032E-02
475.01	0.3679E-01	3000.00	0.4976E-02
500.00	0.3504E-01	3025.00	0.4922E-02
525.00	0.3344E-01	3050.00	0.4869E-02
550.00	0.3198E-01	3075.00	0.4816E-02

575.01	0.3063E-01	3100.00	0.4765E-02
599.99	0.2940E-01	3125.00	0.4715E-02
625.00	0.2825E-01	3150.00	0.4666E-02
650.00	0.2718E-01	3174.99	0.4618E-02
675.00	0.2618E-01	3200.00	0.4570E-02
699.99	0.2524E-01	3225.00	0.4524E-02
725.00	0.2437E-01	3250.00	0.4479E-02
750.00	0.2354E-01	3275.00	0.4435E-02
775.00	0.2277E-01	3300.00	0.4391E-02
800.01	0.2204E-01	3325.00	0.4348E-02
825.00	0.2135E-01	3350.00	0.4306E-02
850.00	0.2069E-01	3375.00	0.4265E-02
875.00	0.2007E-01	3400.00	0.4225E-02
900.01	0.1948E-01	3425.00	0.4186E-02
924.99	0.1893E-01	3450.00	0.4147E-02
950.00	0.1839E-01	3475.00	0.4109E-02
975.00	0.1789E-01	3500.00	0.4072E-02
1000.00	0.1740E-01	3525.00	0.4035E-02
1024.99	0.1694E-01	3550.00	0.3999E-02
1050.00	0.1650E-01	3575.00	0.3964E-02
1075.00	0.1608E-01	3600.00	0.3929E-02
1100.00	0.1567E-01	3625.00	0.3895E-02
1125.01	0.1528E-01	3650.00	0.3862E-02
1150.00	0.1491E-01	3675.00	0.3829E-02
1175.00	0.1456E-01	3700.00	0.3797E-02
1200.00	0.1422E-01	3725.00	0.3766E-02
1225.01	0.1389E-01	3750.00	0.3735E-02
1250.00	0.1357E-01	3775.00	0.3704E-02
1275.00	0.1327E-01	3800.00	0.3675E-02
1300.00	0.1297E-01	3825.00	0.3645E-02
1325.01	0.1269E-01	3850.00	0.3617E-02
1349.99	0.1242E-01	3875.00	0.3588E-02
1375.00	0.1216E-01	3900.00	0.3560E-02
1400.00	0.1191E-01	3925.00	0.3533E-02
1425.00	0.1167E-01	3950.00	0.3506E-02
1450.00	0.1143E-01	3975.00	0.3480E-02
1475.00	0.1120E-01	4000.00	0.3454E-02
1500.00	0.1098E-01	4025.00	0.3429E-02
1525.00	0.1077E-01	4050.00	0.3404E-02
1550.01	0.1057E-01	4075.00	0.3379E-02
1575.00	0.1037E-01	4100.00	0.3355E-02
1600.00	0.1018E-01	4125.00	0.3331E-02
1625.00	0.9987E-02	4150.00	0.3308E-02
1650.00	0.9806E-02	4175.00	0.3285E-02
1675.00	0.9631E-02	4200.00	0.3262E-02
1700.00	0.9461E-02	4225.00	0.3240E-02
1725.00	0.9297E-02	4250.00	0.3218E-02
1750.00	0.9138E-02	4275.00	0.3197E-02
1774.99	0.8982E-02	4300.00	0.3176E-02
1800.00	0.8830E-02	4325.00	0.3155E-02
1825.00	0.8682E-02	4350.00	0.3134E-02
1850.00	0.8539E-02	4375.00	0.3114E-02
1875.00	0.8400E-02	4400.00	0.3094E-02
1900.00	0.8265E-02	4425.00	0.3075E-02
1925.01	0.8133E-02	4450.00	0.3056E-02
1950.01	0.8006E-02	4475.00	0.3037E-02
1975.01	0.7882E-02	4500.00	0.3018E-02
1999.99	0.7762E-02	4525.00	0.3000E-02
2025.00	0.7645E-02	4550.00	0.2982E-02
2050.00	0.7530E-02	4575.00	0.2964E-02
2075.00	0.7419E-02	4600.00	0.2947E-02
2099.99	0.7308E-02	4625.00	0.2930E-02
2124.99	0.7202E-02	4650.00	0.2913E-02
2150.00	0.7098E-02	4675.00	0.2896E-02
2175.00	0.6997E-02	4700.00	0.2884E-02
2200.00	0.6897E-02	4725.00	0.2873E-02
2225.00	0.6800E-02	4750.00	0.2861E-02
2250.00	0.6706E-02	4775.00	0.2850E-02
2275.00	0.6615E-02	4800.00	0.2838E-02

2300.00	0.6525E-02	4825.00	0.2827E-02
2325.00	0.6438E-02	4850.00	0.2816E-02
2350.00	0.6353E-02	4875.00	0.2805E-02
2375.00	0.6270E-02	4900.00	0.2794E-02
2400.01	0.6190E-02	4925.00	0.2784E-02
2424.99	0.6110E-02	4950.00	0.2773E-02
2450.00	0.6032E-02	4975.00	0.2763E-02
2475.00	0.5955E-02	5000.00	0.2752E-02
2500.00	0.5880E-02		

***** AERSCREEN MAXIMUM IMPACT SUMMARY *****

3-hour, 8-hour, and 24-hour scaled concentrations are equal to the 1-hour concentration as referenced in SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4) Report number EPA-454/R-92-019 http://www.epa.gov/scram001/guidance_permit.htm under Screening Guidance

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m ³)	SCALED 3-HOUR CONC (ug/m ³)	SCALED 8-HOUR CONC (ug/m ³)	SCALED 24-HOUR CONC (ug/m ³)	SCALED ANNUAL CONC (ug/m ³)
FLAT TERRAIN	0.1613	0.1613	0.1613	0.1613	N/A

DISTANCE FROM SOURCE 108.99 meters

IMPACT AT THE AMBIENT BOUNDARY 0.1104 0.1104 0.1104 0.1104 N/A

DISTANCE FROM SOURCE 1.00 meters

ATTACHMENT C

Cancer Risk Calculation Spreadsheet

Air Quality Health Risk Calculations Riverside and Lincoln Retail (Tier 4 with DPF)						
From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	0.00089				
	Number of Workdays	280				
	Emission per day (lb/day)	0.006357143				
	Construction day (Hours)	8				
	Emission Rate (Grams/Second)	9.99926E-05				
	Project Site Size (Acres)	5.86				
	Project Site Size (meters)	23714.57864				
	Length of Smalles Side (meters)	153.9953851				
	Emission Rate over Grading Area	4.2165E-09				
Concentration Annual						
0.012624						
New Method based on Risk Assessment Guidelines - Guidance Manual for Preparation of Health Risk Assessments - February 2015	Page 5-1 Calculate Point of Maximum Impact and Maximally Exposed Individual Resident					
1st find Dose (Equation 5.4.1.1) Page 5-24	5.4 Estimation of Dose					
Duration	Construction Days		Construction Days converted to years			
	280		0.767123288			
Age (Years)	3rd Trimester (0.25)		0-2	2-9	2-16	16-30
Cair (annual) - From F15	0.012624		0.012624	0.012624	0.012624	0.012624
Breathing Rate per agegroup BR/BW (Page 5-25) A (Default is 1)	361 1		1090 1	861 1	745 1	335 1
Exposure Frequency = EF (days/365days)	0.96		0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3 Dose-inh	0.000001 0.00000437		0.000001 0.00001321	0.000001 0.00001043	0.000001 0.00000903	0.000001 0.00000406
8.2.4 Calculating Residential Inhalation Cancer Risk						
Equation 8.2.4 A Page 8-7						
Construction Days	280		0.767123288			
potency factor for Diesel	1.1		1.1	1.1	1.1	1.1
Age Sensitivity Factor	10		10	3	3	1
ED	0.25		0.767123288	0.767123288	0.767123288	0.767123288
AT	70		70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85		0.85	0.72	0.72	0.73
Risk for Each Age Group	1.46093E-07 0.146092863		1.35355E-06 1.353547355	2.71697E-07 0.271697057	2.35092E-07 0.235092111	3.57269E-08 0.03572693
Cancer Risk Per Million 9-years	1.77					
Cancer Risk Per Million 30-years	1.77					
Cancer Risk Per Million 70-years	1.77					