

Air Quality and Greenhouse Gas Background and Modeling Data

AIR QUALITY

Climate/Meteorology

SOUTH COAST AIR BASIN

The project site lies in the South Coast Air Basin (SoCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds.¹

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the project site with temperature data is the Sun City Monitoring Station (ID No. 048655). The lowest average temperature is reported at 34.5°F in December, and the highest average temperature is 98.0°F in August.²

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from October through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall historically averages 11.22 inches per year in the project area.³

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the

¹ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

² Western Regional Climate Center (WRCC). 2019. Sun City, California ([Station ID] 048655): Period of Record Monthly Climate Summary, 05/01/1973 to 01/31/2006. Western U.S. Climate Summaries. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca8655>.

³ Western Regional Climate Center (WRCC). 2019. Sun City, California ([Station ID] 048655): Period of Record Monthly Climate Summary, 05/01/1973 to 01/31/2006. Western U.S. Climate Summaries. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca8655>.

SoCAB by offshore winds, the “ocean effect” is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB.⁴

Wind

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

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

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.⁵

Of the counties located in the South Coast Air Basin, Riverside County generates the lowest amount of emissions annually. However, due to its topography and climate, the county’s residents are subject to greater health risks from air pollution than any other county. The primary cause of air pollution in the region is from vehicle emissions from Los Angeles and Orange Counties, as prevailing offshore surface winds carry pollutants toward western Riverside County.⁶

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area.⁷

⁴ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

⁵ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

⁶ City of Temecula. 2005. Temecula General Plan: Air Quality Element. <https://temeculaca.gov/345/General-Plan>.

⁷ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

Air Quality Regulations

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (SCAQMD). However, SCAQMD reports to California Air Resources board (CARB) and all criteria emissions are also governed by the California and national Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

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

Both California and the federal government have established health based AAQS for seven air pollutants. As shown in Table 1, these pollutants include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Ozone (O ₃) ³	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
	1 hour	20 ppm	35 ppm	

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Carbon Monoxide (CO)	8 hours	9.0 ppm	9 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m ³	150 µg/m ³	
Respirable Fine Particulate Matter (PM _{2.5}) ⁴	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m ³	
Lead (Pb)	30-Day Average	1.5 µg/m ³	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m ³	
	Rolling 3-Month Average	*	0.15 µg/m ³	
Sulfates (SO ₄) ⁵	24 hours	25 µg/m ³	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H ₂ S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Vinyl Chloride	24 hour	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: California Air Resources Board (CARB). 2016, October 1. Ambient Air Quality Standards. <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

Notes: ppm: parts per million; µg/m³: micrograms per cubic meter

* Standard has not been established for this pollutant/duration by this entity.

1 California standards for O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and particulate matter (PM₁₀, PM_{2.5}, 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.

2 National standards (other than O₃, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O₃ 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 µg/m³ is equal to or less than one. For PM_{2.5}, 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.

3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

4 On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

5 On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

CRITERIA AIR POLLUTANTS

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb) are primary air pollutants. Of these, CO, SO₂, NO₂, PM₁₀, and PM_{2.5} are “criteria air pollutants,” which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO_x) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O₃) and NO₂ are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be

the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation.^{8,9} The SoCAB is designated under the California and National AAQS as being in attainment of CO criteria levels.¹⁰

Volatile Organic Compounds (VOC) are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of VOCs include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of ozone (O₃), SCAQMD has established a significance threshold for this pollutant.¹¹

Nitrogen Oxides (NO_x) are a byproduct of fuel combustion and contribute to the formation of O₃, PM₁₀, and PM_{2.5}. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO₂). The principal form of NO₂ produced by combustion is NO, but NO reacts with oxygen to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO₂ is only potentially irritating. There is some indication of a relationship between NO₂ and chronic pulmonary fibrosis. Some increase in bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 part per million (ppm). NO₂ absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure.^{12,13} The SoCAB is designated as an attainment area for NO₂ under the National AAQS California AAQS.¹⁴

Sulfur Dioxide (SO₂) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and from chemical processes at chemical plants and refineries. Gasoline and natural gas have very low sulfur content and do not

⁸ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

⁹ US Environmental Protection Agency (USEPA). 2019. Criteria Air Pollutants. <https://www.epa.gov/criteria-air-pollutants>.

¹⁰ California Air Resources Board (CARB). 2017, May 5. Area Designations Maps/State and National. <http://www.arb.ca.gov/desig/desig.htm>.

¹¹ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

¹² South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

¹³ US Environmental Protection Agency (USEPA). 2019. Criteria Air Pollutants. <https://www.epa.gov/criteria-air-pollutants>.

¹⁴ California Air Resources Board (CARB). 2017, May 5. Area Designations Maps/State and National. <http://www.arb.ca.gov/desig/desig.htm>.

release significant quantities of SO₂.^{15,16} When sulfur dioxide forms sulfates (SO₄) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_x). Thus, SO₂ is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO₂ may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO₂ may do greater harm by injuring lung tissue. The SoCAB is designated as attainment under the California and National AAQS.¹⁷

Suspended Particulate Matter (PM₁₀ and PM_{2.5}) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM₁₀, include the particulate matter with an aerodynamic diameter of 10 microns (i.e., 10 millionths of a meter or 0.0004 inch) or less. Inhalable fine particles, or PM_{2.5}, have an aerodynamic diameter of 2.5 microns (i.e., 2.5 millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind action on arid landscapes also contributes substantially to local particulate loading (i.e., fugitive dust). Both PM₁₀ and PM_{2.5} may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems.¹⁸

The US Environmental Protection Agency's (EPA) scientific review concluded that PM_{2.5}, which penetrates deeply into the lungs, is more likely than PM₁₀ to contribute to health effects and at concentrations that extend well below those allowed by the current PM₁₀ standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms.¹⁹ There has been emerging evidence that even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch), known as ultrafine particulates (UFPs), have human health implications, because UFPs toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs.²⁰ However, the EPA or CARB have yet to adopt AAQS to regulate these particulates. Diesel particulate matter (DPM) is classified by the CARB as a carcinogen.²¹

¹⁵ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

¹⁶ US Environmental Protection Agency (USEPA). 2019. Criteria Air Pollutants. <https://www.epa.gov/criteria-air-pollutants>.

¹⁷ California Air Resources Board (CARB). 2018, June 12 (updated). Air Quality Standards and Area Designations. <http://www.arb.ca.gov/desig/desig.htm>.

¹⁸ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

¹⁹ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

²⁰ South Coast Air Quality Management District (SCAQMD). 2016, February. 2016 Air Quality Management Plan National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin. <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf>.

²¹ California Air Resources Board (CARB). 1998, April 22. The Report on Diesel Exhaust. <http://www.arb.ca.gov/toxics/dieseltac/de-fnds.htm>.

Particulate matter can also cause environmental effects such as visibility impairment,²² environmental damage,²³ and aesthetic damage.^{24,25,26} The SoCAB is a nonattainment area for PM_{2.5} under California and National AAQS and a nonattainment area for PM₁₀ under the California AAQS.²⁷

Ozone (O₃) is commonly referred to as “smog” and is a gas that is formed when VOCs and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in the presence of sunlight. O₃ is a secondary criteria air pollutant. O₃ concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for the formation of this pollutant. O₃ poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O₃ can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O₃ also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O₃ also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O₃ harms sensitive vegetation during the growing season.^{28,29} The SoCAB is designated as extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour).³⁰

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems,

²² PM_{2.5} is the main cause of reduced visibility (haze) in parts of the United States.

²³ Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

²⁴ Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

²⁵ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

²⁶ US Environmental Protection Agency (USEPA). 2019, June 11 (updated). Criteria Air Pollutants. <https://www.epa.gov/criteria-air-pollutants>.

²⁷ CARB approved the SCAQMD’s request to redesignate the SoCAB from serious nonattainment for PM₁₀ to attainment for PM₁₀ under the National AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM₁₀ standards during the period from 2004 to 2007. In June 2013, the EPA approved the State of California’s request to redesignate the PM₁₀ nonattainment area to attainment of the PM₁₀ National AAQS, effective on July 26, 2013.

²⁸ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

²⁹ US Environmental Protection Agency (USEPA). 2018, October 31 (updated). Ground Level Ozone Basics.

³⁰ California Air Resources Board (CARB). 2017, May 5. Area Designations Maps/State and National. <http://www.arb.ca.gov/desig/desig.htm>.

learning deficits, and lowered IQ.^{31,32} The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted stricter lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.³³ As a result of these violations, the Los Angeles County portion of the SoCAB is designated nonattainment under the National AAQS for lead.³⁴ Because emissions of lead are found only in projects that are permitted by SCAQMD, lead is not a pollutant of concern for the project.

TOXIC AIR CONTAMINANTS

The public's exposure to air pollutants classified as toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

³¹ South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

³² US Environmental Protection Agency (USEPA). 2018, March (updated). Criteria Air Pollutants. <https://www.epa.gov/criteria-air-pollutants>.

³³ Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (SCAQMD 2012).

³⁴ South Coast Air Quality Management District (SCAQMD). 2012, May 4. Final 2012 Lead State Implementation Plan: Los Angeles County. <http://www3.aqmd.gov/hb/attachments/2011-2015/2012May/2012-May4-030.pdf>.

Air toxics from stationary sources are also regulated in California under the Air Toxics “Hot Spot” Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs.³⁵ Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

CARB has promulgated the following specific rules to limit TAC emissions:

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 13 CCR Section 2477 and Article 8, Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Community Risk

In addition, to reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005)³⁶ to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources. CARB’s recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. CARB

³⁵ California Air Resources Board (CARB). 1999. California Air Resources Board (CARB). Final Staff Report: Update to the Toxic Air Contaminant List. <https://ww3.arb.ca.gov/toxics/id/finalstaffreport.htm>.

³⁶ California Air Resources Board (CARB). 2005, April. Air Quality and Land Use Handbook: A Community Health Perspective. <https://www.arb.ca.gov/ch/handbook.pdf>.

recommendations are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

Multiple Airborne Toxics Exposure Study (MATES)

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on ambient concentrations of TACs and estimated the potential health risks from air toxics in the SoCAB. In 2008, SCAQMD conducted its third update to the MATES study (MATES III). The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, accounting for 84 percent of the cancer risk.³⁷

SCAQMD recently released the fourth update (MATES IV). The results showed that the overall monitored risk for excess cancer from a lifetime exposure to ambient levels of air toxics decreased to approximately 418 in one million. Compared to the 2008 MATES III, monitored excess cancer risks decreased by approximately 65 percent. Approximately 90 percent of the risk is attributed to mobile sources while 10 percent is attributed to TACs from stationary sources, such as refineries, metal processing facilities, gas stations, and chrome plating facilities. The largest contributor to this risk was diesel exhaust, accounting for approximately 68 percent of the air toxics risk. Compared to MATES III, MATES IV found substantial improvement in air quality and associated decrease in air toxics exposure. As a result, the estimated basin-wide population-weighted risk decreased by approximately 57 percent compared to the analysis done for the MATES III time period.³⁸

The Office of Environmental Health Hazard Assessment (OEHHA) updated the guidelines for estimating cancer risks on March 6, 2015. The new method utilizes higher estimates of cancer potency during early life exposures, which result in a higher calculation of risk. There are also differences in the assumptions on breathing rates and length of residential exposures. When combined together, SCAQMD estimates that risks for a given inhalation exposure level will be about 2.7 times higher using the proposed updated methods identified in MATES IV (e.g., 2.7 times higher than 418 in one million overall excess cancer risk).³⁹

Air Quality Management Planning

SCAQMD is the agency responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

³⁷ South Coast Air Quality Management District (SCAQMD). 2008, September. Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES III). <https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iii>.

³⁸ South Coast Air Quality Management District (SCAQMD). 2015, October 3. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV). <http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf>.

³⁹ South Coast Air Quality Management District (SCAQMD). 2015, October 3. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV). <http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf>.

2016 AQMP

On March 3, 2017, SCAQMD adopted the 2016 AQMP as an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following National AAQS:

- 2008 National 8-hour ozone standard by 2031,
- 2012 National annual PM_{2.5} standard by 2025⁴⁰,
- 2006 National 24-hour PM_{2.5} standard by 2019,
- 1997 National 8-hour ozone standard by 2023, and the
- 1979 National 1-hour ozone standard by year 2022.

It is projected that total NO_x emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone standard by year 2022⁴¹, which requires reducing NO_x emissions in the SoCAB to 250 tpd. This is approximately 45 percent additional reductions above existing regulations for the 2023 ozone standard and 55 percent additional reductions above existing regulations to meet the 2031 ozone standard.

Reducing NO_x emissions would also reduce PM_{2.5} concentrations in the SoCAB. However, as the goal is to meet the 2012 federal annual PM_{2.5} standard no later than year 2025, SCAQMD is seeking to reclassify the SoCAB from “moderate” to “serious” nonattainment under this federal standard. A “moderate” nonattainment would require meeting the 2012 federal standard by no later than 2021.

Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in the 2016 AQMP would be implemented in collaboration between CARB and the EPA.⁴²

LEAD STATE IMPLEMENTATION PLAN

In 2008 EPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The rest of the SoCAB, outside the Los Angeles County nonattainment area remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to EPA for approval.

⁴⁰ The 2016 AQMP requests a reclassification from moderate to serious non-attainment for the 2012 National PM_{2.5} standard.

⁴¹ South Coast Air Quality Management District (SCAQMD). 2017, March 4. Final 2016 Air Quality Management Plan. <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15>.

⁴² South Coast Air Quality Management District (SCAQMD). 2017, March 4. Final 2016 Air Quality Management Plan. <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15>.

AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment:** a pollutant is in attainment if the CAAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment:** a pollutant is in nonattainment if there was at least one violation of a state AAQS for that pollutant in the area.
- **Nonattainment/Transitional:** a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 2. The SoCAB is designated in attainment of the California AAQS for sulfates. The SoCAB is designated as nonattainment for lead (Los Angeles County only) under the National AAQS.

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

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM ₁₀	Serious Nonattainment	Attainment/Maintenance
PM _{2.5}	Nonattainment	Nonattainment ¹
CO	Attainment	Attainment
NO ₂	Attainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only) ²
All others	Attainment/Unclassified	Attainment/Unclassified

Source: California Air Resources Board (CARB). 2018, June 12. Air Quality Standards and Area Designations. <http://www.arb.ca.gov/design/design.htm>.

¹ SCAQMD is seeking to reclassify the SoCAB from “moderate” to “serious” nonattainment under federal PM_{2.5} standard.

² In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state AAQS as a result of large industrial emitters. Remaining areas in the SoCAB are unclassified.

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the SCAQMD. The project site is located within Source Receptor

Area (SRA) 26 – Temecula Valley. The air quality monitoring station closest to the project site is the Winchester—33700 Borel Road Monitoring Station. This station monitors O₃, and PM_{2.5}. Data for PM₁₀ and NO_x is supplemented by the Lake Elsinore – W Flint Street Monitoring Station. The most current five years of data from these monitoring stations are included in Table 3, *Ambient Air Quality Monitoring Summary*. The data show regular violations of the state O₃ standards in the last five years.

Table 3 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2013	2014	2015	2016	2017
Ozone (O₃)¹					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	0	1	1	0	4
State 8-hour ≥ 0.07 ppm (days exceed threshold)	*	*	*	*	*
Federal 8-Hour > 0.075 ppm (days exceed threshold)	11	10	20	19	47
Max. 1-Hour Conc. (ppm)	0.093	0.119	0.100	0.092	0.104
Max. 8-Hour Conc. (ppm)	0.078	0.100	0.087	0.081	0.088
Nitrogen Dioxide (NO₂)²					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Federal 1-Hour ≥ 0.100 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppb)	0.0465	0.0453	0.0472	0.0513	0.0490
Coarse Particulates (PM₁₀)²					
State 24-Hour > 50 µg/m ³ (days exceed threshold)	*	*	*	*	*
Federal 24-Hour > 150 µg/m ³ (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m ³)	112.3	86.8	90.7	99.7	134.1
Fine Particulates (PM_{2.5})²					
Federal 24-Hour > 35 µg/m ³ (days exceed threshold)	*	*	*	*	*
Max. 24-Hour Conc. (µg/m ³)	37.4	33.7	41.7	31.5	27.2

Source: California Air Resources Board (CARB). 2019. Air Pollution Data Monitoring Cards (2013, 2014, 2015, 2016, and 2017).
<https://www.arb.ca.gov/adam/topfour/topfour1.php>
 ppm: parts per million; parts per billion, µg/m³: micrograms per cubic meter
 Notes: * Data not available.
¹ Data obtained from the Winchester—33700 Borel Road Monitoring Station
² Data obtained from the Lake Elsinore – W Flint Street Monitoring Station

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the

enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public. The nearest sensitive receptors to the proposed project site are the residences surrounding Pourroy Road to the northwest, west, and southwest as well as employees and students of the Temecula Valley Charter School and Preparatory School to the south.

Methodology

Projected construction-related air pollutant emissions are calculated using the California Emissions Estimator Model (CalEEMod)⁴³, Version 2016.3.2. CalEEMod compiles an emissions inventory of construction (fugitive dust, off-gas emissions, on-road emissions, and off-road emissions), area sources, indirect emissions from energy use, mobile sources, indirect emissions from waste disposal (annual only), and indirect emissions from water/wastewater (annual only) use. The calculated emissions of the project are compared to thresholds of significance for individual projects using the SCAQMD’s CEQA Air Quality Analysis Guidance Handbook.

Thresholds of Significance

The analysis of the proposed project’s air quality impacts follows the guidance and methodologies recommended in SCAQMD’s *CEQA Air Quality Handbook* and the significance thresholds on SCAQMD’s website.⁴⁴ CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. SCAQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds listed above, projects are also subject to the AAQS. These are addressed through an analysis of localized CO impacts and localized significance thresholds (LSTs).

REGIONAL SIGNIFICANCE THRESHOLDS

SCAQMD has adopted regional construction and operational emissions thresholds to determine a project’s cumulative impact on air quality in the SoCAB. Table 4 lists SCAQMD’s regional significance thresholds that are applicable for all projects uniformly regardless of size or scope. There is growing evidence that although ultrafine particulates contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from PM. However, the EPA or CARB have not yet adopted AAQS to regulate ultrafine particulates; therefore, SCAQMD has not developed thresholds for them.

Table 4 SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day

⁴³ California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). Version 2016.3.2. Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.

⁴⁴ South Coast Air Quality Management District (SCAQMD). 2019, April (revised). SCAQMD Air Quality Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

Nitrogen Oxides (NO _x)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO _x)	150 lbs/day	150 lbs/day
Particulates (PM ₁₀)	150 lbs/day	150 lbs/day
Particulates (PM _{2.5})	55 lbs/day	55 lbs/day

Source: South Coast Air Quality Management District (SCAQMD). 2019, April (revised). SCAQMD Air Quality Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Linked to increased cancer risk (PM_{2.5}, TACs)
- Aggravates respiratory disease (O₃, PM_{2.5})
- Increases bronchitis (O₃, PM_{2.5})
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O₃)
- Reduces resistance to infections and increases fatigue (O₃)
- Reduces lung growth in children (PM_{2.5})
- Contributes to heart disease and heart attacks (PM_{2.5})
- Contributes to premature death (O₃, PM_{2.5})
- Linked to lower birth weight in newborns (PM_{2.5})⁴⁵

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of PM_{2.5} is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children’s health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB.⁴⁶

Mass emissions in Table 4 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. Therefore, regional emissions from a single project do not single-handedly trigger a regional health impact. SCAQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the SoCAB. To achieve the health-based standards established by the EPA, SCAQMD prepares an AQMP that details regional programs to attain the AAQS.

⁴⁵ South Coast Air Quality Management District (SCAQMD). 2015. Health Effects of Air Pollution.

<http://www.aqmd.gov/docs/default-source/publications/brochures/the-health-effects-of-air-pollution-brochure.pdf>.

⁴⁶ South Coast Air Quality Management District (SCAQMD). 2015, October. “Blueprint for Clean Air: 2016 AQMP White Paper.” 2016 AQMP White Papers Web Page. <https://www.aqmd.gov/docs/default-source/Agendas/aqmp/white-paper-working-groups/wp-blueprint-final.pdf?sfvrsn=2>.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hot spot analysis conducted for the attainment by SCAQMD for busiest intersections in Los Angeles during the peak morning and afternoon periods plan did not predict a violation of CO standards.⁴⁷ As identified in SCAQMD's 2003 AQMP⁴⁸ and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years, prior to redesignation, were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.⁴⁹

LOCALIZED SIGNIFICANCE THRESHOLDS

SCAQMD developed LSTs for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at the project site (offsite mobile-source emissions are not included in the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS and are shown in Table 5.

Table 5 SCAQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO ₂ Standard (CAAQS)	0.18 ppm
Annual NO ₂ Standard (CAAQS)	0.03 ppm
24-Hour PM ₁₀ Standard – Construction (SCAQMD) ¹	10.4 µg/m ³
24-Hour PM _{2.5} Standard – Construction (SCAQMD) ¹	10.4 µg/m ³
24-Hour PM ₁₀ Standard – Operation (SCAQMD) ¹	2.5 µg/m ³

⁴⁷ The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

⁴⁸ South Coast Air Quality Management District (SCAQMD). 2003, August. 2003 Air Quality Management Plan. Appendix V. <https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2003-aqmp>.

⁴⁹ Bay Area Air Quality Management District (BAAQMD). 2017, May. California Environmental Quality Act Air Quality Guidelines. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

24-Hour PM _{2.5} Standard – Operation (SCAQMD) ¹	2.5 µg/m ³
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Source: South Coast Air Quality Management District (SCAQMD). 2019, April (revised). SCAQMD Air Quality Significance Thresholds.
 ppm – parts per million; µg/m³ – micrograms per cubic meter
¹ Threshold is based on SCAQMD Rule 403. Since the SoCAB is in nonattainment for PM₁₀ and PM_{2.5}, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, SCAQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated onsite that would trigger the levels shown in Table 5 for projects under 5-acres. These “screening-level” LSTs tables are the localized significance thresholds for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required to compare concentrations of air pollutants generated by the project to the localized concentrations shown in Table 5.

In accordance with SCAQMD’s LST methodology, construction LSTs are based on the acreage disturbed per day based on equipment use. The construction LSTs for the project site in SRA 26 are shown in Table 6, SCAQMD Screening-Level Construction Localized Significance Thresholds, for receptors within 82 feet (25 meters).

Table 6 SCAQMD Construction Localized Significance Thresholds

Acreage Disturbed	Threshold (lbs/day) ¹			
	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Coarse Particulates (PM ₁₀)	Fine Particulates (PM _{2.5})
≤1.00 Acre Disturbed Per Day	162	750	4.0	3.0
1.31 Acres Disturbed Per Day	184	859	4.9	3.3
2.50 Acres Disturbed Per Day	257	1,244	8.0	4.7
3.50 Acres Disturbed Per Day	302	1,532	9.99	6.0
4.00 Acres Disturbed Per Day	325	1,676	10.99	6.67

Sources:
 South Coast Air Quality Management District (SCAQMD). 2008, July. Final Localized Significance Threshold Methodology. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>.
 South Coast Air Quality Management District (SCAQMD). 2011. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf>
¹ LSTs are based on receptors within 82 feet (25 meters) in SRA 26

Because the project is not an industrial project that has the potential to emit substantial sources of stationary emissions, operational LSTs are not an air quality impact of concern associated with the project.

Whenever a project would require use of chemical compounds that have been identified in SCAQMD Rule 1401, placed on CARB’s air toxics list pursuant to AB 1807, or placed on the EPA’s National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the SCAQMD. Table 7, *Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. The purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project. (*California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369 (Case No. S213478)*). CEQA does not require CEQA-level environmental document to analyze the environmental effects of attracting

development and people to an area. However, the environmental document must analyze the impacts of environmental hazards on future users, when a proposed project exacerbates an existing environmental hazard or condition. Residential, commercial, and office uses do not use substantial quantities of TACs and typically do not exacerbate existing hazards, so these thresholds are typically applied to new industrial projects.

Table 7 SCAQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden in areas ≥ 1 in 1 million	> 0.5 excess cancer cases
Source: South Coast Air Quality Management District (SCAQMD). 2019, April (revised). SCAQMD Air Quality Significance Thresholds. http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf .	

GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,⁵⁰ carbon (CO₂), methane (CH₄), and ozone (O₃)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons.^{51,52,53} The major GHG are briefly described below.

- **Carbon dioxide (CO₂)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH₄)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.
- **Nitrous oxide (N₂O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.
- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.
 - **Chlorofluorocarbons (CFCs)** are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere

⁵⁰ Water vapor (H₂O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

⁵¹ Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

⁵² California Air Resources Board (CARB). 2017, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. <https://www.arb.ca.gov/cc/shortlived/shortlived.htm>.

⁵³ Intergovernmental Panel on Climate Change (IPCC). 2001. Third Assessment Report: Climate Change 2001. New York: Cambridge University Press. https://www.ipcc.ch/site/assets/uploads/2018/03/WGI_TAR_full_report.pdf.

where, given suitable conditions, they break down ozone. These gases are also ozone-depleting gases and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

- **Perfluorocarbons (PFCs)** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF₄] and perfluoroethane [C₂F₆]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.
- **Sulfur Hexafluoride (SF₆)** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF₆ is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.
- **Hydrochlorofluorocarbons (HCFCs)** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.
- **Hydrofluorocarbons (HFCs)** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs.^{54,55}

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 8. The GWP is used to convert GHGs to CO₂-equivalence (CO₂e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fourth Assessment Report (AR4) GWP values for CH₄, a project that generates 10 metric tons (MT) of CH₄ would be equivalent to 250 MT of CO₂.⁵⁶

⁵⁴ Intergovernmental Panel on Climate Change (IPCC). 2001. Third Assessment Report: Climate Change 2001. New York: Cambridge University Press. https://www.ipcc.ch/site/assets/uploads/2018/03/WGI_TAR_full_report.pdf.

⁵⁵ US Environmental Protection Agency (USEPA). 2019. Overview of Greenhouse Gases. <http://www3.epa.gov/climatechange/ghgemissions/gases.html>.

⁵⁶ Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007. New York: Cambridge University Press.

Table 8 GHG Emissions and Their Relative Global Warming Potential Compared to CO₂

GHGs	Second Assessment Report Atmospheric Lifetime (Years)	Fourth Assessment Report Atmospheric Lifetime (Years)	Second Assessment Report Global Warming Potential Relative to CO ₂ ¹	Fourth Assessment Report Global Warming Potential Relative to CO ₂ ¹
Carbon Dioxide (CO ₂)	50 to 200	50 to 200	1	1
Methane ² (CH ₄)	12 (±3)	12	21	25
Nitrous Oxide (N ₂ O)	120	114	310	298
Hydrofluorocarbons:				
HFC-23	264	270	11,700	14,800
HFC-32	5.6	4.9	650	675
HFC-125	32.6	29	2,800	3,500
HFC-134a	14.6	14	1,300	1,430
HFC-143a	48.3	52	3,800	4,470
HFC-152a	1.5	1.4	140	124
HFC-227ea	36.5	34.2	2,900	3,220
HFC-236fa	209	240	6,300	9,810
HFC-4310mee	17.1	15.9	1,300	1,030
Perfluoromethane: CF ₄	50,000	50,000	6,500	7,390
Perfluoroethane: C ₂ F ₆	10,000	10,000	9,200	12,200
Perfluorobutane: C ₄ F ₁₀	2,600	NA	7,000	8,860
Perfluoro-2-methylpentane: C ₆ F ₁₄	3,200	NA	7,400	9,300
Sulfur Hexafluoride (SF ₆)	3,200	NA	23,900	22,800

Source: Intergovernmental Panel on Climate Change (IPCC). 1995. Second Assessment Report: Climate Change 1995

https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_sar_wg_1_full_report.pdf.

Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007. New York: Cambridge University Press.

https://www.ipcc.ch/site/assets/uploads/2018/02/ar4_syr_full_report.pdf.

Notes: The GWP values in the IPCC's Fifth Assessment Report (2013)⁵⁷ reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO₂. However, SCAQMD uses the AR4 GWP values to maintain consistency in statewide GHG emissions modeling. In addition, the 2017 Scoping Plan Update was based on the AR4 GWP values.

¹ Based on 100-year time horizon of the GWP of the air pollutant relative to CO₂.

² The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO₂ is not included.

California's Greenhouse Gas Sources and Relative Contribution

In 2018, the statewide GHG emissions inventory was updated for 2000 to 2016 emissions using the GWPs in IPCC's AR4.⁵⁸ Based on these GWPs, California produced 429.4 MMTCO₂e GHG emissions in 2016. California's transportation sector was the single largest generator of GHG emissions, producing 40.5 percent of the state's total emissions. Industrial sector emissions made up 23.4 percent, and electric power generation made up 16.1 percent of the state's emissions inventory. Other major sectors of GHG emissions include

⁵⁷ Intergovernmental Panel on Climate Change (IPCC). 2013. Fifth Assessment Report: Climate Change 2013. New York: Cambridge University Press. https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_all_final.pdf.

⁵⁸ Methodology for determining the statewide GHG inventory is not the same as the methodology used to determine statewide GHG emissions under Assembly Bill 32 (2006).

commercial and residential (12.0 percent), agriculture and forestry (7.9 percent) and other (solvents and chemicals at 0.2 percent).⁵⁹

California's GHG emissions have followed a declining trend since 2007. In 2016, emissions from routine GHG emitting activities statewide were 429 MMTCO_{2e}, or 12 MMTCO_{2e} lower than 2015 levels. This represents an overall decrease of 13 percent since peak levels in 2004 and 2 MMTCO_{2e} below the 1990 level and the state's 2020 GHG target. During the 2000 to 2016 period, per capita GHG emissions in California have continued to drop from a peak in 2001 of 14.0 MTCO_{2e} per capita to 10.8 MTCO_{2e} per capita in 2016, a 23 percent decrease. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product (GDP)) is declining, representing a 38 percent decline since the 2001 peak, while the state's GDP has grown 41 percent during this period.⁶⁰

Regulatory Settings

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

The U.S. Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements, but allow the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation.⁶¹

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO₂, CH₄, N₂O, hydrofluorocarbons, perfluorocarbons, and SF₆—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions and, per South Coast Air Quality Management District guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO₂ per year are required to submit an annual report.

⁵⁹ California Air Resources Board (CARB). 2018, February. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets. <https://www.arb.ca.gov/cc/inventory/data/data.htm>.

⁶⁰ California Air Resources Board (CARB). 2018, July 11. 2018 Edition California Greenhouse Gas Inventory for 2000-2016: By Category as Defined in the 2008 Scoping Plan. https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf.

⁶¹ US Environmental Protection Agency (USEPA). 2009, December. EPA: Greenhouse Gases Threaten Public Health and the Environment. Science overwhelmingly shows greenhouse gas concentrations at unprecedented levels due to human activity. https://archive.epa.gov/epapages/newsroom_archive/newsreleases/08d11a451131bca585257685005bf252.html.

Update to Corporate Average Fuel Economy Standards (2010/2012)

The current Corporate Average Fuel Economy standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017–2025 that will require a fleet average of 54.5 miles per gallon in 2025. However, the EPA is reexamining the 2017-2025 emissions standards.

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the Clean Air Act, the EPA has been developing regulations for new stationary sources such as power plants, refineries, and other large sources of emissions. Pursuant to former President Obama’s 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources also. However, the EPA is reviewing the Clean Power Plan under President Trump’s Energy Independence Executive Order.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32) and Senate Bill 375 (SB 375).

Executive Order S-3-05

Executive Order S-3-05, signed June 1, 2005. Executive Order S-3-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32. AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-03-05.

CARB 2008 Scoping Plan

The final Scoping Plan was adopted by CARB on December 11, 2008. The *2008 Scoping Plan* identified that GHG emissions in California are anticipated to be approximately 596 MMTCO_{2e} in 2020. In December 2007,

CARB approved a 2020 emissions limit of 427 MMTCO_{2e} (471 million tons) for the state.⁶² In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 MTCO_{2e} per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

First Update to the Scoping Plan

CARB completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The First Update to the Scoping Plan was adopted at the May 22, 2014, board hearing. The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the original 2008 Scoping Plan. As part of the update, CARB recalculated the 1990 GHG emission levels with the updated AR4 GWPs, and the 427 MMTCO_{2e} 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher at 431 MMTCO_{2e}.⁶³

As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the update also addresses the state's longer-term GHG goals within a post-2020 element. The post-2020 element provides a high-level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the state to adopt a midterm target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with or exceeds the trajectory created by statewide goals.⁶⁴ CARB identified that reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit.⁶⁵

Executive Order B-30-15

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions in the state to 40 percent of 1990 levels by year 2030. Executive Order B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in Executive Order S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaptation strategy, Safeguarding California, in order to ensure climate change is accounted for in state planning and investment decisions.

⁶² California Air Resources Board (CARB). 2008, October. Climate Change Proposed Scoping Plan, a Framework for Change. <https://ww3.arb.ca.gov/cc/scopingplan/document/psp.pdf>.

⁶³ California Air Resources Board (CARB). 2014, May 15. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006. <http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm>.

⁶⁴ California Air Resources Board (CARB). 2014, May 15. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006. <http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm>.

⁶⁵ California Air Resources Board (CARB). 2014, May 15. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006. <http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm>.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

2017 Climate Change Scoping Plan Update

Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, CARB adopted the 2017 Climate Change Scoping Plan Update, which outlines potential regulations and programs, including strategies consistent with AB 197 requirements, to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 MMTCO_{2e} for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.⁶⁶

California's climate strategy will require contributions from all sectors of the economy, including enhanced focus on zero- and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, such as solar roofs, wind, and other types of distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning, to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for GHG reductions at stationary sources complement local air pollution control efforts by the local air districts to tighten criteria air pollutants and TACs emissions limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks;
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.

⁶⁶ California Air Resources Board (CARB). 2017, November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

- Continued implementation of SB 375.
- Development of a Natural and Working Lands Action Plan to secure California’s land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2017 Climate Change Scoping Plan also identified local governments as essential partners in achieving the State’s long-term GHG reduction goals and identified local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends statewide targets of no more than 6 MTCO_{2e} or less per capita by 2030 and 2 MTCO_{2e} or less per capita by 2050. CARB recommends that local governments evaluate and adopt robust and quantitative locally appropriate goals that align with the statewide per capita targets and the State’s sustainable development objectives and develop plans to achieve the local goals. The statewide per capita goals were developed by applying the percent reductions necessary to reach the 2030 and 2050 climate goals (i.e., 40 percent and 80 percent, respectively) to the State’s 1990 emissions limit established under AB 32. For CEQA projects, CARB states that lead agencies have discretion to develop evidenced-based numeric thresholds (mass emissions, per capita, or per service population)—consistent with the Scoping Plan and the state’s long-term GHG goals. To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT, and direct investments in GHG reductions within the project’s region that contribute potential air quality, health, and economic co-benefits. Where further project design or regional investments are infeasible or not proven to be effective, CARB recommends mitigating potential GHG impacts through purchasing and retiring carbon credits.

The Scoping Plan scenario is set against what is called the business-as-usual (BAU) yardstick—that is, what would the GHG emissions look like if the State did nothing at all beyond the existing policies that are required and already in place to achieve the 2020 limit, as shown in Table 9. It includes the existing renewables requirements, advanced clean cars, the “10 percent” Low Carbon Fuel Standard (LCFS), and the SB 375 program for more vibrant communities, among others. However, it does not include a range of new policies or measures that have been developed or put into statute over the past two years. Also shown in the table, the known commitments are expected to result in emissions that are 60 MMTCO_{2e} above the target in 2030. If the estimated GHG reductions from the known commitments are not realized due to delays in implementation or technology deployment, the post-2020 Cap-and-Trade Program would deliver the additional GHG reductions in the sectors it covers to ensure the 2030 target is achieved.

Table 9 2017 Climate Change Scoping Plan Emissions Reductions Gap

Modeling Scenario	2030 GHG Emissions MMTCO _{2e}
Reference Scenario (Business-as-Usual)	389
With Known Commitments	320
2030 GHG Target	260
Gap to 2030 Target	60

Source: California Air Resources Board (CARB). 2017, January. California’s 2017 Climate Change Scoping Plan: The Strategy for Achieving California’s 2030 Greenhouse Gas Target. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

Table 10 provides estimated GHG emissions by sector, compared to 1990 levels, and the range of GHG emissions for each sector estimated for 2030.

Table 10 2017 Climate Change Scoping Plan Emissions Change by Sector

Scoping Plan Sector	1990 MMTCO ₂ e	2030 Proposed Plan Ranges MMTCO ₂ e	% Change from 1990
Agricultural	26	24-25	-8% to -4%
Residential and Commercial	44	38-40	-14% to -9%
Electric Power	108	30-53	-72% to -51%
High GWP	3	8-11	267% to 367%
Industrial	98	83-90	-15% to -8%
Recycling and Waste	7	8-9	14% to 29%
Transportation (including TCU)	152	103-111	-32% to -27%
Net Sink ¹	-7	TBD	TBD
Sub Total	431	294-339	-32% to -21%
Cap-and-Trade Program	NA	24-79	NA
Total	431	260	-40%

Source: California Air Resources Board (CARB). 2017, November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

Notes: TCU = Transportation, Communications, and Utilities; TBD: To Be Determined.

¹ Work is underway through 2017 to estimate the range of potential sequestration benefits from the natural and working lands sector.

Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH₄. Black carbon is the light-absorbing component of fine particulate matter produced during incomplete combustion of fuels. SB 1383 requires the state board, no later than January 1, 2018, to approve and begin implementing that comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030, as specified. The bill also establishes targets for reducing organic waste in landfill. On March 14, 2017, CARB adopted the “Final Proposed Short-Lived Climate Pollutant Reduction Strategy”, which identifies the state’s approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s despite the tripling of diesel fuel use.⁶⁷ In-use on-road rules are expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. SCAQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these char broilers by over 80 percent.⁶⁸ Additionally, SCAQMD Rule 445 limits installation of new fireplaces in the SoCAB.

⁶⁷ California Air Resources Board (CARB). 2017, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. <https://www.arb.ca.gov/cc/shortlived/shortlived.htm>.

⁶⁸ California Air Resources Board (CARB). 2017, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. <https://www.arb.ca.gov/cc/shortlived/shortlived.htm>.

Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035.⁶⁹ The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 MMTCO_{2e} of reductions by 2020 and 15 MMTCO_{2e} of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met.⁷⁰

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology and recently released another update in February 2018. The updated targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update, while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks relative to 2005. This excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies such as statewide road user pricing. The proposed targets call for greater per capita GHG emission reductions from SB 375 than are currently in place, which for 2035, translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs. As proposed, CARB staff's proposed targets would result in an additional reduction of over 8 MMTCO_{2e} in 2035 compared to the current targets. For the next round of SCS updates, CARB's updated targets for the SCAG region are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita

⁶⁹ California Air Resources Board (CARB). 2010, August. Staff Report Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375. https://ww3.arb.ca.gov/cc/sb375/staffreport_sb375080910.pdf.

⁷⁰ California Air Resources Board (CARB). 2010, August. Staff Report Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375. https://ww3.arb.ca.gov/cc/sb375/staffreport_sb375080910.pdf.

GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent).⁷¹ CARB adopted the updated targets and methodology on March 22, 2018. All SCSs adopted after October 1, 2018 are subject to these new targets.

SCAG's 2016-2040 RTP/SCS

SB 375 requires each MPO to prepare an SCS in their regional transportation plan. For the SCAG region, the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted on April 7, 2016 and is an update to the 2012 RTP/SCS.⁷² In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

The 2016-2040 RTP/SCS projects that the SCAG region will meet or exceed the passenger per capita targets set in 2010 by CARB. It is projected that VMT per capita in the region for year 2040 would be reduced by 7.4 percent with implementation of the 2016-2040 RTP/SCS compared to a no-plan year 2040 scenario. Under the 2016-2040 RTP/SCS, SCAG anticipates lowering GHG emissions 8 percent below 2005 levels by 2020, 18 percent by 2035, and 21 percent by 2040. The 18 percent reduction by 2035 over 2005 levels represents a 2 percent increase in reduction compared to the 2012 RTP/SCS projection. Overall, the SCS is meant to provide growth strategies that will achieve the aforementioned regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high quality transit areas and livable corridors and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles.⁷³ However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and was anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under *Federal Laws*, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car

⁷¹ California Air Resources Board (CARB). 2018, February. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets. <https://www.arb.ca.gov/cc/inventory/data/data.htm>.

⁷² Southern California Association of Governments (SCAG). 2016, April. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. <http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf>.

⁷³ Southern California Association of Governments (SCAG). 2016, April. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. <http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf>.

program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Senate Bills 1078, 107, X1-2, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the RPS established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08 was signed in November 2008, which expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon), was signed into law in September 2015. SB 350 establishes tiered increases to the RPS of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals,

meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_{2e} from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directs the number of zero-emission vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions from the transportation sector 80 percent below 1990 levels.

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017.

The 2016 Standards continues to improve upon the previous 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Under the 2016 Standards, residential and nonresidential buildings are 28 and 5 percent more energy efficient than the 2013 Standards, respectively.⁷⁴ Buildings that are constructed in accordance with the 2013 Building Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the prior 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features. While the 2016 standards do not achieve zero net energy, they do get very close to the state's goal and make important steps toward changing residential building practices in California. The 2019 standards will take the final step to achieve zero net energy for newly constructed residential buildings throughout California.⁷⁵

The 2019 standards move towards cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of 3 stories and less. Four key areas the 2019 standards will focus on include 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3)

⁷⁴ California Energy Commission (CEC). 2015, June 10. 2016 Building Energy Efficiency Standards, Adoption Hearing Presentation. <http://www.energy.ca.gov/title24/2016standards/rulemaking/documents>.

⁷⁵ California Energy Commission (CEC). 2015. 2016 Building Energy and Efficiency Standards Frequently Asked Questions. https://www2.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf.

residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements.⁷⁶ Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards while single-family homes will be 7 percent more energy efficient.⁷⁷ When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards.⁷⁸

California Building Code: CALGreen

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.⁷⁹ The mandatory provisions of CALGreen became effective January 1, 2011 and were last updated in 2016. The 2016 CALGreen became effective on January 1, 2017. The CEC adopted the voluntary standards of the 2019 CALGreen on October 3, 2018. The 2019 CALGreen standards become effective January 1, 2020.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006 and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Regulations

California's Integrated Waste Management Act of 1989 (AB 939; Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses.

The California Solid Waste Reuse and Recycling Access Act (AB 1327; Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act

⁷⁶ California Energy Commission (CEC). 2018. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html.

⁷⁷ California Energy Commission (CEC). 2018. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf.

⁷⁸ California Energy Commission (CEC). 2018. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf.

⁷⁹ The green building standards became mandatory in the 2010 edition of the code.

required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

Section 5.408 of the 2016 CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

In October of 2014 Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

Water Efficiency Regulations

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed “SBX7-7.” SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Thresholds of Significance

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;

3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.⁸⁰

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency⁸¹:

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.
- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. Project-related GHG emissions include on-road transportation, energy use, water use, wastewater generation, solid waste disposal, area sources, off-road emissions, and construction activities. The SCAQMD Working Group identified that because construction activities would result in a “one-time” net increase in GHG emissions, construction activities should be amortized into the operational phase GHG emissions inventory based on the service life of a building. For buildings in general, it is reasonable to look at a 30-year time frame, since this is a typical interval before a new building requires the first major renovation. SCAQMD identified a screening-level threshold of 3,000 MTCO_{2e} annually for all land use types or the following land-use-specific thresholds: 1,400 MTCO_{2e} for commercial projects, 3,500 MTCO_{2e} for residential projects, and 3,000 MTCO_{2e} for mixed-use projects. These interim bright-line screening-level criteria are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, less than cumulatively considerable impact

⁸⁰ The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

⁸¹ South Coast Air Quality Management District (SCAQMD). 2010, September 28. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 15. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf).

on GHG emissions. SCAQMD recommends use of the 3,000 MTCO_{2e} interim bright-line screening-level criterion for all project types.⁸²

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

The SCAQMD Working Group has identified an efficiency target for projects that exceed the screening threshold of 4.8 MTCO_{2e} per year per service population (MTCO_{2e}/year/SP) for project-level analyses and 6.6 MTCO_{2e}/year/SP for plan level projects (e.g., program-level projects such as general plans) for the year 2020.⁸³ The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.⁸⁴ If a proposed project's horizon year is beyond year 2020, the efficiency target would need to be adjusted based on the mid-term GHG reduction target of SB 32, which establishes a target of 40 percent below 1990 levels by 2030, and the long-term reduction goal of Executive Order S-03-05, which sets a goal of 80 percent below 1990 levels by 2050.

For purposes of this analysis, because it has not developed its own numeric GHG significance threshold, the District utilizes the SCAQMD's bright-line screening-level criterion of 3,000 MTCO_{2e} per year as the significance threshold for this project. If the project's operation-phase emissions exceed the bright-line screening-level criterion, GHG emissions would be considered potentially significant in the absence of mitigation measures.

⁸² South Coast Air Quality Management District (SCAQMD). 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf).

⁸³ It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

⁸⁴ SCAQMD took the 2020 statewide GHG reduction target for land use only GHG emissions sectors and divided it by the 2020 statewide employment for the land use sectors to derive a per capita GHG efficiency metric that coincides with the GHG reduction targets of AB 32 for year 2020.

Regional Construction Emissions Worksheet:

PHASE I

Site Prep		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		2020 Summer					
Onsite	Fugitive Dust					7.8238	4.2606
	Off-Road	4.0765	42.4173	21.5136	0.038	2.1974	2.0216
	Total	4.0765	42.4173	21.5136	0.038	10.0212	6.2822
Offsite	Hauling	1.1926	54.9107	6.7752	0.1766	3.9558	1.2117
	Vendor	0	0	0	0	0	0
	Worker	0.0916	0.0542	0.7258	1.99E-03	0.1867	0.0506
	Total	1.2842	54.9648	7.501	0.1786	4.1425	1.2624
TOTAL		5.3607	97.3821	29.0146	0.2166	14.1637	7.5446
		2020 Winter					
Onsite	Fugitive Dust					7.8238	4.2606
	Off-Road	4.0765	42.4173	21.5136	0.038	2.1974	2.0216
	Total	4.0765	42.4173	21.5136	0.038	10.0212	6.2822
Offsite	Hauling	1.2545	55.3909	7.9352	0.1721	3.9583	1.2141
	Vendor	0	0	0	0	0	0
	Worker	0.0897	0.056	0.5871	1.79E-03	0.1867	0.0506
	Total	1.3442	55.4469	8.5223	0.1739	4.145	1.2647
TOTAL		5.4207	97.8642	30.0359	0.2119	14.1662	7.5469
		2020					
Onsite	Fugitive Dust	0	0	0	0	7.8238	4.2606
	Off-Road	4.0765	42.4173	21.5136	0.038	2.1974	2.0216
	Total	4.0765	42.4173	21.5136	0.038	10.0212	6.2822
Offsite	Hauling	1.2545	55.3909	7.9352	0.1766	3.9583	1.2141
	Vendor	0	0	0	0	0	0
	Worker	0.0916	0.056	0.7258	0.00199	0.1867	0.0506
	Total	1.3442	55.4469	8.5223	0.1786	4.145	1.2647
TOTAL		5.4207	97.8642	30.0359	0.2166	14.1662	7.5469

Rough Grading		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		2020 Summer					
Onsite	Fugitive Dust					3.7079	1.5375
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1018	0.0602	0.8064	2.21E-03	0.2074	0.0562
	Total	0.1018	0.0602	0.8064	2.21E-03	0.2074	0.0562
TOTAL		4.5519	50.2577	32.7647	0.0642	6.0892	3.5937
		2020 Winter					
Onsite	Fugitive Dust					3.7079	1.5375
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0997	0.0623	0.6524	1.98E-03	0.2074	0.0562
	Total	0.0997	0.0623	0.6524	1.98E-03	0.2074	0.0562
TOTAL		4.5498	50.2598	32.6107	0.0640	6.0892	3.5937
		2020					
Onsite	Fugitive Dust	0	0	0	0	3.7079	1.5375
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1018	0.0623	0.8064	0.00221	0.2074	0.0562
	Total	0.1018	0.0623	0.8064	0.00221	0.2074	0.0562
TOTAL		4.5519	50.2598	32.7647	0.06421	6.0892	3.5937

Fine Grading								
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total	
Onsite		2020 Summer						
	Fugitive Dust					3.7079	1.5375	
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2	
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375	
Offsite								
	Hauling	0	0	0	0	0	0	
	Vendor	0	0	0	0	0	0	
	Worker	0.1018	0.0602	0.8064	2.21E-03	0.2074	0.0562	
	Total	0.1018	0.0602	0.8064	2.21E-03	0.2074	0.0562	
TOTAL		4.5519	50.2577	32.7647	0.0642	6.0892	3.5937	
Onsite		2020 Winter						
	Fugitive Dust					3.7079	1.5375	
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2	
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375	
Offsite								
	Hauling	0	0	0	0	0	0	
	Vendor	0	0	0	0	0	0	
	Worker	0.0997	0.0623	0.6524	1.98E-03	0.2074	0.0562	
	Total	0.0997	0.0623	0.6524	1.98E-03	0.2074	0.0562	
TOTAL		4.5498	50.2598	32.6107	0.0640	6.0892	3.5937	
Onsite		2020						
	Fugitive Dust	0	0	0	0	3.7079	1.5375	
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2	
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375	
Offsite								
	Hauling	0	0	0	0	0	0	
	Vendor	0	0	0	0	0	0	
	Worker	0.1018	0.0623	0.8064	0.00221	0.2074	0.0562	
	Total	0.1018	0.0623	0.8064	0.00221	0.2074	0.0562	
TOTAL		4.5519	50.2598	32.7647	0.06421	6.0892	3.5937	

Building Construction 2020								
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total	
Onsite		2020 Summer						
	Off-Road	2.1198	19.186	16.8485	0.0269	1.1171	1.0503	
	Total	2.1198	19.186	16.8485	0.0269	1.1171	1.0503	
Offsite								
	Hauling	0	0	0	0	0	0	
	Vendor	0.0585	2.1607	0.3953	5.49E-03	0.1381	0.0484	
	Worker	0.2697	0.1595	2.137	5.86E-03	0.5497	0.149	
	Total	0.3282	2.3202	2.5323	0.0114	0.6878	0.1974	
TOTAL		2.4480	21.5062	19.3808	0.0383	1.8049	1.2477	
Onsite		2020 Winter						
	Off-Road	2.1198	19.186	16.8485	0.0269	1.1171	1.0503	
	Total	2.1198	19.186	16.8485	0.0269	1.1171	1.0503	
Offsite								
	Hauling	0	0	0	0	0	0	
	Vendor	0.0617	2.1494	0.4628	5.28E-03	0.1383	0.0485	
	Worker	0.2641	0.165	1.7287	5.26E-03	0.5497	0.149	
	Total	0.3259	2.3144	2.1916	0.0105	0.6879	0.1975	
TOTAL		2.4457	21.5004	19.0401	0.0374	1.8050	1.2478	
Onsite		2020						
	Off-Road	2.1198	19.186	16.8485	0.0269	1.1171	1.0503	
	Total	2.1198	19.186	16.8485	0.0269	1.1171	1.0503	
Offsite								
	Hauling	0	0	0	0	0	0	
	Vendor	0.0617	2.1607	0.4628	0.00549	0.1383	0.0485	
	Worker	0.2697	0.165	2.137	0.00586	0.5497	0.149	
	Total	0.3282	2.3202	2.5323	0.0114	0.6879	0.1975	
TOTAL		2.4480	21.5062	19.3808	0.0383	1.8050	1.2478	

Building Construction 2021

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Off-Road	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
	Total	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.049	1.9433	0.3467	5.44E-03	0.1296	0.0401
	Worker	0.2513	0.1432	1.9595	5.66E-03	0.5496	0.149
	Total	0.3003	2.0865	2.3062	0.0111	0.6791	0.1891
TOTAL		2.2012	19.5186	18.8814	0.0380	1.6377	1.0904
Onsite		2021 Winter					
	Off-Road	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
	Total	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0521	1.9266	0.4102	5.24E-03	0.1297	0.0402
	Worker	0.2466	0.148	1.5817	5.08E-03	0.5496	0.149
	Total	0.2987	2.0746	1.9918	0.0103	0.6792	0.1892
TOTAL		2.1996	19.5067	18.5670	0.0372	1.6378	1.0905
Onsite		2021					
	Off-Road	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
	Total	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0521	1.9433	0.4102	0.00544	0.1297	0.0402
	Worker	0.2513	0.148	1.9595	0.00566	0.5496	0.149
	Total	0.3003	2.0865	2.3062	0.0111	0.6792	0.1892
TOTAL		2.2012	19.5186	18.8814	0.0380	1.6378	1.0905

Architectural Coating

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Archit. Coating	28.5331				0	0
	Off-Road	0.2422	1.6838	1.8314	2.97E-03	0.1109	0.1109
	Total	28.7752	1.6838	1.8314	2.97E-03	0.1109	0.1109
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.056	0.0331	0.4435	1.22E-03	0.1141	0.0309
	Total	0.056	0.0331	0.4435	1.22E-03	0.1141	0.0309
TOTAL		28.8312	1.7169	2.2749	0.0042	0.2250	0.1418
Onsite		2021 Winter					
	Archit. Coating	28.5331				0	0
	Off-Road	0.2422	1.6838	1.8314	2.97E-03	0.1109	0.1109
	Total	28.7752	1.6838	1.8314	2.97E-03	0.1109	0.1109
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0548	0.0343	0.3588	1.09E-03	0.1141	0.0309
	Total	0.0548	0.0343	0.3588	1.09E-03	0.1141	0.0309
TOTAL		28.8300	1.7181	2.1902	0.0041	0.2250	0.1418
Onsite		2021					
	Archit. Coating	28.5331	0	0	0	0	0
	Off-Road	0.2422	1.6838	1.8314	0.00297	0.1109	0.1109
	Total	28.7752	1.6838	1.8314	0.00297	0.1109	0.1109
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.056	0.0343	0.4435	0.00122	0.1141	0.0309
	Total	0.056	0.0343	0.4435	0.00122	0.1141	0.0309
TOTAL		28.8312	1.7181	2.2749	0.00419	0.225	0.1418

Asphalt Paving

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer						
	Off-Road		1.3566	14.0656	14.6521	0.0228	0.7528	0.6926
	Paving		0.5057				0	0
	Total		1.8622	14.0656	14.6521	0.0228	0.7528	0.6926
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.0763	0.0451	0.6048	1.66E-03	0.1556	0.0422
	Total		0.0763	0.0451	0.6048	1.66E-03	0.1556	0.0422
TOTAL			1.9385	14.1107	15.2569	0.0245	0.9084	0.7348
Onsite		2021 Winter						
	Off-Road		1.3566	14.0656	14.6521	0.0228	0.7528	0.6926
	Paving		0.5057				0	0
	Total		1.8622	14.0656	14.6521	0.0228	0.7528	0.6926
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.0748	0.0467	0.4893	1.49E-03	0.1556	0.0422
	Total		0.0748	0.0467	0.4893	1.49E-03	0.1556	0.0422
TOTAL			1.9370	14.1123	15.1414	0.0243	0.9084	0.7348
Onsite		2021						
	Off-Road		1.3566	14.0656	14.6521	0.0228	0.7528	0.6926
	Paving		0.5057	0	0	0	0	0
	Total		1.8622	14.0656	14.6521	0.0228	0.7528	0.6926
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.0763	0.0467	0.6048	0.00166	0.1556	0.0422
	Total		0.0763	0.0467	0.6048	0.00166	0.1556	0.0422
TOTAL			1.9385	14.1123	15.2569	0.02446	0.9084	0.7348
Architectural Coating and Paving			30.7697	15.8304	17.5318	0.0287	1.1334	0.8766

PHASE 2

Fine Grading

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Fugitive Dust					2.8147	1.4417
	Off-Road	1.7109	17.9359	14.7507	0.0297	0.7749	0.7129
	Total	1.7109	17.9359	14.7507	0.0297	3.5896	2.1546
Offsite							
	Hauling	0.0994	3.9015	0.7642	0.0225	0.5168	0.1478
	Vendor	6.68E-03	0.2626	0.0541	1.00E-03	0.0242	7.22E-03
	Worker	0.0624	0.0329	0.4721	1.49E-03	0.1555	0.0421
	Total	0.1684	4.197	1.2904	0.025	0.6965	0.1971
TOTAL		1.8793	22.1329	16.0411	0.0547	4.2861	2.3517
Onsite		2023 Winter					
	Fugitive Dust					2.8147	1.4417
	Off-Road	1.7109	17.9359	14.7507	0.0297	0.7749	0.7129
	Total	1.7109	17.9359	14.7507	0.0297	3.5896	2.1546
Offsite							
	Hauling	0.1046	3.8772	0.8596	0.0219	0.5169	0.1479
	Vendor	7.08E-03	0.259	0.0625	9.60E-04	0.0242	7.23E-03
	Worker	0.0616	0.034	0.3799	1.33E-03	0.1555	0.0421
	Total	0.1733	4.1702	1.302	0.0242	0.6967	0.1973
TOTAL		1.8842	22.1061	16.0527	0.0539	4.2863	2.3519
Onsite		2023					
	Fugitive Dust	0	0	0	0	2.8147	1.4417
	Off-Road	1.7109	17.9359	14.7507	0.0297	0.7749	0.7129
	Total	1.7109	17.9359	14.7507	0.0297	3.5896	2.1546
Offsite							
	Hauling	0.1046	3.9015	0.8596	0.0225	0.5169	0.1479
	Vendor	0.00708	0.2626	0.0625	0.001	0.0242	0.00723
	Worker	0.0624	0.034	0.4721	0.00149	0.1555	0.0421
	Total	0.1733	4.197	1.302	0.025	0.6967	0.1973
TOTAL		1.8842	22.1329	16.0527	0.0547	4.2863	2.3519

Building Construction

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Off-Road	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
	Total	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0184	0.7222	0.1489	2.75E-03	0.0666	0.0199
	Worker	0.1164	0.0614	0.8812	2.77E-03	0.2902	0.0786
	Total	0.1348	0.7835	1.0301	5.52E-03	0.3569	0.0985
TOTAL		1.7076	15.1684	17.2741	0.0324	1.0566	0.7569
Onsite		2023 Winter					
	Off-Road	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
	Total	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0195	0.7124	0.172	2.65E-03	0.0667	0.0199
	Worker	0.115	0.0634	0.7092	2.49E-03	0.2902	0.0786
	Total	0.1344	0.7758	0.8811	5.14E-03	0.3569	0.0985
TOTAL		1.7072	15.1607	17.1251	0.0320	1.0566	0.7569
Onsite		2023					
	Off-Road	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
	Total	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0195	0.7222	0.172	0.00275	0.0667	0.0199
	Worker	0.1164	0.0634	0.8812	0.00277	0.2902	0.0786
	Total	0.1348	0.7835	1.0301	0.00552	0.3569	0.0985
TOTAL		1.7076	15.1684	17.2741	0.0324	1.0566	0.7569

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Off-Road	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
	Total	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.018	0.7183	0.1438	2.74E-03	0.0666	0.0199
	Worker	0.1097	0.0557	0.8262	2.67E-03	0.2902	0.0786
	Total	0.1277	0.7739	0.9701	5.41E-03	0.3569	0.0985
TOTAL		1.5993	14.2177	17.1369	0.0324	0.9702	0.6754
Onsite		2024 Winter					
	Off-Road	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
	Total	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0191	0.7086	0.1664	2.64E-03	0.0667	0.0199
	Worker	0.1087	0.0575	0.6635	2.40E-03	0.2902	0.0786
	Total	0.1277	0.766	0.8299	5.04E-03	0.3569	0.0985
TOTAL		1.5993	14.2098	16.9967	0.0320	0.9702	0.6754
Onsite		2024					
	Off-Road	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
	Total	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0191	0.7183	0.1664	0.00274	0.0667	0.0199
	Worker	0.1097	0.0575	0.8262	0.00267	0.2902	0.0786
	Total	0.1277	0.7739	0.9701	0.00541	0.3569	0.0985
TOTAL		1.5993	14.2177	17.1369	0.0324	0.9702	0.6754

Architectural Coating

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Archit. Coating	30.9375				0	0
	Off-Road	0.1808	1.2188	1.8101	2.97E-03	0.0609	0.0609
	Total	31.1182	1.2188	1.8101	2.97E-03	0.0609	0.0609
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0235	0.0119	0.1771	5.70E-04	0.0622	0.0168
	Total	0.0235	0.0119	0.1771	5.70E-04	0.0622	0.0168
TOTAL		31.1417	1.2307	1.9872	0.0035	0.1231	0.0777
Onsite		2024 Winter					
	Archit. Coating	30.9375				0	0
	Off-Road	0.1808	1.2188	1.8101	2.97E-03	0.0609	0.0609
	Total	31.1182	1.2188	1.8101	2.97E-03	0.0609	0.0609
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0233	0.0123	0.1422	5.10E-04	0.0622	0.0168
	Total	0.0233	0.0123	0.1422	5.10E-04	0.0622	0.0168
TOTAL		31.1415	1.2311	1.9523	0.0035	0.1231	0.0777
Onsite		2024					
	Archit. Coating	30.9375	0	0	0	0	0
	Off-Road	0.1808	1.2188	1.8101	0.00297	0.0609	0.0609
	Total	31.1182	1.2188	1.8101	0.00297	0.0609	0.0609
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0235	0.0123	0.1771	0.00057	0.0622	0.0168
	Total	0.0235	0.0123	0.1771	0.00057	0.0622	0.0168
TOTAL		31.1417	1.2311	1.9872	0.00354	0.1231	0.0777

Asphalt Paving		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
Off-Road	Paving	0.9882	9.5246	14.6258	0.0228	0.4685	0.431
		0.1873				0	0
	Total	1.1755	9.5246	14.6258	0.0228	0.4685	0.431
Offsite							
Hauling	Vendor	0	0	0	0	0	0
	Worker	0.0588	0.0298	0.4426	1.43E-03	0.1555	0.0421
	Total	0.0588	0.0298	0.4426	1.43E-03	0.1555	0.0421
	TOTAL	1.2343	9.5544	15.0684	0.0242	0.6240	0.4731
Onsite		2024 Winter					
Off-Road	Paving	0.9882	9.5246	14.6258	0.0228	0.4685	0.431
		0.1873				0	0
	Total	1.1755	9.5246	14.6258	0.0228	0.4685	0.431
Offsite							
Hauling	Vendor	0	0	0	0	0	0
	Worker	0.0582	0.0308	0.3554	1.28E-03	0.1555	0.0421
	Total	0.0582	0.0308	0.3554	1.28E-03	0.1555	0.0421
	TOTAL	1.2337	9.5554	14.9812	0.0241	0.6240	0.4731
Onsite		2024					
Off-Road	Paving	0.9882	9.5246	14.6258	0.0228	0.4685	0.431
		0.1873	0	0	0	0	0
	Total	1.1755	9.5246	14.6258	0.0228	0.4685	0.431
Offsite							
Hauling	Vendor	0	0	0	0	0	0
	Worker	0.0588	0.0308	0.4426	0.00143	0.1555	0.0421
	Total	0.0588	0.0308	0.4426	0.00143	0.1555	0.0421
	TOTAL	1.2343	9.5554	15.0684	0.02423	0.624	0.4731
MAX DAILY		31.14	97.86	32.76	0.22	14.17	7.55
Regional Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

Regional Construction Emissions Worksheet:

PHASE I

Site Prep

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total	
Onsite		2020 Summer						
	Fugitive Dust					7.8238	4.2606	
	Off-Road	4.0765	42.4173	21.5136	0.038	2.1974	2.0216	
	Total	4.0765	42.4173	21.5136	0.038	10.0212	6.2822	
Offsite								
	Hauling	1.1926	54.9107	6.7752	0.1766	3.9558	1.2117	
	Vendor	0	0	0	0	0	0	
	Worker	0.0916	0.0542	0.7258	1.99E-03	0.1867	0.0506	
	Total	1.2842	54.9648	7.501	0.1786	4.1425	1.2624	
TOTAL		5.3607	97.3821	29.0146	0.2166	14.1637	7.5446	
Onsite		2020 Winter						
	Fugitive Dust					7.8238	4.2606	
	Off-Road	4.0765	42.4173	21.5136	0.038	2.1974	2.0216	
	Total	4.0765	42.4173	21.5136	0.038	10.0212	6.2822	
Offsite								
	Hauling	1.2545	55.3909	7.9352	0.1721	3.9583	1.2141	
	Vendor	0	0	0	0	0	0	
	Worker	0.0897	0.056	0.5871	1.79E-03	0.1867	0.0506	
	Total	1.3442	55.4469	8.5223	0.1739	4.145	1.2647	
TOTAL		5.4207	97.8642	30.0359	0.2119	14.1662	7.5469	
Onsite		2020						
	Fugitive Dust	0	0	0	0	7.8238	4.2606	
	Off-Road	4.0765	42.4173	21.5136	0.038	2.1974	2.0216	
	Total	4.0765	42.4173	21.5136	0.038	10.0212	6.2822	
Offsite								
	Hauling	1.2545	55.3909	7.9352	0.1766	3.9583	1.2141	
	Vendor	0	0	0	0	0	0	
	Worker	0.0916	0.056	0.7258	0.00199	0.1867	0.0506	
	Total	1.3442	55.4469	8.5223	0.1786	4.145	1.2647	
TOTAL		5.4207	97.8642	30.0359	0.2166	14.1662	7.5469	

Rough Grading

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total	
Onsite		2020 Summer						
	Fugitive Dust					3.7079	1.5375	
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2	
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375	
Offsite								
	Hauling	0	0	0	0	0	0	
	Vendor	0	0	0	0	0	0	
	Worker	0.1018	0.0602	0.8064	2.21E-03	0.2074	0.0562	
	Total	0.1018	0.0602	0.8064	2.21E-03	0.2074	0.0562	
TOTAL		4.5519	50.2577	32.7647	0.0642	6.0892	3.5937	
Onsite		2020 Winter						
	Fugitive Dust					3.7079	1.5375	
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2	
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375	
Offsite								
	Hauling	0	0	0	0	0	0	
	Vendor	0	0	0	0	0	0	
	Worker	0.0997	0.0623	0.6524	1.98E-03	0.2074	0.0562	
	Total	0.0997	0.0623	0.6524	1.98E-03	0.2074	0.0562	
TOTAL		4.5498	50.2598	32.6107	0.0640	6.0892	3.5937	
Onsite		2020						
	Fugitive Dust	0	0	0	0	3.7079	1.5375	
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2	
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375	
Offsite								
	Hauling	0	0	0	0	0	0	
	Vendor	0	0	0	0	0	0	
	Worker	0.1018	0.0623	0.8064	0.00221	0.2074	0.0562	
	Total	0.1018	0.0623	0.8064	0.00221	0.2074	0.0562	
TOTAL		4.5519	50.2598	32.7647	0.06421	6.0892	3.5937	

Fine Grading

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		2020 Summer					
Onsite	Fugitive Dust					3.7079	1.5375
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1018	0.0602	0.8064	2.21E-03	0.2074	0.0562
	Total	0.1018	0.0602	0.8064	2.21E-03	0.2074	0.0562
TOTAL		4.5519	50.2577	32.7647	0.0642	6.0892	3.5937
		2020 Winter					
Onsite	Fugitive Dust					3.7079	1.5375
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0997	0.0623	0.6524	1.98E-03	0.2074	0.0562
	Total	0.0997	0.0623	0.6524	1.98E-03	0.2074	0.0562
TOTAL		4.5498	50.2598	32.6107	0.0640	6.0892	3.5937
		2020					
Onsite	Fugitive Dust	0	0	0	0	3.7079	1.5375
	Off-Road	4.4501	50.1975	31.9583	0.062	2.1739	2
	Total	4.4501	50.1975	31.9583	0.062	5.8818	3.5375
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1018	0.0623	0.8064	0.00221	0.2074	0.0562
	Total	0.1018	0.0623	0.8064	0.00221	0.2074	0.0562
TOTAL		4.5519	50.2598	32.7647	0.06421	6.0892	3.5937

Building Construction 2020

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		2020 Summer					
Onsite	Off-Road	2.1198	19.186	16.8485	0.0269	1.1171	1.0503
	Total	2.1198	19.186	16.8485	0.0269	1.1171	1.0503
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0585	2.1607	0.3953	5.49E-03	0.1381	0.0484
	Worker	0.2697	0.1595	2.137	5.86E-03	0.5497	0.149
	Total	0.3282	2.3202	2.5323	0.0114	0.6878	0.1974
TOTAL		2.4480	21.5062	19.3808	0.0383	1.8049	1.2477
		2020 Winter					
Onsite	Off-Road	2.1198	19.186	16.8485	0.0269	1.1171	1.0503
	Total	2.1198	19.186	16.8485	0.0269	1.1171	1.0503
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0617	2.1494	0.4628	5.28E-03	0.1383	0.0485
	Worker	0.2641	0.165	1.7287	5.26E-03	0.5497	0.149
	Total	0.3259	2.3144	2.1916	0.0105	0.6879	0.1975
TOTAL		2.4457	21.5004	19.0401	0.0374	1.8050	1.2478
		2020					
Onsite	Off-Road	2.1198	19.186	16.8485	0.0269	1.1171	1.0503
	Total	2.1198	19.186	16.8485	0.0269	1.1171	1.0503
Offsite	Hauling	0	0	0	0	0	0
	Vendor	0.0617	2.1607	0.4628	0.00549	0.1383	0.0485
	Worker	0.2697	0.165	2.137	0.00586	0.5497	0.149
	Total	0.3282	2.3202	2.5323	0.0114	0.6879	0.1975
TOTAL		2.4480	21.5062	19.3808	0.0383	1.8050	1.2478

Building Construction 2021

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Off-Road	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
	Total	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
Offsite		2021 Summer					
	Hauling	0	0	0	0	0	0
	Vendor	0.049	1.9433	0.3467	5.44E-03	0.1296	0.0401
	Worker	0.2513	0.1432	1.9595	5.66E-03	0.5496	0.149
	Total	0.3003	2.0865	2.3062	0.0111	0.6791	0.1891
TOTAL		2.2012	19.5186	18.8814	0.0380	1.6377	1.0904
Onsite		2021 Winter					
	Off-Road	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
	Total	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
Offsite		2021 Winter					
	Hauling	0	0	0	0	0	0
	Vendor	0.0521	1.9266	0.4102	5.24E-03	0.1297	0.0402
	Worker	0.2466	0.148	1.5817	5.08E-03	0.5496	0.149
	Total	0.2987	2.0746	1.9918	0.0103	0.6792	0.1892
TOTAL		2.1996	19.5067	18.5670	0.0372	1.6378	1.0905
Onsite		2021					
	Off-Road	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
	Total	1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
Offsite		2021					
	Hauling	0	0	0	0	0	0
	Vendor	0.0521	1.9433	0.4102	0.00544	0.1297	0.0402
	Worker	0.2513	0.148	1.9595	0.00566	0.5496	0.149
	Total	0.3003	2.0865	2.3062	0.0111	0.6792	0.1892
TOTAL		2.2012	19.5186	18.8814	0.0380	1.6378	1.0905

Architectural Coating

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Archit. Coating	28.5331				0	0
	Off-Road	0.2422	1.6838	1.8314	2.97E-03	0.1109	0.1109
	Total	28.7752	1.6838	1.8314	2.97E-03	0.1109	0.1109
Offsite		2021 Summer					
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.056	0.0331	0.4435	1.22E-03	0.1141	0.0309
	Total	0.056	0.0331	0.4435	1.22E-03	0.1141	0.0309
TOTAL		28.8312	1.7169	2.2749	0.0042	0.2250	0.1418
Onsite		2021 Winter					
	Archit. Coating	28.5331				0	0
	Off-Road	0.2422	1.6838	1.8314	2.97E-03	0.1109	0.1109
	Total	28.7752	1.6838	1.8314	2.97E-03	0.1109	0.1109
Offsite		2021 Winter					
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0548	0.0343	0.3588	1.09E-03	0.1141	0.0309
	Total	0.0548	0.0343	0.3588	1.09E-03	0.1141	0.0309
TOTAL		28.8300	1.7181	2.1902	0.0041	0.2250	0.1418
Onsite		2021					
	Archit. Coating	28.5331	0	0	0	0	0
	Off-Road	0.2422	1.6838	1.8314	0.00297	0.1109	0.1109
	Total	28.7752	1.6838	1.8314	0.00297	0.1109	0.1109
Offsite		2021					
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.056	0.0343	0.4435	0.00122	0.1141	0.0309
	Total	0.056	0.0343	0.4435	0.00122	0.1141	0.0309
TOTAL		28.8312	1.7181	2.2749	0.00419	0.225	0.1418

Asphalt Paving

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Off-Road	1.3566	14.0656	14.6521	0.0228	0.7528	0.6926
	Paving	0.5057				0	0
	Total	1.8622	14.0656	14.6521	0.0228	0.7528	0.6926
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0763	0.0451	0.6048	1.66E-03	0.1556	0.0422
	Total	0.0763	0.0451	0.6048	1.66E-03	0.1556	0.0422
TOTAL		1.9385	14.1107	15.2569	0.0245	0.9084	0.7348
Onsite		2021 Winter					
	Off-Road	1.3566	14.0656	14.6521	0.0228	0.7528	0.6926
	Paving	0.5057				0	0
	Total	1.8622	14.0656	14.6521	0.0228	0.7528	0.6926
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0748	0.0467	0.4893	1.49E-03	0.1556	0.0422
	Total	0.0748	0.0467	0.4893	1.49E-03	0.1556	0.0422
TOTAL		1.9370	14.1123	15.1414	0.0243	0.9084	0.7348
Onsite		2021					
	Off-Road	1.3566	14.0656	14.6521	0.0228	0.7528	0.6926
	Paving	0.5057	0	0	0	0	0
	Total	1.8622	14.0656	14.6521	0.0228	0.7528	0.6926
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0763	0.0467	0.6048	0.00166	0.1556	0.0422
	Total	0.0763	0.0467	0.6048	0.00166	0.1556	0.0422
TOTAL		1.9385	14.1123	15.2569	0.02446	0.9084	0.7348
Architectural Coating and Paving		30.7697	15.8304	17.5318	0.0287	1.1334	0.8766

PHASE 2

Fine Grading

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Fugitive Dust					2.8147	1.4417
	Off-Road	1.7109	17.9359	14.7507	0.0297	0.7749	0.7129
	Total	1.7109	17.9359	14.7507	0.0297	3.5896	2.1546
Offsite							
	Hauling	0.0994	3.9015	0.7642	0.0225	0.5168	0.1478
	Vendor	6.68E-03	0.2626	0.0541	1.00E-03	0.0242	7.22E-03
	Worker	0.0624	0.0329	0.4721	1.49E-03	0.1555	0.0421
	Total	0.1684	4.197	1.2904	0.025	0.6965	0.1971
TOTAL		1.8793	22.1329	16.0411	0.0547	4.2861	2.3517
Onsite		2023 Winter					
	Fugitive Dust					2.8147	1.4417
	Off-Road	1.7109	17.9359	14.7507	0.0297	0.7749	0.7129
	Total	1.7109	17.9359	14.7507	0.0297	3.5896	2.1546
Offsite							
	Hauling	0.1046	3.8772	0.8596	0.0219	0.5169	0.1479
	Vendor	7.08E-03	0.259	0.0625	9.60E-04	0.0242	7.23E-03
	Worker	0.0616	0.034	0.3799	1.33E-03	0.1555	0.0421
	Total	0.1733	4.1702	1.302	0.0242	0.6967	0.1973
TOTAL		1.8842	22.1061	16.0527	0.0539	4.2863	2.3519
Onsite		2023					
	Fugitive Dust	0	0	0	0	2.8147	1.4417
	Off-Road	1.7109	17.9359	14.7507	0.0297	0.7749	0.7129
	Total	1.7109	17.9359	14.7507	0.0297	3.5896	2.1546
Offsite							
	Hauling	0.1046	3.9015	0.8596	0.0225	0.5169	0.1479
	Vendor	0.00708	0.2626	0.0625	0.001	0.0242	0.00723
	Worker	0.0624	0.034	0.4721	0.00149	0.1555	0.0421
	Total	0.1733	4.197	1.302	0.025	0.6967	0.1973
TOTAL		1.8842	22.1329	16.0527	0.0547	4.2863	2.3519

Building Construction

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Off-Road	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
	Total	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0184	0.7222	0.1489	2.75E-03	0.0666	0.0199
	Worker	0.1164	0.0614	0.8812	2.77E-03	0.2902	0.0786
	Total	0.1348	0.7835	1.0301	5.52E-03	0.3569	0.0985
TOTAL		1.7076	15.1684	17.2741	0.0324	1.0566	0.7569
Onsite		2023 Winter					
	Off-Road	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
	Total	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0195	0.7124	0.172	2.65E-03	0.0667	0.0199
	Worker	0.115	0.0634	0.7092	2.49E-03	0.2902	0.0786
	Total	0.1344	0.7758	0.8811	5.14E-03	0.3569	0.0985
TOTAL		1.7072	15.1607	17.1251	0.0320	1.0566	0.7569
Onsite		2023					
	Off-Road	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
	Total	1.5728	14.3849	16.244	0.0269	0.6997	0.6584
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0195	0.7222	0.172	0.00275	0.0667	0.0199
	Worker	0.1164	0.0634	0.8812	0.00277	0.2902	0.0786
	Total	0.1348	0.7835	1.0301	0.00552	0.3569	0.0985
TOTAL		1.7076	15.1684	17.2741	0.0324	1.0566	0.7569

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Off-Road	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
	Total	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.018	0.7183	0.1438	2.74E-03	0.0666	0.0199
	Worker	0.1097	0.0557	0.8262	2.67E-03	0.2902	0.0786
	Total	0.1277	0.7739	0.9701	5.41E-03	0.3569	0.0985
TOTAL		1.5993	14.2177	17.1369	0.0324	0.9702	0.6754
Onsite		2024 Winter					
	Off-Road	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
	Total	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0191	0.7086	0.1664	2.64E-03	0.0667	0.0199
	Worker	0.1087	0.0575	0.6635	2.40E-03	0.2902	0.0786
	Total	0.1277	0.766	0.8299	5.04E-03	0.3569	0.0985
TOTAL		1.5993	14.2098	16.9967	0.0320	0.9702	0.6754
Onsite		2024					
	Off-Road	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
	Total	1.4716	13.4438	16.1668	0.027	0.6133	0.5769
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0191	0.7183	0.1664	0.00274	0.0667	0.0199
	Worker	0.1097	0.0575	0.8262	0.00267	0.2902	0.0786
	Total	0.1277	0.7739	0.9701	0.00541	0.3569	0.0985
TOTAL		1.5993	14.2177	17.1369	0.0324	0.9702	0.6754

Architectural Coating		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Archit. Coating	30.9375				0	0
	Off-Road	0.1808	1.2188	1.8101	2.97E-03	0.0609	0.0609
	Total	31.1182	1.2188	1.8101	2.97E-03	0.0609	0.0609
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0235	0.0119	0.1771	5.70E-04	0.0622	0.0168
	Total	0.0235	0.0119	0.1771	5.70E-04	0.0622	0.0168
TOTAL		31.1417	1.2307	1.9872	0.0035	0.1231	0.0777
Onsite		2024 Winter					
	Archit. Coating	30.9375				0	0
	Off-Road	0.1808	1.2188	1.8101	2.97E-03	0.0609	0.0609
	Total	31.1182	1.2188	1.8101	2.97E-03	0.0609	0.0609
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0233	0.0123	0.1422	5.10E-04	0.0622	0.0168
	Total	0.0233	0.0123	0.1422	5.10E-04	0.0622	0.0168
TOTAL		31.1415	1.2311	1.9523	0.0035	0.1231	0.0777
Onsite		2024					
	Archit. Coating	30.9375	0	0	0	0	0
	Off-Road	0.1808	1.2188	1.8101	0.00297	0.0609	0.0609
	Total	31.1182	1.2188	1.8101	0.00297	0.0609	0.0609
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0235	0.0123	0.1771	0.00057	0.0622	0.0168
	Total	0.0235	0.0123	0.1771	0.00057	0.0622	0.0168
TOTAL		31.1417	1.2311	1.9872	0.00354	0.1231	0.0777
Asphalt Paving		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Off-Road	0.9882	9.5246	14.6258	0.0228	0.4685	0.431
	Paving	0.1873				0	0
	Total	1.1755	9.5246	14.6258	0.0228	0.4685	0.431
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0588	0.0298	0.4426	1.43E-03	0.1555	0.0421
	Total	0.0588	0.0298	0.4426	1.43E-03	0.1555	0.0421
TOTAL		1.2343	9.5544	15.0684	0.0242	0.6240	0.4731
Onsite		2024 Winter					
	Off-Road	0.9882	9.5246	14.6258	0.0228	0.4685	0.431
	Paving	0.1873				0	0
	Total	1.1755	9.5246	14.6258	0.0228	0.4685	0.431
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0582	0.0308	0.3554	1.28E-03	0.1555	0.0421
	Total	0.0582	0.0308	0.3554	1.28E-03	0.1555	0.0421
TOTAL		1.2337	9.5554	14.9812	0.0241	0.6240	0.4731
Onsite		2024					
	Off-Road	0.9882	9.5246	14.6258	0.0228	0.4685	0.431
	Paving	0.1873	0	0	0	0	0
	Total	1.1755	9.5246	14.6258	0.0228	0.4685	0.431
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0588	0.0308	0.4426	0.00143	0.1555	0.0421
	Total	0.0588	0.0308	0.4426	0.00143	0.1555	0.0421
TOTAL		1.2343	9.5554	15.0684	0.02423	0.624	0.4731
MAX DAILY		31.14	97.86	32.76	0.22	14.17	7.55
Regional Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

Regional Construction Emissions Worksheet:

PHASE 1

Site Prep			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020				
	Fugitive Dust				7.8238	4.2606
	Off-Road		42.4173	21.5136	2.1974	2.0216
	Total		42.4173	21.5136	10.0212	6.2822
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			42.4173	21.5136	10.0212	6.2822
Onsite		2020				
	Fugitive Dust				7.8238	4.2606
	Off-Road		42.4173	21.5136	2.1974	2.0216
	Total		42.4173	21.5136	10.0212	6.2822
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			42.4173	21.5136	10.0212	6.2822
Onsite		2020				
	Fugitive Dust		0	0	7.8238	4.2606
	Off-Road		42.4173	21.5136	2.1974	2.0216
	Total		42.4173	21.5136	10.0212	6.2822
Offsite						
	Hauling		0	0	0	0
	Vendor		0	0	0	0
	Worker		0	0	0	0
	Total		0	0	0	0
TOTAL			42.4173	21.5136	10.0212	6.2822
	3.50 Acre LST		302	1,532	9.99	6.00
	Exceeds LST?		no	no	yes	yes

Rough Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020			
	Fugitive Dust			3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		50.1975	31.9583	5.8818	3.5375
Onsite		2020			
	Fugitive Dust			3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		50.1975	31.9583	5.8818	3.5375
Onsite		2020			
	Fugitive Dust	0	0	3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		50.1975	31.9583	5.8818	3.5375
	4.00 Acre LST	325	1,676	10.99	6.67
	Exceeds LST?	no	no	no	no

Fine Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020			
	Fugitive Dust			3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		50.1975	31.9583	5.8818	3.5375
Onsite		2020			
	Fugitive Dust			3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		50.1975	31.9583	5.8818	3.5375
Onsite		2020			
	Fugitive Dust	0	0	3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		50.1975	31.9583	5.8818	3.5375
4.00 Acre LST		325	1,676	10.99	6.67
Exceeds LST?		no	no	no	no

Building Construction 2020

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020				
	Off-Road		19.186	16.8485	1.1171	1.0503
	Total		19.186	16.8485	1.1171	1.0503
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			19.1860	16.8485	1.1171	1.0503
Onsite		2020				
	Off-Road		19.186	16.8485	1.1171	1.0503
	Total		19.186	16.8485	1.1171	1.0503
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			19.1860	16.8485	1.1171	1.0503
Onsite		2020				
	Off-Road		19.186	16.8485	1.1171	1.0503
	Total		19.186	16.8485	1.1171	1.0503
Offsite						
	Hauling		0	0	0	0
	Vendor		0	0	0	0
	Worker		0	0	0	0
	Total		0	0	0	0
TOTAL			19.1860	16.8485	1.1171	1.0503
1.31 Acre LST			184	859	4.94	3.31
Exceeds LST?			no	no	no	no

Building Construction 2021

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	2021				
	Off-Road	17.4321	16.5752	0.9586	0.9013
	Total	17.4321	16.5752	0.9586	0.9013
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		17.4321	16.5752	0.9586	0.9013
Onsite	2021				
	Off-Road	17.4321	16.5752	0.9586	0.9013
	Total	17.4321	16.5752	0.9586	0.9013
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		17.4321	16.5752	0.9586	0.9013
Onsite	2021				
	Off-Road	17.4321	16.5752	0.9586	0.9013
	Total	17.4321	16.5752	0.9586	0.9013
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		17.4321	16.5752	0.9586	0.9013
1.31 Acre LST		184	859	4.94	3.31
<i>Exceeds LST?</i>		<i>no</i>	<i>no</i>	<i>no</i>	<i>no</i>

Architectural Coating

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021				
	Archit. Coating				0	0
	Off-Road		1.6838	1.8314	0.1109	0.1109
	Total		1.6838	1.8314	0.1109	0.1109
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			1.6838	1.8314	0.1109	0.1109
Onsite		2021				
	Archit. Coating				0	0
	Off-Road		1.6838	1.8314	0.1109	0.1109
	Total		1.6838	1.8314	0.1109	0.1109
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			1.6838	1.8314	0.1109	0.1109
Onsite		2021				
	Archit. Coating		0	0	0	0
	Off-Road		1.6838	1.8314	0.1109	0.1109
	Total		1.6838	1.8314	0.1109	0.1109
Offsite						
	Hauling		0	0	0	0
	Vendor		0	0	0	0
	Worker		0	0	0	0
	Total		0	0	0	0
TOTAL			1.6838	1.8314	0.1109	0.1109

Asphalt Paving

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021				
	Off-Road Paving		14.0656	14.6521	0.7528	0.6926
	Total		14.0656	14.6521	0.7528	0.6926
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			14.0656	14.6521	0.7528	0.6926
Onsite		2021				
	Off-Road Paving		14.0656	14.6521	0.7528	0.6926
	Total		14.0656	14.6521	0.7528	0.6926
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			14.0656	14.6521	0.7528	0.6926
Onsite		2021				
	Off-Road Paving		14.0656	14.6521	0.7528	0.6926
	Total		14.0656	14.6521	0.7528	0.6926
Offsite						
	Hauling		0	0	0	0
	Vendor		0	0	0	0
	Worker		0	0	0	0
	Total		0	0	0	0
TOTAL			14.0656	14.6521	0.7528	0.6926
Architectural Coating and Paving			15.7494	16.4835	0.8637	0.8035
0.00 Acre LST Exceeds LST?			162	750	4.00	3.00
			no	no	no	no

PHASE 2

Fine Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2023			
	Fugitive Dust			2.8147	1.4417
	Off-Road	17.9359	14.7507	0.7749	0.7129
	Total	17.9359	14.7507	3.5896	2.1546
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		17.9359	14.7507	3.5896	2.1546
Onsite		2023			
	Fugitive Dust			2.8147	1.4417
	Off-Road	17.9359	14.7507	0.7749	0.7129
	Total	17.9359	14.7507	3.5896	2.1546
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		17.9359	14.7507	3.5896	2.1546
Onsite		2023			
	Fugitive Dust	0	0	2.8147	1.4417
	Off-Road	17.9359	14.7507	0.7749	0.7129
	Total	17.9359	14.7507	3.5896	2.1546
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		17.9359	14.7507	3.5896	2.1546
	2.50 Acre LST	257	1,244	8.00	4.67
	Exceeds LST?	no	no	no	no

Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	2023				
	Off-Road	14.3849	16.244	0.6997	0.6584
	Total	14.3849	16.244	0.6997	0.6584
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		14.3849	16.2440	0.6997	0.6584
Onsite	2023				
	Off-Road	14.3849	16.244	0.6997	0.6584
	Total	14.3849	16.244	0.6997	0.6584
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		14.3849	16.2440	0.6997	0.6584
Onsite	2023				
	Off-Road	14.3849	16.244	0.6997	0.6584
	Total	14.3849	16.244	0.6997	0.6584
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		14.3849	16.2440	0.6997	0.6584
1.31 Acre LST		184	859	4.94	3.31
<i>Exceeds LST?</i>		<i>no</i>	<i>no</i>	<i>no</i>	<i>no</i>

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024			
	Off-Road	13.4438	16.1668	0.6133	0.5769
	Total	13.4438	16.1668	0.6133	0.5769
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		13.4438	16.1668	0.6133	0.5769
Onsite		2024			
	Off-Road	13.4438	16.1668	0.6133	0.5769
	Total	13.4438	16.1668	0.6133	0.5769
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		13.4438	16.1668	0.6133	0.5769
Onsite		2024			
	Off-Road	13.4438	16.1668	0.6133	0.5769
	Total	13.4438	16.1668	0.6133	0.5769
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		13.4438	16.1668	0.6133	0.5769
1.31 Acre LST		184	859	4.94	3.31
<i>Exceeds LST?</i>		<i>no</i>	<i>no</i>	<i>no</i>	<i>no</i>

Architectural Coating

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024			
	Archit. Coating			0	0
	Off-Road	1.2188	1.8101	0.0609	0.0609
	Total	1.2188	1.8101	0.0609	0.0609
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		1.2188	1.8101	0.0609	0.0609
Onsite		2024			
	Archit. Coating			0	0
	Off-Road	1.2188	1.8101	0.0609	0.0609
	Total	1.2188	1.8101	0.0609	0.0609
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0.0123	0.1422	0.0622	0.0168
	Total	0.0123	0.1422	0.0622	0.0168
TOTAL		1.2311	1.9523	0.1231	0.0777
Onsite		2024			
	Archit. Coating	0	0	0	0
	Off-Road	1.2188	1.8101	0.0609	0.0609
	Total	1.2188	1.8101	0.0609	0.0609
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0.0123	0.1422	0.0622	0.0168
	Total	0.0123	0.1422	0.0622	0.0168
TOTAL		1.2311	1.9523	0.1231	0.0777
	0.00 Acre LST	162	750	4.00	3.00
	Exceeds LST?	no	no	no	no

Asphalt Paving

		NOx	CO	PM10 Total	PM2.5 Total
Onsite	2024				
	Off-Road	9.5246	14.6258	0.4685	0.431
	Paving			0	0
	Total	9.5246	14.6258	0.4685	0.431
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		9.5246	14.6258	0.4685	0.4310
Onsite	2024				
	Off-Road	9.5246	14.6258	0.4685	0.431
	Paving			0	0
	Total	9.5246	14.6258	0.4685	0.431
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		9.5246	14.6258	0.4685	0.4310
Onsite	2024				
	Off-Road	9.5246	14.6258	0.4685	0.431
	Paving	0	0	0	0
	Total	9.5246	14.6258	0.4685	0.431
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		9.5246	14.6258	0.4685	0.431
0.00 Acre LST		162	750	4.00	3.00
Exceeds LST?		no	no	no	no

Regional Construction Emissions Worksheet:

PHASE 1

Site Prep			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020				
	Fugitive Dust				6.7806	3.6925
	Off-Road		42.4173	21.5136	2.1974	2.0216
	Total		42.4173	21.5136	8.978	5.7141
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			42.4173	21.5136	8.9780	5.7141
Onsite		2020				
	Fugitive Dust				6.7806	3.6925
	Off-Road		42.4173	21.5136	2.1974	2.0216
	Total		42.4173	21.5136	8.978	5.7141
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			42.4173	21.5136	8.9780	5.7141
Onsite		2020				
	Fugitive Dust		0	0	6.7806	3.6925
	Off-Road		42.4173	21.5136	2.1974	2.0216
	Total		42.4173	21.5136	8.978	5.7141
Offsite						
	Hauling		0	0	0	0
	Vendor		0	0	0	0
	Worker		0	0	0	0
	Total		0	0	0	0
TOTAL			42.4173	21.5136	8.978	5.7141
	3.50 Acre LST		302	1,532	9.99	6.00
	Exceeds LST?		no	no	no	no

Rough Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020			
	Fugitive Dust			3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		50.1975	31.9583	5.8818	3.5375
Onsite		2020			
	Fugitive Dust			3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		50.1975	31.9583	5.8818	3.5375
Onsite		2020			
	Fugitive Dust	0	0	3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		50.1975	31.9583	5.8818	3.5375
4.00 Acre LST		325	1,676	10.99	6.67
Exceeds LST?		no	no	no	no

Fine Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020			
	Fugitive Dust			3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		50.1975	31.9583	5.8818	3.5375
Onsite		2020			
	Fugitive Dust			3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		50.1975	31.9583	5.8818	3.5375
Onsite		2020			
	Fugitive Dust	0	0	3.7079	1.5375
	Off-Road	50.1975	31.9583	2.1739	2
	Total	50.1975	31.9583	5.8818	3.5375
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		50.1975	31.9583	5.8818	3.5375
4.00 Acre LST		325	1,676	10.99	6.67
Exceeds LST?		no	no	no	no

Building Construction 2020

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020			
	Off-Road	19.186	16.8485	1.1171	1.0503
	Total	19.186	16.8485	1.1171	1.0503
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		19.1860	16.8485	1.1171	1.0503
Onsite		2020			
	Off-Road	19.186	16.8485	1.1171	1.0503
	Total	19.186	16.8485	1.1171	1.0503
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		19.1860	16.8485	1.1171	1.0503
Onsite		2020			
	Off-Road	19.186	16.8485	1.1171	1.0503
	Total	19.186	16.8485	1.1171	1.0503
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		19.1860	16.8485	1.1171	1.0503
1.31 Acre LST		184	859	4.94	3.31
Exceeds LST?		no	no	no	no

Building Construction 2021

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021			
	Off-Road	17.4321	16.5752	0.9586	0.9013
	Total	17.4321	16.5752	0.9586	0.9013
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		17.4321	16.5752	0.9586	0.9013
Onsite		2021			
	Off-Road	17.4321	16.5752	0.9586	0.9013
	Total	17.4321	16.5752	0.9586	0.9013
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		17.4321	16.5752	0.9586	0.9013
Onsite		2021			
	Off-Road	17.4321	16.5752	0.9586	0.9013
	Total	17.4321	16.5752	0.9586	0.9013
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		17.4321	16.5752	0.9586	0.9013
1.31 Acre LST		184	859	4.94	3.31
Exceeds LST?		no	no	no	no

Architectural Coating

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021			
	Archit. Coating			0	0
	Off-Road	1.6838	1.8314	0.1109	0.1109
	Total	1.6838	1.8314	0.1109	0.1109
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		1.6838	1.8314	0.1109	0.1109
Onsite		2021			
	Archit. Coating			0	0
	Off-Road	1.6838	1.8314	0.1109	0.1109
	Total	1.6838	1.8314	0.1109	0.1109
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		1.6838	1.8314	0.1109	0.1109
Onsite		2021			
	Archit. Coating	0	0	0	0
	Off-Road	1.6838	1.8314	0.1109	0.1109
	Total	1.6838	1.8314	0.1109	0.1109
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		1.6838	1.8314	0.1109	0.1109

Asphalt Paving

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021			
	Off-Road	14.0656	14.6521	0.7528	0.6926
	Paving			0	0
	Total	14.0656	14.6521	0.7528	0.6926
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		14.0656	14.6521	0.7528	0.6926
Onsite		2021			
	Off-Road	14.0656	14.6521	0.7528	0.6926
	Paving			0	0
	Total	14.0656	14.6521	0.7528	0.6926
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		14.0656	14.6521	0.7528	0.6926
Onsite		2021			
	Off-Road	14.0656	14.6521	0.7528	0.6926
	Paving	0	0	0	0
	Total	14.0656	14.6521	0.7528	0.6926
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		14.0656	14.6521	0.7528	0.6926
Architectural Coating and Paving		15.7494	16.4835	0.8637	0.8035
0.00 Acre LST		162	750	4.00	3.00
Exceeds LST?		no	no	no	no

PHASE 2

Fine Grading

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2023			
	Fugitive Dust			2.8147	1.4417
	Off-Road	17.9359	14.7507	0.7749	0.7129
	Total	17.9359	14.7507	3.5896	2.1546
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		17.9359	14.7507	3.5896	2.1546
Onsite		2023			
	Fugitive Dust			2.8147	1.4417
	Off-Road	17.9359	14.7507	0.7749	0.7129
	Total	17.9359	14.7507	3.5896	2.1546
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		17.9359	14.7507	3.5896	2.1546
Onsite		2023			
	Fugitive Dust	0	0	2.8147	1.4417
	Off-Road	17.9359	14.7507	0.7749	0.7129
	Total	17.9359	14.7507	3.5896	2.1546
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		17.9359	14.7507	3.5896	2.1546
2.50 Acre LST		257	1,244	8.00	4.67
Exceeds LST?		no	no	no	no

Building Construction

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2023			
	Off-Road	14.3849	16.244	0.6997	0.6584
	Total	14.3849	16.244	0.6997	0.6584
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		14.3849	16.2440	0.6997	0.6584
Onsite		2023			
	Off-Road	14.3849	16.244	0.6997	0.6584
	Total	14.3849	16.244	0.6997	0.6584
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		14.3849	16.2440	0.6997	0.6584
Onsite		2023			
	Off-Road	14.3849	16.244	0.6997	0.6584
	Total	14.3849	16.244	0.6997	0.6584
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		14.3849	16.2440	0.6997	0.6584
1.31 Acre LST		184	859	4.94	3.31
Exceeds LST?		no	no	no	no

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024			
	Off-Road	13.4438	16.1668	0.6133	0.5769
	Total	13.4438	16.1668	0.6133	0.5769
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		13.4438	16.1668	0.6133	0.5769
Onsite		2024			
	Off-Road	13.4438	16.1668	0.6133	0.5769
	Total	13.4438	16.1668	0.6133	0.5769
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		13.4438	16.1668	0.6133	0.5769
Onsite		2024			
	Off-Road	13.4438	16.1668	0.6133	0.5769
	Total	13.4438	16.1668	0.6133	0.5769
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		13.4438	16.1668	0.6133	0.5769
1.31 Acre LST		184	859	4.94	3.31
Exceeds LST?		no	no	no	no

Architectural Coating

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024			
	Archit. Coating			0	0
	Off-Road	1.2188	1.8101	0.0609	0.0609
	Total	1.2188	1.8101	0.0609	0.0609
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		1.2188	1.8101	0.0609	0.0609
Onsite		2024			
	Archit. Coating			0	0
	Off-Road	1.2188	1.8101	0.0609	0.0609
	Total	1.2188	1.8101	0.0609	0.0609
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0.0123	0.1422	0.0622	0.0168
	Total	0.0123	0.1422	0.0622	0.0168
TOTAL		1.2311	1.9523	0.1231	0.0777
Onsite		2024			
	Archit. Coating	0	0	0	0
	Off-Road	1.2188	1.8101	0.0609	0.0609
	Total	1.2188	1.8101	0.0609	0.0609
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0.0123	0.1422	0.0622	0.0168
	Total	0.0123	0.1422	0.0622	0.0168
TOTAL		1.2311	1.9523	0.1231	0.0777
0.00 Acre LST		162	750	4.00	3.00
Exceeds LST?		no	no	no	no

Asphalt Paving

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024			
	Off-Road	9.5246	14.6258	0.4685	0.431
	Paving			0	0
	Total	9.5246	14.6258	0.4685	0.431
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		9.5246	14.6258	0.4685	0.4310
Onsite		2024			
	Off-Road	9.5246	14.6258	0.4685	0.431
	Paving			0	0
	Total	9.5246	14.6258	0.4685	0.431
Offsite					
	Hauling				
	Vendor				
	Worker				
	Total				
TOTAL		9.5246	14.6258	0.4685	0.4310
Onsite		2024			
	Off-Road	9.5246	14.6258	0.4685	0.431
	Paving	0	0	0	0
	Total	9.5246	14.6258	0.4685	0.431
Offsite					
	Hauling	0	0	0	0
	Vendor	0	0	0	0
	Worker	0	0	0	0
	Total	0	0	0	0
TOTAL		9.5246	14.6258	0.4685	0.431
0.00 Acre LST		162	750	4.00	3.00
Exceeds LST?		no	no	no	no

Regional Operation Emissions Worksheet*

*CalEEMod, Version 2016.3.2

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	3.2072	0.0009	0.1021	0.00001	0.0004	0.0004
Energy	0.0249	0.2262	0.1900	0.0014	0.0172	0.0172
Mobile	3.6894	4.7674	47.5014	0.1540	17.2225	4.6433
Total	6.9214	4.9946	47.7934	0.1553	17.2401	4.6609

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	3.2072	0.0009	0.1021	0.0000	0.0004	0.0004
Energy	0.0249	0.2262	0.1900	0.0014	0.0172	0.0172
Mobile	2.9975	4.9589	39.5475	0.1388	17.2226	4.6434
Total	6.2295	5.1860	39.8396	0.1401	17.2401	4.6609

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	3.2072	0.0009	0.1021	0.00001	0.0004	0.0004
Energy	0.0249	0.2262	0.1900	0.0014	0.0172	0.0172
Mobile	3.6894	4.9589	47.5014	0.1540	17.2226	4.6434
Total	6.9214	5.1860	47.7934	0.1553	17.2401	4.6609

Regional Thresholds

Regional Thresholds	55	55	550	150	150	550
Exceeds Thresholds?	No	No	No	No	No	No

GHG Emissions Inventory

Proposed Project Buildout

Construction

	<u>MTCO₂e Total*</u>
2020	579
2021	217
2023	175
2024	223
Total Construction	1,195

*CalEEMod, Version 2016.3.2.

Operation*

	Proposed	
Area	0	MTCO ₂ e/Year**
Energy	314	MTCO ₂ e/Year
Mobile	1,673	MTCO ₂ e/Year
Solid Waste	83	MTCO ₂ e/Year
Water	45	MTCO ₂ e/Year
Amortized Construction Emissions***	40	MTCO ₂ e/Year
Total	2,154	MTCO₂e/Year
SCAQMD Bright-Line Screening Threshold	3,000	MTCO ₂ e/Year
Exceed Threshold?	No	

*CalEEMod, Version 2016.3.2.

** MTCO₂e=metric tons of carbon dioxide equivalent.

*** Total construction emissions are amortized over 30 years per SCAQMD methodology; SCAQMD. 2009, November 19. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2).

CalEEMod Inputs (Construction Run) PHASE I

Name: Temecula Valley K-8 STEAM Academy
Project Number: TVU-20
Project Location: NW corner of Washington St and Abelia St, across from TV Charter School
County/Air Basin: Riverside
Climate Zone: 10
Land Use Setting: Urban
Operational Year: 2021
Utility Company: Southern California Edison
Air Basin: SoCAB
Air District: SCAQMD
SRA: 26

Project Site Acreage	23
Disturbed Site Acreage	23

Project Components	SQFT	Acres
New Construction		
Administrative Building (A)	7,707.00	0.18
Classroom Building (B)	15,079.00	0.35
Classroom Building (C)	15,079.00	0.35
(2) 24x40 Modular Buildings (Locker Rooms and Showers)	1,920.00	0.04
Library Building (L)	2,500.00	0.06
(6) 24x40 Modular Buildings (classrooms)	5,760.00	0.13
48x40 Relocatable Bases Building (band room)	1,920.00	0.04
Multipurpose Building (partial building for Food and Auditorium)	9,569.00	0.22
Asphalt Drivable	67,538.00	1.55
Asphalt Fire Lane	72,261.00	1.66
Asphalt Non-drivable	28,183.00	0.65
Concrete Drivable	5,956.00	0.14
Concrete Fire Lane	13,059.00	0.30
Concrete Non-Drivable	69,876.00	1.60
Playfields	176,909.00	4.06
Additional Area	508,780.80	11.68

Notes

Land Use	Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Administrative Building (A)	Educational	Elementary School	7,707	1000sqft	0.18	7,707
Classroom Building (B)	Educational	Elementary School	15,079	1000sqft	0.35	15,079
Classroom Building (C)	Educational	Elementary School	15,079	1000sqft	0.35	15,079
(2) 24x40 Modular Buildings (Locker Rooms and Showers)	Educational	Elementary School	1.92	1000sqft	0.04	1,920
Library Building (L)	Educational	Elementary School	2.5	1000sqft	0.06	2,500
(6) 24x40 Modular Buildings (classrooms)	Educational	Elementary School	5.76	1000sqft	0.13	5,760
48x40 Relocatable Bases Building (band room)	Educational	Elementary School	1.92	1000sqft	0.04	1,920
Multipurpose Building (partial building for Food and Auditorium)	Educational	Elementary School	9,569	1000sqft	0.22	9,569
Asphalt Drivable	Parking	Parking Lot	34	stalls	1.55	67,538
Asphalt Fire Lane	Parking	Other Asphalt Surfaces	72,261	1000sqft	1.66	72,261
Asphalt Non-drivable	Parking	Other Asphalt Surfaces	28,183	1000sqft	0.65	28,183
Concrete Drivable	Parking	Other Non-Asphalt Surfaces	5,956	1000sqft	0.14	5,956
Concrete Fire Lane	Parking	Other Non-Asphalt Surfaces	13,059	1000sqft	0.30	13,059
Concrete Non-Drivable	Parking	Other Non-Asphalt Surfaces	69,876	1000sqft	1.60	69,876
Playfields	Parking	Other Non-Asphalt Surfaces	176,909	1000sqft	4.06	176,909
Additional Area			508,780.8	1000sqft	11.68	508,781
Total					23.00	

Land Use Summary	Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
	Educational	Elementary School	59,534	1000sqft	1.37	59,534
	Parking Lot	Parking Lot	67,538	1000sqft	1.55	67,538
	Parking Lot	Other Asphalt Surfaces	100,444	1000sqft	2.31	0
	Parking Lot	Other Non-asphalt surfaces	774,581	1000sqft	17.78	0

** Phase I involves site prep and rough grading for entire 23 acres of land.

23.00

Land Use Summary	Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
	Educational	Elementary School	59,534	1000sqft	1.37	59,534
	Parking Lot	Parking Lot	67,538	1000sqft	1.55	67,538
	Parking Lot	Other Asphalt Surfaces	100,444	1000sqft	2.31	100,444
	Parking Lot	Other Non-asphalt surfaces	353,139	1000sqft	8.11	353,139

** Phase I involves fine grading, building construction, architectural coating, and paving over 13.33 acres of land

13.33

Demolition

Component	Amount to be Demolished (Tons)	Haul Truck Capacity (tons)	Haul Distance (miles)	Total Trip Ends	Trip Ends/day	Duration (days)
Total	0	20	20	0	0	0

¹ Based on information provided by the applicant

Construction Activities	Haul Truck Capacity (cy) ¹	Import Volume (CY)	No. of total one-way import haul (trip ends)	No. of total one-way haul (trip ends/day)	Export Volume (CY) ²	No. of total one-way export haul (trip ends)	No. of total one-way haul (trip ends/day)	Total Days
Site Preparation	16	0	0	0	18,553	2,319	232	10

¹ CalEEMod default.

² Assumes 23 acres of surface area and 6 inches in depth to be excavated.

Architectural Coating

Percentage of Proposed Buildings' Interior Painted:	100%
Percentage of Proposed Buildings' Exterior Painted:	100%
SCAQMD Rule 1113	
Interior Paint VOC content:	100 grams per liter
Exterior Paint VOC content:	100 grams per liter

Non-Residential Structures	Land Use Square Feet	CalEEMod Factor ²	Total Paintable Surface Area	Paintable Interior Area ¹	Paintable Exterior Area ¹
Administrative Building (A)	7,707	2	15,414	11,561	3,854
Classroom Building (B)	15,079	2	30,158	22,619	7,540
Classroom Building (C)	15,079	2	30,158	22,619	7,540
(2) 24x40 Modular Buildings (Locker Rooms and Showers)	1,920	2	3,840	2,880	960
Library Building (L)	2,500	2	5,000	3,750	1,250
(6) 24x40 Modular Buildings (classrooms)	5,760	2	11,520	8,640	2,880
48x40 Relocatable Bases Building (band room)	1,920	2	3,840	2,880	960
Multipurpose Building (partial building for Food and Auditorium)	9,569	2	19,138	14,354	4,785
Parking Lot	67,538	6%	119,068	89,301	29,767
			4,052	-	4,052

¹ CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.

² The program assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage defined by the user. Architectural coatings for the parking lot is based on CalEEMod methodology applied to a surface parking lot (i.e., striping), in which 6% of surface area is painted.

³ We assume 100% of the interior and exterior of buildings to be modernized will be painted

Construction Mitigation

SCAQMD Rule 403		
Replace Ground Cover	PM10:	5 % Reduction
Replace Ground Cover	PM10:	5 % Reduction
Water Exposed Area		
Frequency:		2 per day
PM10:		55 % Reduction
PM25:		55 % Reduction
Unpaved Roads		
Vehicle Speed:		15 mph
SCAQMD Rule 1186		
Clean Paved Road		9 % PM Reduction

CalEEMod Construction Off-Road Equipment Inputs

Based on CalEEMod defaults

General Construction Hours: 8 hours btwn 7:00 AM to 4:00 PM (with 1 hr break), Mon-Fri

Equipment	Construction Equipment Details					
	# of Equipment	hrs/day	hp	load factor	Model	total trips
Site Preparation						
Rubber Tired Dozers	3	8	247	0.4		
Tractors/Loaders/Backhoes	4	8	97	0.37		
Water Truck	1					4
Worker Trips						18
Vendor Trips						
Hauling Trips						
Site Preparation Soil Haul						
No additional equipment from Grading (site) equipment mix						
No additional Worker Trips from Grading (site) activity.						
No additional Vendor Trips from Grading (site) activity.						
Hauling Trips						232
Rough Grading						
Excavators	2	8	158	0.38		
Graders	1	8	187	0.41		
Rubber Tired Dozers	1	8	247	0.4		
Scrapers	2	8	367	0.48		
Tractors/Loaders/Backhoes	2	8	97	0.37		
Water Truck	1					4
Worker Trips						20
Vendor Trips						
Hauling Trips						
Fine Grading						
Excavators	2	8	158	0.38		
Graders	1	8	187	0.41		
Rubber Tired Dozers	1	8	247	0.4		
Scrapers	2	8	367	0.48		
Tractors/Loaders/Backhoes	2	8	97	0.37		
Water Truck	1					4
Worker Trips						20
Vendor Trips						
Hauling Trips						
Building Construction						
Cranes	1	7	231	0.29		
Forklifts	3	8	89	0.2		
Generator Sets	1	8	84	0.74		
Tractors/Loaders/Backhoes	3	7	97	0.37		
Welders	1	8	46	0.45		
Worker Trips						53
Vendor Trips						21
Hauling Trips						
Architectural Coating (surface lots, etc...)						
Air Compressors	1	6	78	0.48		
Worker Trips						11
Vendor Trips						
Hauling Trips						
Asphalt Paving						
Pavers	2	8	130	0.42		
Paving Equipment	2	8	132	0.36		
Rollers	2	8	80	0.38		
Worker Trips						15
Vendor Trips						
Hauling Trips						

Construction Activities and Schedule Assumptions: Temecula Valley STEAM Academy

* As provided by applicant

Construction Activities	Phase Type	Construction Schedule		
		Start Date	End Date	Duration (Workday)
Site Preparation	Site Preparation	2/3/2020	2/14/2020	10
Rough Grading	Grading	2/15/2020	3/27/2020	30
Fine Grading	Grading	3/28/2020	5/8/2020	30
Building Construction	Building Construction	5/9/2020	7/2/2021	300
Architectural Coating (surface lots, etc...)	Architectural Coating	7/3/2021	7/30/2021	20
Asphalt Paving	Paving	7/3/2021	7/30/2021	20

** Phase I involves site prep and rough grading for entire 23 acres of land and 13.33 acres for fine grading, building construction, architectural coating, and paving

Construction Trips Worksheet

PhaseName	Worker Trip Ends Per	Vendor Trip Ends Per	Haul Truck Trip Ends	Total Haul Truck Trip	Start Date	End Date	Workdays
	Day	Day	Per Day	Ends			
Site Preparation	18	4	24	232	2/3/2020	2/14/2020	10
Rough Grading	20	4	0	0	2/15/2020	3/27/2020	30
Fine Grading	20	4	0	0	3/28/2020	5/8/2020	30
Building Construction	53	21	0	0	5/9/2020	7/2/2021	300
Architectural Coating (surface lots, etc...)	11	0	0	0	7/3/2021	7/30/2021	20
Asphalt Paving	15	0	0	0	7/3/2021	7/30/2021	20

	Worker Trip Ends Per	Vendor Trip Ends Per	Haul Truck Trip Ends	Total Trip Ends Per	Start Date	End Date	Workdays
	Day	Day	Per Day	Day			
Site Preparation	18	4	24	46	2/3/2020	2/14/2020	10
Rough Grading	20	4	0	24	2/15/2020	3/27/2020	30
Fine Grading	20	4	0	24	3/28/2020	5/8/2020	30
Building Construction	53	21	0	74	5/9/2020	7/2/2021	300
Architectural Coating (surface lots, etc...)	11	0	0	11	7/3/2021	7/30/2021	20
Asphalt Paving	15	0	0	15	7/3/2021	7/30/2021	20
Maximum Daily Trips	53	21	24	74			

CalEEMod Inputs (Construction Run) PHASE 2

Name: Temecula Valley K-8 STEAM Academy
 Project Number: TVU-20
 Project Location: NW corner of Washington St and Abelia St, across from TV Charter School
 County/Air Basin: Riverside
 Climate Zone: 10
 Land Use Setting: Urban
 Operational Year: 2023-2025
 Utility Company: Southern California Edison
 Air Basin: SoCAB
 Air District: SCAQMD
 SRA: 26

Project Site Acreage: 23
 Disturbed Site Acreage*: 9.67
 * assumed by subtracting acres from acres associated with Phase 1

Project Components	SQFT	Acres
Removal		
(2) 24x40 Modular Buildings	1920	0.04
New Construction		
Kindergarten Building (K)	9,210	0.21
Classroom Building (D)	15,079	0.35
Classroom Building (F)	15,079	0.35
Classroom Building (E)	15,079	0.35
Locker Rooms and Showers (Permanent)	4,900	0.11
Multipurpose Building (M)	7,400	0.17
Asphalt Drivable	22,745	0.52
Asphalt Fire Lane	39,362	0.90
Concrete Fire Lane	157	0.00
Concrete Non-Drivable	109,345	2.51
Play Area	11,528	0.26
Additional Area	171,190.80	3.93

Notes

Land Use	Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Kindergarten Building (K)	Educational	Elementary School	9.21	1000sqft	0.21	9,210.00
Classroom Building (D)	Educational	Elementary School	15.079	1000sqft	0.35	15,079.00
Classroom Building (F)	Educational	Elementary School	15.079	1000sqft	0.35	15,079.00
Classroom Building (E)	Educational	Elementary School	15.079	1000sqft	0.35	15,079.00
Locker Rooms and Showers (Permanent)	Educational	Elementary School	4.9	1000sqft	0.11	4,900.00
Multipurpose Building (M)	Educational	Elementary School	7.4	1000sqft	0.17	7,400.00
Asphalt Drivable	Parking	Other Asphalt Surfaces	22,745	1000sqft	0.52	22,745.00
Asphalt Fire Lane	Parking	Other Asphalt Surfaces	39,362	1000sqft	0.90	39,362.00
Concrete Fire Lane	Parking	Other Non-asphalt surfaces	0.157	1000sqft	0.00	157.00
Concrete Non-Drivable	Parking	Other Non-asphalt surfaces	109,345	1000sqft	2.51	109,345.00
Play Area	Parking	Other Non-asphalt surfaces	11,528	1000sqft	0.26	11,528.00
Additional Area	Parking	Other Non-asphalt surfaces	171,190.80	1000sqft	3.93	171,190.80
Total					9.67	

Land Use Summary	Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
	Educational	Elementary School	66.747	1000sqft	1.53	66,747.000
	Parking Lot	Other Asphalt Surfaces	62.107	1000sqft	1.43	62,107.000
	Parking Lot	Other Non-asphalt surfaces	292.221	1000sqft	6.71	292,221
Total					9.67	

Demolition

Component	Amount to be Demolished (Tons)	Haul Truck Capacity (tons)	Haul Distance (miles)	Total Trip Ends	Trip Ends/ day	Duration (days)
Total	0	20	20	0		

¹ Based on information provided by the applicant

Soil Haul¹

Construction Activities	Haul Truck Capacity (cy)	Import Volume (CY)	No. of total one-way import haul (trip ends)	No. of total one-way haul (trip ends/day)	Export Volume (CY)	No. of total one-way export haul (trip ends)	No. of total one-way haul (trip ends/day)	Total Days
Fine Grading	16		0	0	5000	625	31	20

^{*} Based on information provided by school district

Architectural Coating

Percentage of Proposed Buildings' Interior Painted:	100%
Percentage of Proposed Buildings' Exterior Painted:	100%

SCAQMD Rule 1113

Interior Paint VOC content: 100 grams per liter
 Exterior Paint VOC content: 100 grams per liter

Non-Residential Structures	Land Use Square Feet	CalEEMod Factor ²	Total Paintable Surface	Paintable Interior	Paintable Exterior
			Area	Area	Area
Kindergarten Building (K)	9,210	2	18,420	13,815	4,605
Classroom Building (D)	15,079	2	30,158	22,619	7,540
Classroom Building (F)	15,079	2	30,158	22,619	7,540
Classroom Building (E)	15,079	2	30,158	22,619	7,540
Locker Rooms and Showers (Permanent)	4,900	2	9,800	7,350	2,450
Multipurpose Building (M)	7,400	2	14,800	11,100	3,700
Total			133,494	100,121	33,374
Parking Lot	0	6%	0	-	0

¹ CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.

² The program assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage defined by the user. Architectural coatings for the parking lot is

³ We assume 100% of the interior and exterior of buildings to be modernized will be painted

Construction Mitigation

SCAQMD Rule 403

Replace Ground Cover	PM10:	5	% Reduction
Replace Ground Cover	PM10:	5	% Reduction
	PM25:	5	% Reduction
Water Exposed Area	Frequency:	2	per day
	PM10:	55	% Reduction
Unpaved Roads	Vehicle Speed:	15	mph
SCAQMD Rule 1186	Clean Paved Road	9	% PM Reduction

CalEEMod Construction Off-Road Equipment Inputs

Based on CalEEMod defaults

btwn 7:00 AM to 4:00 PM (with 1 hr
break), Mon-Fri

General Construction Hours: 8 hours

Equipment	Construction Equipment Details					
	# of Equipment	hrs/day	hp	load factor	Model	total trips
Fine Grading						
Excavators	1	8	158	0.38		
Graders	1	8	187	0.41		
Rubber Tired Dozers	1	8	247	0.4		
Tractors/Loaders/Backhoes	3	8	97	0.37		
Water Truck	1					4
Worker Trips						15
Vendor Trips						4
Hauling Trips						625
Building Construction						
Cranes	1	7	231	0.29		
Forklifts	3	8	89	0.2		
Generator Sets	1	8	84	0.74		
Tractors/Loaders/Backhoes	3	7	97	0.37		
Welders	1	8	46	0.45		
Worker Trips						28
Vendor Trips						11
Hauling Trips						
Architectural Coating (surface lots, etc...)						
Air Compressors	1	6	78	0.48		
Worker Trips						6
Vendor Trips						
Hauling Trips						
Asphalt Paving						
Pavers	2	8	130	0.42		
Paving Equipment	2	8	132	0.36		
Rollers	2	8	80	0.38		
Worker Trips						15
Vendor Trips						
Hauling Trips						

Construction Activities and Schedule Assumptions:

* As provided by applicant

Construction Activities	Phase Type	Construction Schedule		
		Start Date	End Date	Duration (Workday)
Fine Grading Soil Haul	Grading	8/1/2023	8/28/2023	20
Building Construction	Building Construction	8/29/2023	7/15/2024	230
Architectural Coating	Architectural Coating	7/16/2024	8/12/2024	20
Asphalt Paving	Paving	8/13/2024	9/9/2024	20

Construction Trips Worksheet

PhaseName	Worker Trip Ends Per	Vendor Trip Ends Per	Haul Truck Trip Ends	Total Haul Truck Trip	Start Date	End Date	Workdays
	Day	Day	Per Day	Ends			
Fine Grading Soil Haul	15	8	32	625	8/1/2023	8/28/2023	20
Building Construction	28	11	0	0	8/29/2023	7/15/2024	230
Architectural Coating	6	0	0	0	7/16/2024	8/12/2024	20
Asphalt Paving	15	0	0	0	8/13/2024	9/9/2024	20

	Worker Trip Ends Per	Vendor Trip Ends Per	Haul Truck Trip Ends	Total Trip Ends Per	Start Date	End Date	Workdays
	Day	Day	Per Day	Day			
Fine Grading Soil Haul	15	8	32	55	8/1/2023	8/28/2023	20
Building Construction	28	11	0	39	8/29/2023	7/15/2024	230
Architectural Coating	6	0	0	6	7/16/2024	8/12/2024	20
Asphalt Paving	15	0	0	15	8/13/2024	9/9/2024	20
Maximum Daily Trips	28	11	32	55			

CalEEMod Land Use Inputs: Proposed

Land Use Type	Type	Land Use Unit Amount (Phase 1)	Land Use Unit Amount (Phase 2)	Land Use Unit Amount (Total)	Land Use Size Metric	Lot Acreage	Land Use Square Feet
Educational	Elementary School	59.534	66.747	126.281	1000sqft	2.899	126,281
Parking Lot	Surface Parking	67.538		67.538	1000sqft	1.550	67,538
Parking Lot	Other Asphalt Surfaces	100.444	62.107	162.551	1000sqft	3.732	162,551
Parking Lot	Other Non-Asphalt Surfaces	353.139	292.2208	645.3598	1000sqft	14.815422	645,360
						23.0	acres

Project Location: Riverside County
 Climate Zone: 10
 Operation Year: **2024**
 Land Use Setting: Urban
 Utility Company: SCE
 Source Receptor Area: 26

Project Site Area: 23.0 acres

Land Uses/Development

Buildings

Phase 1 59,534 building square feet
Phase 2 66,747

Other*

Surface Parking: 67,538 square feet

Total Non-Parking Asphalt: 162,551 square feet

Total Non-Asphalt Surfaces 645,360 square feet

*Based on information provided by the Applicant.

Trip Generation

Type	Land Use Type	Land Use Unit Amount	Land Use Size Metric	Land Use Square Feet
Elementary School	Educational	126.28	1000sqft	126,281

Trip Generation

Land Use Type	Average Daily Trips ¹	Adjusted ADT Rate ¹
Elementary School	2,370	18.77

Water Use CalEEMod Defaults*

CalEEMod Inputs			
Land Use	Indoor	Outdoor	Total
Elementary School	3,661,731	9,415,879	13,077,610

*CalEEMod default.

Solid Waste*

Land Use	Total Solid Waste (tons/yr)
Elementary School	164.16

*CalEEMod default.

Architectural Coating

Percentage of Buildings'

*Interior Painted:**

100% percent

Percentage of Buildings'

*Exterior Painted:**

100% percent

Non-Residential Interior

*Paint VOC content:***

100 grams per liter

Non-Residential Exterior

*Paint VOC content:***

100 grams per liter

Parking Paint VOC content

*:***

100 grams per liter

Parking Paint VOC

*content:***

100 grams per liter

* Based on information provided by the Applicant.

**Based on SCAQMD Rule 1113, Architectural Coatings.

Land Use	Land Use Amount (BSF)	CalEEMod Paintable Surface Area Multiplier*	Total Paintable Surface Area (BSF)	Total Paintable Interior Surface Area (BSF)*	Total Paintable Exterior Surface Area (BSF)*
Elementary School	126,281	2.0	252,562	189,422	63,141
			Subtotal:	189,422	63,141
Surface Parking	67,538	0.06	4,052	0	4,052

*Based on CalEEMod methodology in calculating the paintable surface areas for a nonresidential building and surface parking lot.

Electricity (Buildings)

Buildings constructed after January 1, 2020 are required to meet the 2019 Building Energy Efficiency Standards. Non-residential buildings in compliance with the 2019 Standards are generally 30 percent more energy efficient compared to the 2016 Standards.

Changes to the CalEEMod Defaults - Fleet Mix 2024

Average Daily Trips: 2,370

Default	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix	0.554334	0.035376	0.188722	0.108173	0.012711	0.00453	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789	100%
Trips	341	22	116	67	8	3	11	43	1	1	3	1	0	615
Percent	0.903762					0.026198		0.070039						100%
Proportion	0.613363	0.039143	0.208818	0.119692	0.014065	0.172914	0.666043	1.000000	0.054012	0.042866	0.004919	0.034048	0.030117	
Assumed Mix adjusted with	0.97					0.02		0.01						100%
Assumed	0.594962	0.037969	0.202554	0.116101	0.013643	0.003458	0.013321	0.010000	0.001080	0.000857	0.004772	0.000681	0.000602	100%
Trips	1,410	90	480	275	32	8	32	24	3	2	11	2	1	2,370
Calibrated for zero medium and heavy-duty trucks	0.594962	0.037969	0.202554	0.116101	0.013643	0	0	0	0	0	0.004772	0.001400	0	97.1%
Modified	0.612479	0.039087	0.208517	0.119519	0.014044	0	0	0	0	0	0.004912	0.001441	0	100.0%
Trips	1,452	93	494	283	33	0	0	0	0	0	12	3	0	2,370

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

Temecula Valley STEAM Academy Phase I Construction
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	59.53	1000sqft	1.37	59,534.00	0
Other Asphalt Surfaces	100.44	1000sqft	2.31	0.00	0
Other Non-Asphalt Surfaces	352.84	1000sqft	8.10	0.00	0
Parking Lot	67.54	1000sqft	1.55	67,538.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
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

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - assuming other non/asphalt is not painted
adding in additional area into non asphalt

Construction Phase -

Grading - rough grading on whole site, fine grading on phase I

Architectural Coating - accounting for building int and ext paint and parking lot striping

Trips and VMT - to account for water truck trips

Construction Off-road Equipment Mitigation - see assumptions file

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialExported	0.00	18,553.00
tblLandUse	LandUseSquareFeet	59,530.00	59,534.00
tblLandUse	LandUseSquareFeet	100,440.00	0.00
tblLandUse	LandUseSquareFeet	352,840.00	0.00
tblLandUse	LandUseSquareFeet	67,540.00	67,538.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

2.0 Emissions Summary

Temecula Valley STEAM Academy Phase I Construction - 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	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Energy	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Mobile	1.8607	13.3650	22.4623	0.0929	6.7516	0.0641	6.8156	1.8065	0.0601	1.8666		9,473.1953	9,473.1953	0.4523		9,484.5017
Total	3.2407	13.5056	22.6394	0.0937	6.7516	0.0749	6.8265	1.8065	0.0710	1.8775		9,641.4183	9,641.4183	0.4558	3.0800e-003	9,653.7321

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	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Energy	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Mobile	1.8607	13.3650	22.4623	0.0929	6.7516	0.0641	6.8156	1.8065	0.0601	1.8666		9,473.1953	9,473.1953	0.4523		9,484.5017
Total	3.2407	13.5056	22.6394	0.0937	6.7516	0.0749	6.8265	1.8065	0.0710	1.8775		9,641.4183	9,641.4183	0.4558	3.0800e-003	9,653.7321

Temecula Valley STEAM Academy Phase I Construction - 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
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	2/3/2020	2/14/2020	5	10	
2	Rough Grading	Grading	2/15/2020	3/27/2020	5	30	
3	Fine Grading	Grading	3/28/2020	5/8/2020	5	30	
4	Building Construction	Building Construction	5/9/2020	7/2/2021	5	300	
5	Asphalt Paving	Paving	7/3/2021	7/30/2021	5	20	
6	Architectural Coating	Architectural Coating	7/31/2021	8/27/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 11.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 89,301; Non-Residential Outdoor: 29,767; Striped Parking Area: 4,052 (Architectural Coating – sqft)

OffRoad Equipment

Temecula Valley STEAM Academy Phase I Construction - 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
Rough Grading	Excavators	2	8.00	158	0.38
Rough Grading	Graders	1	8.00	187	0.41
Rough Grading	Rubber Tired Dozers	1	8.00	247	0.40
Rough Grading	Scrapers	2	8.00	367	0.48
Rough Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Fine Grading	Excavators	2	8.00	158	0.38
Fine Grading	Graders	1	8.00	187	0.41
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Fine Grading	Scrapers	2	8.00	367	0.48
Fine Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Asphalt Paving	Pavers	2	8.00	130	0.42
Asphalt Paving	Paving Equipment	2	8.00	132	0.36
Asphalt Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

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	4.00	2,319.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.3012	0.0000	18.3012	9.9663	0.0000	9.9663			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.3012	2.1974	20.4986	9.9663	2.0216	11.9879		3,685.1016	3,685.1016	1.1918		3,714.8975

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1926	54.9107	6.7752	0.1766	4.0568	0.1750	4.2318	1.1121	0.1674	1.2795		18,732.1230	18,732.1230	1.1163		18,760.0308
Vendor	0.0112	0.4116	0.0753	1.0400e-003	0.0256	2.3400e-003	0.0280	7.3700e-003	2.2400e-003	9.6100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.0916	0.0542	0.7258	1.9900e-003	0.2012	1.2200e-003	0.2024	0.0534	1.1200e-003	0.0545		198.2870	198.2870	5.0800e-003		198.4141
Total	1.2954	55.3764	7.5763	0.1796	4.2836	0.1785	4.4621	1.1728	0.1707	1.3436		19,040.5663	19,040.5663	1.1297		19,068.8078

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					7.8238	0.0000	7.8238	4.2606	0.0000	4.2606			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	7.8238	2.1974	10.0212	4.2606	2.0216	6.2822	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1926	54.9107	6.7752	0.1766	3.7809	0.1750	3.9558	1.0444	0.1674	1.2117		18,732.1230	18,732.1230	1.1163		18,760.0308
Vendor	0.0112	0.4116	0.0753	1.0400e-003	0.0240	2.3400e-003	0.0263	6.9700e-003	2.2400e-003	9.2100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.0916	0.0542	0.7258	1.9900e-003	0.1855	1.2200e-003	0.1867	0.0495	1.1200e-003	0.0506		198.2870	198.2870	5.0800e-003		198.4141
Total	1.2954	55.3764	7.5763	0.1796	3.9903	0.1785	4.1688	1.1008	0.1707	1.2716		19,040.5663	19,040.5663	1.1297		19,068.8078

3.3 Rough Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.3 Rough Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0112	0.4116	0.0753	1.0400e-003	0.0256	2.3400e-003	0.0280	7.3700e-003	2.2400e-003	9.6100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.1018	0.0602	0.8064	2.2100e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		220.3189	220.3189	5.6500e-003		220.4601
Total	0.1129	0.4718	0.8817	3.2500e-003	0.2492	3.6900e-003	0.2529	0.0667	3.4900e-003	0.0701		330.4753	330.4753	0.0139		330.8230

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					3.7079	0.0000	3.7079	1.5375	0.0000	1.5375			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.7079	2.1739	5.8818	1.5375	2.0000	3.5375	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.3 Rough Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0112	0.4116	0.0753	1.0400e-003	0.0240	2.3400e-003	0.0263	6.9700e-003	2.2400e-003	9.2100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.1018	0.0602	0.8064	2.2100e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		220.3189	220.3189	5.6500e-003		220.4601
Total	0.1129	0.4718	0.8817	3.2500e-003	0.2300	3.6900e-003	0.2337	0.0620	3.4900e-003	0.0655		330.4753	330.4753	0.0139		330.8230

3.4 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.4 Fine Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0112	0.4116	0.0753	1.0400e-003	0.0256	2.3400e-003	0.0280	7.3700e-003	2.2400e-003	9.6100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.1018	0.0602	0.8064	2.2100e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		220.3189	220.3189	5.6500e-003		220.4601
Total	0.1129	0.4718	0.8817	3.2500e-003	0.2492	3.6900e-003	0.2529	0.0667	3.4900e-003	0.0701		330.4753	330.4753	0.0139		330.8230

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					3.7079	0.0000	3.7079	1.5375	0.0000	1.5375			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.7079	2.1739	5.8818	1.5375	2.0000	3.5375	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.4 Fine Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0112	0.4116	0.0753	1.0400e-003	0.0240	2.3400e-003	0.0263	6.9700e-003	2.2400e-003	9.2100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.1018	0.0602	0.8064	2.2100e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		220.3189	220.3189	5.6500e-003		220.4601
Total	0.1129	0.4718	0.8817	3.2500e-003	0.2300	3.6900e-003	0.2337	0.0620	3.4900e-003	0.0655		330.4753	330.4753	0.0139		330.8230

3.5 Building Construction - 2020

Unmitigated Construction On-Site

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

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0585	2.1607	0.3953	5.4900e-003	0.1345	0.0123	0.1468	0.0387	0.0118	0.0505		578.3209	578.3209	0.0434		579.4054
Worker	0.2697	0.1595	2.1370	5.8600e-003	0.5924	3.5900e-003	0.5960	0.1571	3.3000e-003	0.1604		583.8451	583.8451	0.0150		584.2192
Total	0.3282	2.3202	2.5323	0.0114	0.7269	0.0159	0.7428	0.1958	0.0151	0.2109		1,162.1661	1,162.1661	0.0584		1,163.6246

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0585	2.1607	0.3953	5.4900e-003	0.1259	0.0123	0.1381	0.0366	0.0118	0.0484		578.3209	578.3209	0.0434		579.4054
Worker	0.2697	0.1595	2.1370	5.8600e-003	0.5461	3.5900e-003	0.5497	0.1457	3.3000e-003	0.1490		583.8451	583.8451	0.0150		584.2192
Total	0.3282	2.3202	2.5323	0.0114	0.6719	0.0159	0.6878	0.1823	0.0151	0.1974		1,162.1661	1,162.1661	0.0584		1,163.6246

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		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Temecula Valley STEAM Academy Phase I Construction - 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
Vendor	0.0490	1.9433	0.3467	5.4400e-003	0.1345	3.7000e-003	0.1382	0.0387	3.5400e-003	0.0423		573.8272	573.8272	0.0411		574.8534
Worker	0.2513	0.1432	1.9595	5.6600e-003	0.5924	3.4900e-003	0.5959	0.1571	3.2100e-003	0.1603		564.3180	564.3180	0.0135		564.6544
Total	0.3003	2.0865	2.3062	0.0111	0.7269	7.1900e-003	0.7341	0.1958	6.7500e-003	0.2026		1,138.1451	1,138.1451	0.0545		1,139.5078

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Temecula Valley STEAM Academy Phase I Construction - 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
Vendor	0.0490	1.9433	0.3467	5.4400e-003	0.1259	3.7000e-003	0.1296	0.0366	3.5400e-003	0.0401		573.8272	573.8272	0.0411		574.8534
Worker	0.2513	0.1432	1.9595	5.6600e-003	0.5461	3.4900e-003	0.5496	0.1457	3.2100e-003	0.1490		564.3180	564.3180	0.0135		564.6544
Total	0.3003	2.0865	2.3062	0.0111	0.6719	7.1900e-003	0.6791	0.1823	6.7500e-003	0.1891		1,138.1451	1,138.1451	0.0545		1,139.5078

3.6 Asphalt 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		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7612	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.6 Asphalt 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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7612	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.6 Asphalt 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
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	0.1546	9.9000e-004	0.1555	0.0413	9.1000e-004	0.0422		159.7126	159.7126	3.8100e-003		159.8078
Total	0.0711	0.0405	0.5546	1.6000e-003	0.1546	9.9000e-004	0.1555	0.0413	9.1000e-004	0.0422		159.7126	159.7126	3.8100e-003		159.8078

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.5331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	28.7520	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.7 Architectural Coating - 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	0.0522	0.0297	0.4067	1.1800e-003	0.1230	7.2000e-004	0.1237	0.0326	6.7000e-004	0.0333		117.1226	117.1226	2.7900e-003		117.1924
Total	0.0522	0.0297	0.4067	1.1800e-003	0.1230	7.2000e-004	0.1237	0.0326	6.7000e-004	0.0333		117.1226	117.1226	2.7900e-003		117.1924

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	28.5331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	28.7520	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

3.7 Architectural Coating - 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
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	0.0522	0.0297	0.4067	1.1800e-003	0.1133	7.2000e-004	0.1141	0.0303	6.7000e-004	0.0309		117.1226	117.1226	2.7900e-003		117.1924
Total	0.0522	0.0297	0.4067	1.1800e-003	0.1133	7.2000e-004	0.1141	0.0303	6.7000e-004	0.0309		117.1226	117.1226	2.7900e-003		117.1924

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Temecula Valley STEAM Academy Phase I Construction - 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	1.8607	13.3650	22.4623	0.0929	6.7516	0.0641	6.8156	1.8065	0.0601	1.8666		9,473.1953	9,473.1953	0.4523		9,484.5017
Unmitigated	1.8607	13.3650	22.4623	0.0929	6.7516	0.0641	6.8156	1.8065	0.0601	1.8666		9,473.1953	9,473.1953	0.4523		9,484.5017

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	918.55	0.00	0.00	2,261,192	2,261,192
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	918.55	0.00	0.00	2,261,192	2,261,192

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

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	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
NaturalGas Unmitigated	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

Temecula Valley STEAM Academy Phase I Construction - 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					
Elementary School	1428.82	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

Temecula Valley STEAM Academy Phase I Construction - 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					
Elementary School	1.42882	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

6.0 Area Detail

6.1 Mitigation Measures Area

Temecula Valley STEAM Academy Phase I Construction - 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	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Unmitigated	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

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	0.1564					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5600e-003	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Total	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

Temecula Valley STEAM Academy Phase I Construction - 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	0.1564					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5600e-003	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Total	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Summer

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

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

Equipment Type	Number
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11.0 Vegetation

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

Temecula Valley STEAM Academy Phase I Construction
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	59.53	1000sqft	1.37	59,534.00	0
Other Asphalt Surfaces	100.44	1000sqft	2.31	0.00	0
Other Non-Asphalt Surfaces	352.84	1000sqft	8.10	0.00	0
Parking Lot	67.54	1000sqft	1.55	67,538.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
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

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - assuming other non/asphalt is not painted
adding in additional area into non asphalt

Construction Phase -

Grading - rough grading on whole site, fine grading on phase I

Architectural Coating - accounting for building int and ext paint and parking lot striping

Trips and VMT - to account for water truck trips

Construction Off-road Equipment Mitigation - see assumptions file

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialExported	0.00	18,553.00
tblLandUse	LandUseSquareFeet	59,530.00	59,534.00
tblLandUse	LandUseSquareFeet	100,440.00	0.00
tblLandUse	LandUseSquareFeet	352,840.00	0.00
tblLandUse	LandUseSquareFeet	67,540.00	67,538.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

2.0 Emissions Summary

Temecula Valley STEAM Academy Phase I Construction - 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	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Energy	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Mobile	1.5808	13.3912	19.4049	0.0857	6.7516	0.0647	6.8162	1.8065	0.0607	1.8672		8,749.1454	8,749.1454	0.4655		8,760.7834
Total	2.9608	13.5318	19.5821	0.0865	6.7516	0.0755	6.8271	1.8065	0.0716	1.8781		8,917.3684	8,917.3684	0.4691	3.0800e-003	8,930.0137

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	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Energy	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Mobile	1.5808	13.3912	19.4049	0.0857	6.7516	0.0647	6.8162	1.8065	0.0607	1.8672		8,749.1454	8,749.1454	0.4655		8,760.7834
Total	2.9608	13.5318	19.5821	0.0865	6.7516	0.0755	6.8271	1.8065	0.0716	1.8781		8,917.3684	8,917.3684	0.4691	3.0800e-003	8,930.0137

Temecula Valley STEAM Academy Phase I Construction - 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
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	2/3/2020	2/14/2020	5	10	
2	Rough Grading	Grading	2/15/2020	3/27/2020	5	30	
3	Fine Grading	Grading	3/28/2020	5/8/2020	5	30	
4	Building Construction	Building Construction	5/9/2020	7/2/2021	5	300	
5	Asphalt Paving	Paving	7/3/2021	7/30/2021	5	20	
6	Architectural Coating	Architectural Coating	7/31/2021	8/27/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 11.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 89,301; Non-Residential Outdoor: 29,767; Striped Parking Area: 4,052 (Architectural Coating – sqft)

OffRoad Equipment

Temecula Valley STEAM Academy Phase I Construction - 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
Rough Grading	Excavators	2	8.00	158	0.38
Rough Grading	Graders	1	8.00	187	0.41
Rough Grading	Rubber Tired Dozers	1	8.00	247	0.40
Rough Grading	Scrapers	2	8.00	367	0.48
Rough Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Fine Grading	Excavators	2	8.00	158	0.38
Fine Grading	Graders	1	8.00	187	0.41
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Fine Grading	Scrapers	2	8.00	367	0.48
Fine Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Asphalt Paving	Pavers	2	8.00	130	0.42
Asphalt Paving	Paving Equipment	2	8.00	132	0.36
Asphalt Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

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	4.00	2,319.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.3012	0.0000	18.3012	9.9663	0.0000	9.9663			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.3012	2.1974	20.4986	9.9663	2.0216	11.9879		3,685.1016	3,685.1016	1.1918		3,714.8975

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2545	55.3909	7.9352	0.1721	4.0568	0.1774	4.2343	1.1121	0.1698	1.2818		18,263.4658	18,263.4658	1.2219		18,294.0130
Vendor	0.0118	0.4094	0.0882	1.0100e-003	0.0256	2.3700e-003	0.0280	7.3700e-003	2.2700e-003	9.6400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.0897	0.0560	0.5871	1.7900e-003	0.2012	1.2200e-003	0.2024	0.0534	1.1200e-003	0.0545		177.8824	177.8824	4.4200e-003		177.9929
Total	1.3560	55.8564	8.6104	0.1749	4.2836	0.1810	4.4647	1.1728	0.1732	1.3460		18,547.3654	18,547.3654	1.2355		18,578.2528

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					7.8238	0.0000	7.8238	4.2606	0.0000	4.2606			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	7.8238	2.1974	10.0212	4.2606	2.0216	6.2822	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2545	55.3909	7.9352	0.1721	3.7809	0.1774	3.9583	1.0444	0.1698	1.2141		18,263.4658	18,263.4658	1.2219		18,294.0130
Vendor	0.0118	0.4094	0.0882	1.0100e-003	0.0240	2.3700e-003	0.0263	6.9700e-003	2.2700e-003	9.2400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.0897	0.0560	0.5871	1.7900e-003	0.1855	1.2200e-003	0.1867	0.0495	1.1200e-003	0.0506		177.8824	177.8824	4.4200e-003		177.9929
Total	1.3560	55.8564	8.6104	0.1749	3.9903	0.1810	4.1713	1.1008	0.1732	1.2740		18,547.3654	18,547.3654	1.2355		18,578.2528

3.3 Rough Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.3 Rough Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0118	0.4094	0.0882	1.0100e-003	0.0256	2.3700e-003	0.0280	7.3700e-003	2.2700e-003	9.6400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.0997	0.0623	0.6524	1.9800e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		197.6472	197.6472	4.9100e-003		197.7699
Total	0.1114	0.4717	0.7405	2.9900e-003	0.2492	3.7200e-003	0.2529	0.0667	3.5200e-003	0.0702		303.6643	303.6643	0.0141		304.0169

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					3.7079	0.0000	3.7079	1.5375	0.0000	1.5375			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.7079	2.1739	5.8818	1.5375	2.0000	3.5375	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.3 Rough Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0118	0.4094	0.0882	1.0100e-003	0.0240	2.3700e-003	0.0263	6.9700e-003	2.2700e-003	9.2400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.0997	0.0623	0.6524	1.9800e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		197.6472	197.6472	4.9100e-003		197.7699
Total	0.1114	0.4717	0.7405	2.9900e-003	0.2300	3.7200e-003	0.2338	0.0620	3.5200e-003	0.0655		303.6643	303.6643	0.0141		304.0169

3.4 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.4 Fine Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0118	0.4094	0.0882	1.0100e-003	0.0256	2.3700e-003	0.0280	7.3700e-003	2.2700e-003	9.6400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.0997	0.0623	0.6524	1.9800e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		197.6472	197.6472	4.9100e-003		197.7699
Total	0.1114	0.4717	0.7405	2.9900e-003	0.2492	3.7200e-003	0.2529	0.0667	3.5200e-003	0.0702		303.6643	303.6643	0.0141		304.0169

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					3.7079	0.0000	3.7079	1.5375	0.0000	1.5375			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.7079	2.1739	5.8818	1.5375	2.0000	3.5375	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.4 Fine Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0118	0.4094	0.0882	1.0100e-003	0.0240	2.3700e-003	0.0263	6.9700e-003	2.2700e-003	9.2400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.0997	0.0623	0.6524	1.9800e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		197.6472	197.6472	4.9100e-003		197.7699
Total	0.1114	0.4717	0.7405	2.9900e-003	0.2300	3.7200e-003	0.2338	0.0620	3.5200e-003	0.0655		303.6643	303.6643	0.0141		304.0169

3.5 Building Construction - 2020

Unmitigated Construction On-Site

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

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0617	2.1494	0.4628	5.2800e-003	0.1345	0.0124	0.1469	0.0387	0.0119	0.0506		556.5898	556.5898	0.0483		557.7965
Worker	0.2641	0.1650	1.7287	5.2600e-003	0.5924	3.5900e-003	0.5960	0.1571	3.3000e-003	0.1604		523.7650	523.7650	0.0130		524.0902
Total	0.3259	2.3144	2.1916	0.0105	0.7269	0.0160	0.7429	0.1958	0.0152	0.2110		1,080.3548	1,080.3548	0.0613		1,081.8867

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0617	2.1494	0.4628	5.2800e-003	0.1259	0.0124	0.1383	0.0366	0.0119	0.0485		556.5898	556.5898	0.0483		557.7965
Worker	0.2641	0.1650	1.7287	5.2600e-003	0.5461	3.5900e-003	0.5497	0.1457	3.3000e-003	0.1490		523.7650	523.7650	0.0130		524.0902
Total	0.3259	2.3144	2.1916	0.0105	0.6719	0.0160	0.6879	0.1823	0.0152	0.1975		1,080.3548	1,080.3548	0.0613		1,081.8867

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		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Temecula Valley STEAM Academy Phase I Construction - 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
Vendor	0.0521	1.9266	0.4102	5.2400e-003	0.1345	3.8100e-003	0.1383	0.0387	3.6400e-003	0.0424		552.2438	552.2438	0.0457		553.3873
Worker	0.2466	0.1480	1.5817	5.0800e-003	0.5924	3.4900e-003	0.5959	0.1571	3.2100e-003	0.1603		506.2526	506.2526	0.0117		506.5450
Total	0.2987	2.0746	1.9918	0.0103	0.7269	7.3000e-003	0.7342	0.1958	6.8500e-003	0.2027		1,058.4963	1,058.4963	0.0574		1,059.9324

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Temecula Valley STEAM Academy Phase I Construction - 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
Vendor	0.0521	1.9266	0.4102	5.2400e-003	0.1259	3.8100e-003	0.1297	0.0366	3.6400e-003	0.0402		552.2438	552.2438	0.0457		553.3873
Worker	0.2466	0.1480	1.5817	5.0800e-003	0.5461	3.4900e-003	0.5496	0.1457	3.2100e-003	0.1490		506.2526	506.2526	0.0117		506.5450
Total	0.2987	2.0746	1.9918	0.0103	0.6719	7.3000e-003	0.6792	0.1823	6.8500e-003	0.1892		1,058.4963	1,058.4963	0.0574		1,059.9324

3.6 Asphalt 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		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7612	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.6 Asphalt 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	0.0698	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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7612	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.6 Asphalt 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
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	0.0698	0.0419	0.4476	1.4400e-003	0.1546	9.9000e-004	0.1555	0.0413	9.1000e-004	0.0422		143.2790	143.2790	3.3100e-003		143.3618
Total	0.0698	0.0419	0.4476	1.4400e-003	0.1546	9.9000e-004	0.1555	0.0413	9.1000e-004	0.0422		143.2790	143.2790	3.3100e-003		143.3618

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.5331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	28.7520	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.7 Architectural Coating - 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	0.0512	0.0307	0.3283	1.0500e-003	0.1230	7.2000e-004	0.1237	0.0326	6.7000e-004	0.0333		105.0713	105.0713	2.4300e-003		105.1320
Total	0.0512	0.0307	0.3283	1.0500e-003	0.1230	7.2000e-004	0.1237	0.0326	6.7000e-004	0.0333		105.0713	105.0713	2.4300e-003		105.1320

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	28.5331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	28.7520	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

3.7 Architectural Coating - 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
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	0.0512	0.0307	0.3283	1.0500e-003	0.1133	7.2000e-004	0.1141	0.0303	6.7000e-004	0.0309		105.0713	105.0713	2.4300e-003		105.1320
Total	0.0512	0.0307	0.3283	1.0500e-003	0.1133	7.2000e-004	0.1141	0.0303	6.7000e-004	0.0309		105.0713	105.0713	2.4300e-003		105.1320

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Temecula Valley STEAM Academy Phase I Construction - 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	1.5808	13.3912	19.4049	0.0857	6.7516	0.0647	6.8162	1.8065	0.0607	1.8672		8,749.1454	8,749.1454	0.4655		8,760.7834
Unmitigated	1.5808	13.3912	19.4049	0.0857	6.7516	0.0647	6.8162	1.8065	0.0607	1.8672		8,749.1454	8,749.1454	0.4655		8,760.7834

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	918.55	0.00	0.00	2,261,192	2,261,192
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	918.55	0.00	0.00	2,261,192	2,261,192

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

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	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
NaturalGas Unmitigated	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

Temecula Valley STEAM Academy Phase I Construction - 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					
Elementary School	1428.82	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

Temecula Valley STEAM Academy Phase I Construction - 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					
Elementary School	1.42882	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

6.0 Area Detail

6.1 Mitigation Measures Area

Temecula Valley STEAM Academy Phase I Construction - 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	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Unmitigated	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

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	0.1564					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5600e-003	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Total	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

Temecula Valley STEAM Academy Phase I Construction - 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	0.1564					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5600e-003	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Total	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Winter

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

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

Equipment Type	Number
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11.0 Vegetation

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Annual

Temecula Valley STEAM Academy Phase I Construction
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	59.53	1000sqft	1.37	59,534.00	0
Other Asphalt Surfaces	100.44	1000sqft	2.31	0.00	0
Other Non-Asphalt Surfaces	352.84	1000sqft	8.10	0.00	0
Parking Lot	67.54	1000sqft	1.55	67,538.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
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

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - assuming other non/asphalt is not painted
adding in additional area into non asphalt

Construction Phase -

Grading - rough grading on whole site, fine grading on phase I

Architectural Coating - accounting for building int and ext paint and parking lot striping

Trips and VMT - to account for water truck trips

Construction Off-road Equipment Mitigation - see assumptions file

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialExported	0.00	18,553.00
tblLandUse	LandUseSquareFeet	59,530.00	59,534.00
tblLandUse	LandUseSquareFeet	100,440.00	0.00
tblLandUse	LandUseSquareFeet	352,840.00	0.00
tblLandUse	LandUseSquareFeet	67,540.00	67,538.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

2.0 Emissions Summary

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-3-2020	5-2-2020	1.9830	1.9830
2	5-3-2020	8-2-2020	0.8541	0.8541
3	8-3-2020	11-2-2020	0.7870	0.7870
4	11-3-2020	2-2-2021	0.7604	0.7604
5	2-3-2021	5-2-2021	0.6901	0.6901
6	5-3-2021	8-2-2021	0.6536	0.6536
7	8-3-2021	9-30-2021	0.2711	0.2711
		Highest	1.9830	1.9830

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	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154
Energy	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	173.8341	173.8341	6.5600e-003	1.7600e-003	174.5219
Mobile	0.2059	1.7712	2.6008	0.0114	0.8634	8.3500e-003	0.8717	0.2313	7.8400e-003	0.2392	0.0000	1,055.0275	1,055.0275	0.0534	0.0000	1,056.3619
Waste						0.0000	0.0000		0.0000	0.0000	15.7095	0.0000	15.7095	0.9284	0.0000	38.9196
Water						0.0000	0.0000		0.0000	0.0000	0.5476	22.8743	23.4219	0.0572	1.5200e-003	25.3057
Total	0.4574	1.7968	2.6297	0.0115	0.8634	0.0103	0.8737	0.2313	9.8100e-003	0.2411	16.2571	1,251.7503	1,268.0075	1.0456	3.2800e-003	1,295.1244

Temecula Valley STEAM Academy Phase I Construction - 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	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154
Energy	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	173.8341	173.8341	6.5600e-003	1.7600e-003	174.5219
Mobile	0.2059	1.7712	2.6008	0.0114	0.8634	8.3500e-003	0.8717	0.2313	7.8400e-003	0.2392	0.0000	1,055.0275	1,055.0275	0.0534	0.0000	1,056.3619
Waste						0.0000	0.0000		0.0000	0.0000	15.7095	0.0000	15.7095	0.9284	0.0000	38.9196
Water						0.0000	0.0000		0.0000	0.0000	0.5476	22.8743	23.4219	0.0572	1.5200e-003	25.3057
Total	0.4574	1.7968	2.6297	0.0115	0.8634	0.0103	0.8737	0.2313	9.8100e-003	0.2411	16.2571	1,251.7503	1,268.0075	1.0456	3.2800e-003	1,295.1244

	ROG	NOx	CO	SO2	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

Temecula Valley STEAM Academy Phase I Construction - 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	2/3/2020	2/14/2020	5	10	
2	Rough Grading	Grading	2/15/2020	3/27/2020	5	30	
3	Fine Grading	Grading	3/28/2020	5/8/2020	5	30	
4	Building Construction	Building Construction	5/9/2020	7/2/2021	5	300	
5	Asphalt Paving	Paving	7/3/2021	7/30/2021	5	20	
6	Architectural Coating	Architectural Coating	7/31/2021	8/27/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 11.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 89,301; Non-Residential Outdoor: 29,767; Striped Parking Area: 4,052 (Architectural Coating – sqft)

OffRoad Equipment

Temecula Valley STEAM Academy Phase I Construction - 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
Rough Grading	Excavators	2	8.00	158	0.38
Rough Grading	Graders	1	8.00	187	0.41
Rough Grading	Rubber Tired Dozers	1	8.00	247	0.40
Rough Grading	Scrapers	2	8.00	367	0.48
Rough Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Fine Grading	Excavators	2	8.00	158	0.38
Fine Grading	Graders	1	8.00	187	0.41
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Fine Grading	Scrapers	2	8.00	367	0.48
Fine Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Asphalt Paving	Pavers	2	8.00	130	0.42
Asphalt Paving	Paving Equipment	2	8.00	132	0.36
Asphalt Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	4.00	2,319.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0915	0.0000	0.0915	0.0498	0.0000	0.0498	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e-004	0.0915	0.0110	0.1025	0.0498	0.0101	0.0599	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

Temecula Valley STEAM Academy Phase I Construction - Riverside-South Coast County, Annual

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0900e-003	0.2811	0.0364	8.7000e-004	0.0200	8.8000e-004	0.0209	5.4900e-003	8.4000e-004	6.3300e-003	0.0000	84.0747	84.0747	5.2700e-003	0.0000	84.2064
Vendor	6.0000e-005	2.0800e-003	4.1000e-004	1.0000e-005	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4918	0.4918	4.0000e-005	0.0000	0.4928
Worker	4.1000e-004	2.9000e-004	3.0900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8276	0.8276	2.0000e-005	0.0000	0.8282
Total	6.5600e-003	0.2835	0.0399	8.9000e-004	0.0211	9.0000e-004	0.0220	5.7900e-003	8.6000e-004	6.6500e-003	0.0000	85.3941	85.3941	5.3300e-003	0.0000	85.5273

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					0.0391	0.0000	0.0391	0.0213	0.0000	0.0213	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e-004	0.0391	0.0110	0.0501	0.0213	0.0101	0.0314	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

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3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0900e-003	0.2811	0.0364	8.7000e-004	0.0186	8.8000e-004	0.0195	5.1600e-003	8.4000e-004	6.0000e-003	0.0000	84.0747	84.0747	5.2700e-003	0.0000	84.2064
Vendor	6.0000e-005	2.0800e-003	4.1000e-004	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4918	0.4918	4.0000e-005	0.0000	0.4928
Worker	4.1000e-004	2.9000e-004	3.0900e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.2000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.8276	0.8276	2.0000e-005	0.0000	0.8282
Total	6.5600e-003	0.2835	0.0399	8.9000e-004	0.0197	9.0000e-004	0.0206	5.4300e-003	8.6000e-004	6.3000e-003	0.0000	85.3941	85.3941	5.3300e-003	0.0000	85.5273

3.3 Rough Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872
Total	0.0668	0.7530	0.4794	9.3000e-004	0.1301	0.0326	0.1627	0.0540	0.0300	0.0840	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872

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3.3 Rough Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	6.2400e-003	1.2200e-003	2.0000e-005	3.8000e-004	4.0000e-005	4.1000e-004	1.1000e-004	3.0000e-005	1.4000e-004	0.0000	1.4753	1.4753	1.2000e-004	0.0000	1.4783
Worker	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605
Total	1.5500e-003	7.2100e-003	0.0115	5.0000e-005	3.6800e-003	6.0000e-005	3.7300e-003	9.9000e-004	5.0000e-005	1.0300e-003	0.0000	4.2341	4.2341	1.9000e-004	0.0000	4.2388

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					0.0556	0.0000	0.0556	0.0231	0.0000	0.0231	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871
Total	0.0668	0.7530	0.4794	9.3000e-004	0.0556	0.0326	0.0882	0.0231	0.0300	0.0531	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871

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3.3 Rough Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	6.2400e-003	1.2200e-003	2.0000e-005	3.5000e-004	4.0000e-005	3.9000e-004	1.0000e-004	3.0000e-005	1.4000e-004	0.0000	1.4753	1.4753	1.2000e-004	0.0000	1.4783
Worker	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.0400e-003	2.0000e-005	3.0600e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605
Total	1.5500e-003	7.2100e-003	0.0115	5.0000e-005	3.3900e-003	6.0000e-005	3.4500e-003	9.1000e-004	5.0000e-005	9.7000e-004	0.0000	4.2341	4.2341	1.9000e-004	0.0000	4.2388

3.4 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872
Total	0.0668	0.7530	0.4794	9.3000e-004	0.1301	0.0326	0.1627	0.0540	0.0300	0.0840	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872

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3.4 Fine Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	6.2400e-003	1.2200e-003	2.0000e-005	3.8000e-004	4.0000e-005	4.1000e-004	1.1000e-004	3.0000e-005	1.4000e-004	0.0000	1.4753	1.4753	1.2000e-004	0.0000	1.4783
Worker	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605
Total	1.5500e-003	7.2100e-003	0.0115	5.0000e-005	3.6800e-003	6.0000e-005	3.7300e-003	9.9000e-004	5.0000e-005	1.0300e-003	0.0000	4.2341	4.2341	1.9000e-004	0.0000	4.2388

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					0.0556	0.0000	0.0556	0.0231	0.0000	0.0231	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871
Total	0.0668	0.7530	0.4794	9.3000e-004	0.0556	0.0326	0.0882	0.0231	0.0300	0.0531	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871

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3.4 Fine Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	6.2400e-003	1.2200e-003	2.0000e-005	3.5000e-004	4.0000e-005	3.9000e-004	1.0000e-004	3.0000e-005	1.4000e-004	0.0000	1.4753	1.4753	1.2000e-004	0.0000	1.4783
Worker	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.0400e-003	2.0000e-005	3.0600e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605
Total	1.5500e-003	7.2100e-003	0.0115	5.0000e-005	3.3900e-003	6.0000e-005	3.4500e-003	9.1000e-004	5.0000e-005	9.7000e-004	0.0000	4.2341	4.2341	1.9000e-004	0.0000	4.2388

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1791	1.6212	1.4237	2.2700e-003		0.0944	0.0944		0.0888	0.0888	0.0000	195.7104	195.7104	0.0478	0.0000	196.9041
Total	0.1791	1.6212	1.4237	2.2700e-003		0.0944	0.0944		0.0888	0.0888	0.0000	195.7104	195.7104	0.0478	0.0000	196.9041

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3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0400e-003	0.1846	0.0361	4.6000e-004	0.0112	1.0400e-003	0.0123	3.2300e-003	1.0000e-003	4.2300e-003	0.0000	43.6328	43.6328	3.4900e-003	0.0000	43.7200
Worker	0.0206	0.0144	0.1540	4.6000e-004	0.0492	3.0000e-004	0.0495	0.0131	2.8000e-004	0.0134	0.0000	41.1840	41.1840	1.0300e-003	0.0000	41.2097
Total	0.0256	0.1990	0.1901	9.2000e-004	0.0604	1.3400e-003	0.0618	0.0163	1.2800e-003	0.0176	0.0000	84.8167	84.8167	4.5200e-003	0.0000	84.9297

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	0.1791	1.6212	1.4237	2.2700e-003		0.0944	0.0944		0.0888	0.0888	0.0000	195.7102	195.7102	0.0478	0.0000	196.9039
Total	0.1791	1.6212	1.4237	2.2700e-003		0.0944	0.0944		0.0888	0.0888	0.0000	195.7102	195.7102	0.0478	0.0000	196.9039

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3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0400e-003	0.1846	0.0361	4.6000e-004	0.0105	1.0400e-003	0.0115	3.0600e-003	1.0000e-003	4.0600e-003	0.0000	43.6328	43.6328	3.4900e-003	0.0000	43.7200
Worker	0.0206	0.0144	0.1540	4.6000e-004	0.0454	3.0000e-004	0.0457	0.0121	2.8000e-004	0.0124	0.0000	41.1840	41.1840	1.0300e-003	0.0000	41.2097
Total	0.0256	0.1990	0.1901	9.2000e-004	0.0559	1.3400e-003	0.0572	0.0152	1.2800e-003	0.0165	0.0000	84.8167	84.8167	4.5200e-003	0.0000	84.9297

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	0.1245	1.1418	1.0857	1.7600e-003		0.0628	0.0628		0.0590	0.0590	0.0000	151.7224	151.7224	0.0366	0.0000	152.6375
Total	0.1245	1.1418	1.0857	1.7600e-003		0.0628	0.0628		0.0590	0.0590	0.0000	151.7224	151.7224	0.0366	0.0000	152.6375

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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	3.2800e-003	0.1283	0.0247	3.5000e-004	8.6900e-003	2.5000e-004	8.9300e-003	2.5100e-003	2.3000e-004	2.7400e-003	0.0000	33.5585	33.5585	2.5600e-003	0.0000	33.6225
Worker	0.0149	0.0100	0.1093	3.4000e-004	0.0382	2.3000e-004	0.0384	0.0101	2.1000e-004	0.0103	0.0000	30.8563	30.8563	7.2000e-004	0.0000	30.8743
Total	0.0182	0.1383	0.1340	6.9000e-004	0.0469	4.8000e-004	0.0473	0.0126	4.4000e-004	0.0131	0.0000	64.4148	64.4148	3.2800e-003	0.0000	64.4968

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	0.1245	1.1418	1.0857	1.7600e-003		0.0628	0.0628		0.0590	0.0590	0.0000	151.7222	151.7222	0.0366	0.0000	152.6373
Total	0.1245	1.1418	1.0857	1.7600e-003		0.0628	0.0628		0.0590	0.0590	0.0000	151.7222	151.7222	0.0366	0.0000	152.6373

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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	3.2800e-003	0.1283	0.0247	3.5000e-004	8.1300e-003	2.5000e-004	8.3800e-003	2.3700e-003	2.3000e-004	2.6000e-003	0.0000	33.5585	33.5585	2.5600e-003	0.0000	33.6225
Worker	0.0149	0.0100	0.1093	3.4000e-004	0.0352	2.3000e-004	0.0354	9.4000e-003	2.1000e-004	9.6100e-003	0.0000	30.8563	30.8563	7.2000e-004	0.0000	30.8743
Total	0.0182	0.1383	0.1340	6.9000e-004	0.0433	4.8000e-004	0.0438	0.0118	4.4000e-004	0.0122	0.0000	64.4148	64.4148	3.2800e-003	0.0000	64.4968

3.6 Asphalt 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	5.0600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0176	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

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3.6 Asphalt 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	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	5.0600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0176	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

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3.6 Asphalt 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	1.5200e-003	1.0000e-005	1.5300e-003	4.1000e-004	1.0000e-005	4.2000e-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	1.5200e-003	1.0000e-005	1.5300e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2853					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.2875	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

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3.7 Architectural Coating - 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	4.7000e-004	3.2000e-004	3.4600e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9777	0.9777	2.0000e-005	0.0000	0.9783
Total	4.7000e-004	3.2000e-004	3.4600e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9777	0.9777	2.0000e-005	0.0000	0.9783

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	0.2853					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.2875	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

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3.7 Architectural Coating - 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	4.7000e-004	3.2000e-004	3.4600e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.9777	0.9777	2.0000e-005	0.0000	0.9783
Total	4.7000e-004	3.2000e-004	3.4600e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.9777	0.9777	2.0000e-005	0.0000	0.9783

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2059	1.7712	2.6008	0.0114	0.8634	8.3500e-003	0.8717	0.2313	7.8400e-003	0.2392	0.0000	1,055.0275	1,055.0275	0.0534	0.0000	1,056.3619
Unmitigated	0.2059	1.7712	2.6008	0.0114	0.8634	8.3500e-003	0.8717	0.2313	7.8400e-003	0.2392	0.0000	1,055.0275	1,055.0275	0.0534	0.0000	1,056.3619

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	918.55	0.00	0.00	2,261,192	2,261,192
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	918.55	0.00	0.00	2,261,192	2,261,192

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	146.0040	146.0040	6.0300e-003	1.2500e-003	146.5263
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	146.0040	146.0040	6.0300e-003	1.2500e-003	146.5263
NaturalGas Mitigated	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956
NaturalGas Unmitigated	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956

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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					
Elementary School	521518	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	521518	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	434598	138.4723	5.7200e-003	1.1800e-003	138.9677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	23638.3	7.5317	3.1000e-004	6.0000e-005	7.5586
Total		146.0040	6.0300e-003	1.2400e-003	146.5263

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	434598	138.4723	5.7200e-003	1.1800e-003	138.9677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	23638.3	7.5317	3.1000e-004	6.0000e-005	7.5586
Total		146.0040	6.0300e-003	1.2400e-003	146.5263

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154
Unmitigated	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154

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	0.0285					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2195					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.9000e-004	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154
Total	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0285					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2195					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.9000e-004	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154
Total	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	23.4219	0.0572	1.5200e-003	25.3057
Unmitigated	23.4219	0.0572	1.5200e-003	25.3057

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.72619 / 4.43877	23.4219	0.0572	1.5200e-003	25.3057
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		23.4219	0.0572	1.5200e-003	25.3057

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.72619 / 4.43877	23.4219	0.0572	1.5200e-003	25.3057
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		23.4219	0.0572	1.5200e-003	25.3057

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.7095	0.9284	0.0000	38.9196
Unmitigated	15.7095	0.9284	0.0000	38.9196

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	77.39	15.7095	0.9284	0.0000	38.9196
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		15.7095	0.9284	0.0000	38.9196

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	77.39	15.7095	0.9284	0.0000	38.9196
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		15.7095	0.9284	0.0000	38.9196

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

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Equipment Type	Number
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11.0 Vegetation

**Temecula Valley STEAM Academy Phase I Construction
Riverside-South Coast County, Mitigation Report**

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rough Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	5	No Change	0.00
Scrapers	Diesel	No Change	0	4	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	11	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr						Unmitigated mt/yr						
Air Compressors	2.19000E-003	1.52700E-002	1.81800E-002	3.00000E-005	9.40000E-004	9.40000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.80000E-004	0.00000E+000	2.55763E+000
Cranes	5.71900E-002	6.76560E-001	2.70050E-001	7.60000E-004	2.77200E-002	2.55000E-002	0.00000E+000	6.65313E+001	6.65313E+001	2.15200E-002	0.00000E+000	6.70693E+001
Excavators	1.47000E-002	1.44760E-001	1.96070E-001	3.10000E-004	7.01000E-003	6.45000E-003	0.00000E+000	2.72220E+001	2.72220E+001	8.80000E-003	0.00000E+000	2.74421E+001
Forklifts	6.19200E-002	5.60620E-001	5.28680E-001	6.90000E-004	4.09500E-002	3.76700E-002	0.00000E+000	6.04311E+001	6.04311E+001	1.95400E-002	0.00000E+000	6.09197E+001
Generator Sets	5.71300E-002	5.01330E-001	5.54470E-001	9.90000E-004	2.75700E-002	2.75700E-002	0.00000E+000	8.47811E+001	8.47811E+001	4.58000E-003	0.00000E+000	8.48956E+001
Graders	1.42700E-002	1.89770E-001	5.44300E-002	2.00000E-004	6.07000E-003	5.58000E-003	0.00000E+000	1.74919E+001	1.74919E+001	5.66000E-003	0.00000E+000	1.76334E+001
Pavers	4.92000E-003	5.19000E-002	5.81000E-002	9.00000E-005	2.51000E-003	2.31000E-003	0.00000E+000	8.25649E+000	8.25649E+000	2.67000E-003	0.00000E+000	8.32324E+000
Paving Equipment	3.84000E-003	3.88100E-002	5.08300E-002	8.00000E-005	1.92000E-003	1.76000E-003	0.00000E+000	7.15688E+000	7.15688E+000	2.31000E-003	0.00000E+000	7.21475E+000
Rollers	3.79000E-003	3.84800E-002	3.76100E-002	5.00000E-005	2.35000E-003	2.16000E-003	0.00000E+000	4.61011E+000	4.61011E+000	1.49000E-003	0.00000E+000	4.64739E+000
Rubber Tired Dozers	4.85800E-002	5.09950E-001	1.85920E-001	3.80000E-004	2.49700E-002	2.29800E-002	0.00000E+000	3.37749E+001	3.37749E+001	1.09200E-002	0.00000E+000	3.40480E+001
Scrapers	5.95700E-002	7.05120E-001	4.47520E-001	9.10000E-004	2.75000E-002	2.53000E-002	0.00000E+000	7.98512E+001	7.98512E+001	2.58300E-002	0.00000E+000	8.04969E+001
Tractors/Loaders/Backhoes	9.54300E-002	9.61320E-001	1.07666E+000	1.47000E-003	5.94000E-002	5.46400E-002	0.00000E+000	1.29284E+002	1.29284E+002	4.18100E-002	0.00000E+000	1.30330E+002
Welders	4.87300E-002	2.31610E-001	2.61900E-001	3.80000E-004	1.22000E-002	1.22000E-002	0.00000E+000	2.82331E+001	2.82331E+001	3.96000E-003	0.00000E+000	2.83320E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	2.19000E-003	1.52700E-002	1.81800E-002	3.00000E-005	9.40000E-004	9.40000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.80000E-004	0.00000E+000	2.55763E+000
Cranes	5.71900E-002	6.76560E-001	2.70050E-001	7.60000E-004	2.77200E-002	2.55000E-002	0.00000E+000	6.65312E+001	6.65312E+001	2.15200E-002	0.00000E+000	6.70692E+001
Excavators	1.47000E-002	1.44760E-001	1.96070E-001	3.10000E-004	7.01000E-003	6.45000E-003	0.00000E+000	2.72220E+001	2.72220E+001	8.80000E-003	0.00000E+000	2.74421E+001
Forklifts	6.19200E-002	5.60610E-001	5.28680E-001	6.90000E-004	4.09500E-002	3.76700E-002	0.00000E+000	6.04310E+001	6.04310E+001	1.95400E-002	0.00000E+000	6.09196E+001
Generator Sets	5.71300E-002	5.01320E-001	5.54470E-001	9.90000E-004	2.75700E-002	2.75700E-002	0.00000E+000	8.47810E+001	8.47810E+001	4.58000E-003	0.00000E+000	8.48955E+001
Graders	1.42700E-002	1.89770E-001	5.44300E-002	2.00000E-004	6.07000E-003	5.58000E-003	0.00000E+000	1.74919E+001	1.74919E+001	5.66000E-003	0.00000E+000	1.76334E+001
Pavers	4.92000E-003	5.19000E-002	5.81000E-002	9.00000E-005	2.51000E-003	2.31000E-003	0.00000E+000	8.25648E+000	8.25648E+000	2.67000E-003	0.00000E+000	8.32323E+000
Paving Equipment	3.84000E-003	3.88100E-002	5.08300E-002	8.00000E-005	1.92000E-003	1.76000E-003	0.00000E+000	7.15688E+000	7.15688E+000	2.31000E-003	0.00000E+000	7.21474E+000
Rollers	3.79000E-003	3.84800E-002	3.76100E-002	5.00000E-005	2.35000E-003	2.16000E-003	0.00000E+000	4.61011E+000	4.61011E+000	1.49000E-003	0.00000E+000	4.64738E+000
Rubber Tired Dozers	4.85800E-002	5.09950E-001	1.85920E-001	3.80000E-004	2.49700E-002	2.29800E-002	0.00000E+000	3.37748E+001	3.37748E+001	1.09200E-002	0.00000E+000	3.40479E+001
Scrapers	5.95700E-002	7.05120E-001	4.47520E-001	9.10000E-004	2.75000E-002	2.53000E-002	0.00000E+000	7.98511E+001	7.98511E+001	2.58300E-002	0.00000E+000	8.04968E+001
Tractors/Loaders/Balckhoes	9.54300E-002	9.61320E-001	1.07666E+000	1.47000E-003	5.94000E-002	5.46400E-002	0.00000E+000	1.29284E+002	1.29284E+002	4.18100E-002	0.00000E+000	1.30330E+002
Welders	4.87300E-002	2.31610E-001	2.61900E-001	3.80000E-004	1.22000E-002	1.22000E-002	0.00000E+000	2.82331E+001	2.82331E+001	3.96000E-003	0.00000E+000	2.83320E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20244E-006	1.20244E-006	0.00000E+000	0.00000E+000	1.19280E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10205E-006	1.10205E-006	0.00000E+000	0.00000E+000	1.09321E-006
Forklifts	0.00000E+000	1.78374E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15834E-006	1.15834E-006	0.00000E+000	0.00000E+000	1.31320E-006
Generator Sets	0.00000E+000	1.99469E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17792E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14338E-006	1.14338E-006	0.00000E+000	0.00000E+000	1.13421E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21117E-006	1.21117E-006	0.00000E+000	0.00000E+000	1.20146E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.38605E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.15175E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18431E-006	1.18431E-006	0.00000E+000	0.00000E+000	1.17481E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12710E-006	1.12710E-006	0.00000E+000	0.00000E+000	1.11806E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16023E-006	1.16023E-006	0.00000E+000	0.00000E+000	1.15093E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.06258E-006	1.06258E-006	0.00000E+000	0.00000E+000	1.05887E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00	
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day) 2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	9.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.08	0.06
Asphalt Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Paving	Roads	0.00	0.00	0.00	0.00	0.08	0.07
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.11	0.03	0.10	0.03	0.08	0.07
Fine Grading	Fugitive Dust	0.13	0.05	0.06	0.02	0.57	0.57
Fine Grading	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Rough Grading	Fugitive Dust	0.13	0.05	0.06	0.02	0.57	0.57
Rough Grading	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Site Preparation	Fugitive Dust	0.09	0.05	0.04	0.02	0.57	0.57
Site Preparation	Roads	0.02	0.01	0.02	0.01	0.07	0.06

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	50.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

Temecula Valley STEAM Academy Phase II
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	66.75	1000sqft	1.53	66,747.00	0
Other Asphalt Surfaces	39.36	1000sqft	0.90	0.00	0
Other Non-Asphalt Surfaces	314.97	1000sqft	7.23	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - removed to subtract non-paintable space

Construction Phase - see assumptions file

Grading -

Trips and VMT - to account for water truck trips and export

Construction Off-road Equipment Mitigation - see assumptions file

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	PhaseEndDate	10/19/2023	8/28/2023
tblConstructionPhase	PhaseStartDate	9/22/2023	8/1/2023
tblGrading	MaterialExported	0.00	5,000.00
tblLandUse	LandUseSquareFeet	39,362.00	0.00
tblLandUse	LandUseSquareFeet	314,966.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

2.0 Emissions Summary

Temecula Valley STEAM Academy Phase II - 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	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982
Energy	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821
Mobile	1.5779	9.8322	19.1626	0.0924	7.5657	0.0505	7.6162	2.0235	0.0470	2.0705		9,451.6246	9,451.6246	0.3716		9,460.9136
Total	3.0903	9.9896	19.3374	0.0934	7.5657	0.0626	7.6283	2.0235	0.0591	2.0826		9,640.1788	9,640.1788	0.3754	3.4600e-003	9,650.5938

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	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982
Energy	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821
Mobile	1.5779	9.8322	19.1626	0.0924	7.5657	0.0505	7.6162	2.0235	0.0470	2.0705		9,451.6246	9,451.6246	0.3716		9,460.9136
Total	3.0903	9.9896	19.3374	0.0934	7.5657	0.0626	7.6283	2.0235	0.0591	2.0826		9,640.1788	9,640.1788	0.3754	3.4600e-003	9,650.5938

Temecula Valley STEAM Academy Phase II - 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
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	Fine Grading	Grading	8/1/2023	8/28/2023	5	20	
2	Building Construction	Building Construction	8/29/2023	7/15/2024	5	230	
3	Architectural Coating	Architectural Coating	7/16/2024	8/12/2024	5	20	
4	Asphalt Paving	Paving	8/13/2024	9/9/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 8.13

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 100,121; Non-Residential Outdoor: 33,374; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Asphalt Paving	Pavers	2	8.00	130	0.42
Asphalt Paving	Paving Equipment	2	8.00	132	0.36
Fine Grading	Excavators	1	8.00	158	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
Asphalt Paving	Rollers	2	8.00	80	0.38
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Fine Grading	Graders	1	8.00	187	0.41
Fine Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Asphalt Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	6	15.00	4.00	625.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	28.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Fine Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5840	0.0000	6.5840	3.3723	0.0000	3.3723			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.5840	0.7749	7.3589	3.3723	0.7129	4.0852		2,872.6910	2,872.6910	0.9291		2,895.9182

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

3.2 Fine Grading - 2023

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	0.0994	3.9015	0.7642	0.0225	0.5465	7.4300e-003	0.5540	0.1498	7.1100e-003	0.1569		2,387.5716	2,387.5716	0.1122		2,390.3775
Vendor	6.6800e-003	0.2626	0.0541	1.0000e-003	0.0256	2.6000e-004	0.0259	7.3700e-003	2.5000e-004	7.6300e-003		105.4878	105.4878	5.6800e-003		105.6299
Worker	0.0624	0.0329	0.4721	1.4900e-003	0.1677	9.4000e-004	0.1686	0.0445	8.6000e-004	0.0453		148.0292	148.0292	3.0700e-003		148.1059
Total	0.1684	4.1970	1.2904	0.0250	0.7398	8.6300e-003	0.7485	0.2017	8.2200e-003	0.2099		2,641.0886	2,641.0886	0.1210		2,644.1133

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					2.8147	0.0000	2.8147	1.4417	0.0000	1.4417			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	2.8147	0.7749	3.5896	1.4417	0.7129	2.1546	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

3.2 Fine Grading - 2023

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	0.0994	3.9015	0.7642	0.0225	0.5094	7.4300e-003	0.5168	0.1407	7.1100e-003	0.1478		2,387.5716	2,387.5716	0.1122		2,390.3775
Vendor	6.6800e-003	0.2626	0.0541	1.0000e-003	0.0240	2.6000e-004	0.0242	6.9700e-003	2.5000e-004	7.2200e-003		105.4878	105.4878	5.6800e-003		105.6299
Worker	0.0624	0.0329	0.4721	1.4900e-003	0.1546	9.4000e-004	0.1555	0.0413	8.6000e-004	0.0421		148.0292	148.0292	3.0700e-003		148.1059
Total	0.1684	4.1970	1.2904	0.0250	0.6879	8.6300e-003	0.6965	0.1889	8.2200e-003	0.1971		2,641.0886	2,641.0886	0.1210		2,644.1133

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

3.3 Building Construction - 2023

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	0.0184	0.7222	0.1489	2.7500e-003	0.0704	7.3000e-004	0.0712	0.0203	6.9000e-004	0.0210		290.0915	290.0915	0.0156		290.4822
Worker	0.1164	0.0614	0.8812	2.7700e-003	0.3130	1.7500e-003	0.3147	0.0830	1.6100e-003	0.0846		276.3211	276.3211	5.7300e-003		276.4644
Total	0.1348	0.7835	1.0301	5.5200e-003	0.3834	2.4800e-003	0.3859	0.1033	2.3000e-003	0.1056		566.4126	566.4126	0.0214		566.9466

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

3.3 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0184	0.7222	0.1489	2.7500e-003	0.0659	7.3000e-004	0.0666	0.0192	6.9000e-004	0.0199		290.0915	290.0915	0.0156		290.4822
Worker	0.1164	0.0614	0.8812	2.7700e-003	0.2885	1.7500e-003	0.2902	0.0770	1.6100e-003	0.0786		276.3211	276.3211	5.7300e-003		276.4644
Total	0.1348	0.7835	1.0301	5.5200e-003	0.3544	2.4800e-003	0.3569	0.0962	2.3000e-003	0.0985		566.4126	566.4126	0.0214		566.9466

3.3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

3.3 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0180	0.7183	0.1438	2.7400e-003	0.0704	7.2000e-004	0.0712	0.0203	6.9000e-004	0.0210		288.9566	288.9566	0.0153		289.3388
Worker	0.1097	0.0557	0.8262	2.6700e-003	0.3130	1.7300e-003	0.3147	0.0830	1.6000e-003	0.0846		266.4568	266.4568	5.2300e-003		266.5875
Total	0.1277	0.7739	0.9701	5.4100e-003	0.3834	2.4500e-003	0.3859	0.1033	2.2900e-003	0.1056		555.4134	555.4134	0.0205		555.9263

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

3.3 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0180	0.7183	0.1438	2.7400e-003	0.0659	7.2000e-004	0.0666	0.0192	6.9000e-004	0.0199		288.9566	288.9566	0.0153		289.3388
Worker	0.1097	0.0557	0.8262	2.6700e-003	0.2885	1.7300e-003	0.2902	0.0770	1.6000e-003	0.0786		266.4568	266.4568	5.2300e-003		266.5875
Total	0.1277	0.7739	0.9701	5.4100e-003	0.3544	2.4500e-003	0.3569	0.0962	2.2900e-003	0.0985		555.4134	555.4134	0.0205		555.9263

3.4 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	30.9375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	31.1182	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

3.4 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0235	0.0119	0.1771	5.7000e-004	0.0671	3.7000e-004	0.0674	0.0178	3.4000e-004	0.0181		57.0979	57.0979	1.1200e-003		57.1259
Total	0.0235	0.0119	0.1771	5.7000e-004	0.0671	3.7000e-004	0.0674	0.0178	3.4000e-004	0.0181		57.0979	57.0979	1.1200e-003		57.1259

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	30.9375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	31.1182	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

3.4 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0235	0.0119	0.1771	5.7000e-004	0.0618	3.7000e-004	0.0622	0.0165	3.4000e-004	0.0168		57.0979	57.0979	1.1200e-003		57.1259
Total	0.0235	0.0119	0.1771	5.7000e-004	0.0618	3.7000e-004	0.0622	0.0165	3.4000e-004	0.0168		57.0979	57.0979	1.1200e-003		57.1259

3.5 Asphalt Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.1179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1061	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

3.5 Asphalt Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0588	0.0298	0.4426	1.4300e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		142.7447	142.7447	2.8000e-003		142.8147
Total	0.0588	0.0298	0.4426	1.4300e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		142.7447	142.7447	2.8000e-003		142.8147

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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.1179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1061	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

3.5 Asphalt Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0588	0.0298	0.4426	1.4300e-003	0.1546	9.3000e-004	0.1555	0.0413	8.6000e-004	0.0421		142.7447	142.7447	2.8000e-003		142.8147
Total	0.0588	0.0298	0.4426	1.4300e-003	0.1546	9.3000e-004	0.1555	0.0413	8.6000e-004	0.0421		142.7447	142.7447	2.8000e-003		142.8147

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Temecula Valley STEAM Academy Phase II - 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	1.5779	9.8322	19.1626	0.0924	7.5657	0.0505	7.6162	2.0235	0.0470	2.0705		9,451.6246	9,451.6246	0.3716		9,460.9136
Unmitigated	1.5779	9.8322	19.1626	0.0924	7.5657	0.0505	7.6162	2.0235	0.0470	2.0705		9,451.6246	9,451.6246	0.3716		9,460.9136

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	1,029.91	0.00	0.00	2,535,323	2,535,323
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	1,029.91	0.00	0.00	2,535,323	2,535,323

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Non-Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789

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	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821
NaturalGas Unmitigated	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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					
Elementary School	1601.93	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821

Mitigated

	Natural Gas 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					
Elementary School	1.60193	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821

6.0 Area Detail

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Mitigated	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004			0.0982
Unmitigated	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004			0.0982

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	0.1695					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Consumer Products	1.3216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Landscaping	3.9500e-003	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004			0.0982
Total	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004			0.0982

Temecula Valley STEAM Academy Phase II - 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	0.1695					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9500e-003	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982
Total	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Summer

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

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

Equipment Type	Number
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11.0 Vegetation

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

Temecula Valley STEAM Academy Phase II
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	66.75	1000sqft	1.53	66,747.00	0
Other Asphalt Surfaces	39.36	1000sqft	0.90	0.00	0
Other Non-Asphalt Surfaces	314.97	1000sqft	7.23	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2025
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

Project Characteristics -

Land Use - removed to subtract non-paintable space

Construction Phase - see assumptions file

Grading -

Trips and VMT - to account for water truck trips and export

Construction Off-road Equipment Mitigation - see assumptions file

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	PhaseEndDate	10/19/2023	8/28/2023
tblConstructionPhase	PhaseStartDate	9/22/2023	8/1/2023
tblGrading	MaterialExported	0.00	5,000.00
tblLandUse	LandUseSquareFeet	39,362.00	0.00
tblLandUse	LandUseSquareFeet	314,966.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

2.0 Emissions Summary

Temecula Valley STEAM Academy Phase II - 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	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982
Energy	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821
Mobile	1.3273	9.7842	16.4646	0.0854	7.5657	0.0507	7.6164	2.0235	0.0473	2.0708		8,746.8174	8,746.8174	0.3813		8,756.3508
Total	2.8397	9.9416	16.6394	0.0864	7.5657	0.0628	7.6285	2.0235	0.0593	2.0829		8,935.3716	8,935.3716	0.3852	3.4600e-003	8,946.0310

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	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982
Energy	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821
Mobile	1.3273	9.7842	16.4646	0.0854	7.5657	0.0507	7.6164	2.0235	0.0473	2.0708		8,746.8174	8,746.8174	0.3813		8,756.3508
Total	2.8397	9.9416	16.6394	0.0864	7.5657	0.0628	7.6285	2.0235	0.0593	2.0829		8,935.3716	8,935.3716	0.3852	3.4600e-003	8,946.0310

Temecula Valley STEAM Academy Phase II - 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
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	Fine Grading	Grading	8/1/2023	8/28/2023	5	20	
2	Building Construction	Building Construction	8/29/2023	7/15/2024	5	230	
3	Architectural Coating	Architectural Coating	7/16/2024	8/12/2024	5	20	
4	Asphalt Paving	Paving	8/13/2024	9/9/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 8.13

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 100,121; Non-Residential Outdoor: 33,374; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Asphalt Paving	Pavers	2	8.00	130	0.42
Asphalt Paving	Paving Equipment	2	8.00	132	0.36
Fine Grading	Excavators	1	8.00	158	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
Asphalt Paving	Rollers	2	8.00	80	0.38
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Fine Grading	Graders	1	8.00	187	0.41
Fine Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Asphalt Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	6	15.00	4.00	625.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	28.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Fine Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5840	0.0000	6.5840	3.3723	0.0000	3.3723			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.5840	0.7749	7.3589	3.3723	0.7129	4.0852		2,872.6910	2,872.6910	0.9291		2,895.9182

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

3.2 Fine Grading - 2023

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	0.1046	3.8772	0.8596	0.0219	0.5465	7.5600e-003	0.5541	0.1498	7.2300e-003	0.1570		2,327.6583	2,327.6583	0.1216		2,330.6976
Vendor	7.0800e-003	0.2590	0.0625	9.6000e-004	0.0256	2.7000e-004	0.0259	7.3700e-003	2.6000e-004	7.6300e-003		101.5611	101.5611	6.3000e-003		101.7185
Worker	0.0616	0.0340	0.3799	1.3300e-003	0.1677	9.4000e-004	0.1686	0.0445	8.6000e-004	0.0453		132.8118	132.8118	2.6800e-003		132.8787
Total	0.1733	4.1702	1.3020	0.0242	0.7398	8.7700e-003	0.7486	0.2017	8.3500e-003	0.2100		2,562.0312	2,562.0312	0.1306		2,565.2949

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					2.8147	0.0000	2.8147	1.4417	0.0000	1.4417			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	2.8147	0.7749	3.5896	1.4417	0.7129	2.1546	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

3.2 Fine Grading - 2023

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	0.1046	3.8772	0.8596	0.0219	0.5094	7.5600e-003	0.5169	0.1407	7.2300e-003	0.1479		2,327.6583	2,327.6583	0.1216		2,330.6976
Vendor	7.0800e-003	0.2590	0.0625	9.6000e-004	0.0240	2.7000e-004	0.0242	6.9700e-003	2.6000e-004	7.2300e-003		101.5611	101.5611	6.3000e-003		101.7185
Worker	0.0616	0.0340	0.3799	1.3300e-003	0.1546	9.4000e-004	0.1555	0.0413	8.6000e-004	0.0421		132.8118	132.8118	2.6800e-003		132.8787
Total	0.1733	4.1702	1.3020	0.0242	0.6879	8.7700e-003	0.6967	0.1889	8.3500e-003	0.1973		2,562.0312	2,562.0312	0.1306		2,565.2949

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

3.3 Building Construction - 2023

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	0.0195	0.7124	0.1720	2.6500e-003	0.0704	7.5000e-004	0.0712	0.0203	7.2000e-004	0.0210		279.2929	279.2929	0.0173		279.7260
Worker	0.1150	0.0634	0.7092	2.4900e-003	0.3130	1.7500e-003	0.3147	0.0830	1.6100e-003	0.0846		247.9154	247.9154	5.0000e-003		248.0403
Total	0.1344	0.7758	0.8811	5.1400e-003	0.3834	2.5000e-003	0.3859	0.1033	2.3300e-003	0.1056		527.2083	527.2083	0.0223		527.7662

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

3.3 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0195	0.7124	0.1720	2.6500e-003	0.0659	7.5000e-004	0.0667	0.0192	7.2000e-004	0.0199		279.2929	279.2929	0.0173		279.7260
Worker	0.1150	0.0634	0.7092	2.4900e-003	0.2885	1.7500e-003	0.2902	0.0770	1.6100e-003	0.0786		247.9154	247.9154	5.0000e-003		248.0403
Total	0.1344	0.7758	0.8811	5.1400e-003	0.3544	2.5000e-003	0.3569	0.0962	2.3300e-003	0.0985		527.2083	527.2083	0.0223		527.7662

3.3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

3.3 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0191	0.7086	0.1664	2.6400e-003	0.0704	7.5000e-004	0.0712	0.0203	7.1000e-004	0.0210		278.3014	278.3014	0.0169		278.7250
Worker	0.1087	0.0575	0.6635	2.4000e-003	0.3130	1.7300e-003	0.3147	0.0830	1.6000e-003	0.0846		239.0285	239.0285	4.5600e-003		239.1425
Total	0.1277	0.7660	0.8299	5.0400e-003	0.3834	2.4800e-003	0.3859	0.1033	2.3100e-003	0.1056		517.3300	517.3300	0.0215		517.8675

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

3.3 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0191	0.7086	0.1664	2.6400e-003	0.0659	7.5000e-004	0.0667	0.0192	7.1000e-004	0.0199		278.3014	278.3014	0.0169		278.7250
Worker	0.1087	0.0575	0.6635	2.4000e-003	0.2885	1.7300e-003	0.2902	0.0770	1.6000e-003	0.0786		239.0285	239.0285	4.5600e-003		239.1425
Total	0.1277	0.7660	0.8299	5.0400e-003	0.3544	2.4800e-003	0.3569	0.0962	2.3100e-003	0.0985		517.3300	517.3300	0.0215		517.8675

3.4 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	30.9375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	31.1182	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

3.4 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0233	0.0123	0.1422	5.1000e-004	0.0671	3.7000e-004	0.0674	0.0178	3.4000e-004	0.0181		51.2204	51.2204	9.8000e-004		51.2448
Total	0.0233	0.0123	0.1422	5.1000e-004	0.0671	3.7000e-004	0.0674	0.0178	3.4000e-004	0.0181		51.2204	51.2204	9.8000e-004		51.2448

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	30.9375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	31.1182	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

3.4 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0233	0.0123	0.1422	5.1000e-004	0.0618	3.7000e-004	0.0622	0.0165	3.4000e-004	0.0168		51.2204	51.2204	9.8000e-004		51.2448
Total	0.0233	0.0123	0.1422	5.1000e-004	0.0618	3.7000e-004	0.0622	0.0165	3.4000e-004	0.0168		51.2204	51.2204	9.8000e-004		51.2448

3.5 Asphalt Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.1179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1061	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

3.5 Asphalt Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0582	0.0308	0.3554	1.2800e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		128.0510	128.0510	2.4400e-003		128.1120
Total	0.0582	0.0308	0.3554	1.2800e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		128.0510	128.0510	2.4400e-003		128.1120

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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.1179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1061	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

3.5 Asphalt Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0582	0.0308	0.3554	1.2800e-003	0.1546	9.3000e-004	0.1555	0.0413	8.6000e-004	0.0421		128.0510	128.0510	2.4400e-003		128.1120
Total	0.0582	0.0308	0.3554	1.2800e-003	0.1546	9.3000e-004	0.1555	0.0413	8.6000e-004	0.0421		128.0510	128.0510	2.4400e-003		128.1120

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Temecula Valley STEAM Academy Phase II - 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	1.3273	9.7842	16.4646	0.0854	7.5657	0.0507	7.6164	2.0235	0.0473	2.0708		8,746.8174	8,746.8174	0.3813		8,756.3508
Unmitigated	1.3273	9.7842	16.4646	0.0854	7.5657	0.0507	7.6164	2.0235	0.0473	2.0708		8,746.8174	8,746.8174	0.3813		8,756.3508

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	1,029.91	0.00	0.00	2,535,323	2,535,323
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	1,029.91	0.00	0.00	2,535,323	2,535,323

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Non-Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789

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	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821
NaturalGas Unmitigated	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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					
Elementary School	1601.93	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821

Mitigated

	Natural Gas 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					
Elementary School	1.60193	0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0173	0.1571	0.1319	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.4621	188.4621	3.6100e-003	3.4600e-003	189.5821

6.0 Area Detail

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982
Unmitigated	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982

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	0.1695					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9500e-003	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982
Total	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982

Temecula Valley STEAM Academy Phase II - 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	0.1695					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9500e-003	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982
Total	1.4951	3.9000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0922	0.0922	2.4000e-004		0.0982

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Winter

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

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

Equipment Type	Number
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11.0 Vegetation

Temecula Valley STEAM Academy Phase II - Riverside-South Coast County, Annual

Temecula Valley STEAM Academy Phase II
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	66.75	1000sqft	1.53	66,747.00	0
Other Asphalt Surfaces	39.36	1000sqft	0.90	0.00	0
Other Non-Asphalt Surfaces	314.97	1000sqft	7.23	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2025
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

Project Characteristics -

Land Use - removed to subtract non-paintable space

Construction Phase - see assumptions file

Grading -

Trips and VMT - to account for water truck trips and export

Construction Off-road Equipment Mitigation - see assumptions file

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Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	PhaseEndDate	10/19/2023	8/28/2023
tblConstructionPhase	PhaseStartDate	9/22/2023	8/1/2023
tblGrading	MaterialExported	0.00	5,000.00
tblLandUse	LandUseSquareFeet	39,362.00	0.00
tblLandUse	LandUseSquareFeet	314,966.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-11-2023	11-10-2023	0.6003	0.6003
2	11-11-2023	2-10-2024	0.5387	0.5387
3	2-11-2024	5-10-2024	0.5083	0.5083
4	5-11-2024	8-10-2024	0.6734	0.6734
5	8-11-2024	9-30-2024	0.1303	0.1303
		Highest	0.6734	0.6734

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	0.2726	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0111
Energy	3.1500e-003	0.0287	0.0241	1.7000e-004		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	186.4513	186.4513	7.0100e-003	1.9000e-003	187.1921
Mobile	0.1733	1.2931	2.2105	0.0114	0.9675	6.5700e-003	0.9740	0.2591	6.1200e-003	0.2652	0.0000	1,054.6375	1,054.6375	0.0438	0.0000	1,055.7333
Waste						0.0000	0.0000		0.0000	0.0000	17.6156	0.0000	17.6156	1.0411	0.0000	43.6418
Water						0.0000	0.0000		0.0000	0.0000	0.6141	25.6485	26.2626	0.0641	1.7100e-003	28.3749
Total	0.4490	1.3218	2.2399	0.0115	0.9675	8.7700e-003	0.9762	0.2591	8.3200e-003	0.2674	18.2296	1,266.7478	1,284.9774	1.1561	3.6100e-003	1,314.9533

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2726	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0111
Energy	3.1500e-003	0.0287	0.0241	1.7000e-004		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	186.4513	186.4513	7.0100e-003	1.9000e-003	187.1921
Mobile	0.1733	1.2931	2.2105	0.0114	0.9675	6.5700e-003	0.9740	0.2591	6.1200e-003	0.2652	0.0000	1,054.6375	1,054.6375	0.0438	0.0000	1,055.7333
Waste						0.0000	0.0000		0.0000	0.0000	17.6156	0.0000	17.6156	1.0411	0.0000	43.6418
Water						0.0000	0.0000		0.0000	0.0000	0.6141	25.6485	26.2626	0.0641	1.7100e-003	28.3749
Total	0.4490	1.3218	2.2399	0.0115	0.9675	8.7700e-003	0.9762	0.2591	8.3200e-003	0.2674	18.2296	1,266.7478	1,284.9774	1.1561	3.6100e-003	1,314.9533

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Fine Grading	Grading	8/1/2023	8/28/2023	5	20	
2	Building Construction	Building Construction	8/29/2023	7/15/2024	5	230	
3	Architectural Coating	Architectural Coating	7/16/2024	8/12/2024	5	20	
4	Asphalt Paving	Paving	8/13/2024	9/9/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 8.13

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 100,121; Non-Residential Outdoor: 33,374; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Asphalt Paving	Pavers	2	8.00	130	0.42
Asphalt Paving	Paving Equipment	2	8.00	132	0.36
Fine Grading	Excavators	1	8.00	158	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
Asphalt Paving	Rollers	2	8.00	80	0.38
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Fine Grading	Graders	1	8.00	187	0.41
Fine Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Asphalt Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	6	15.00	4.00	625.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	28.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Fine Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0658	0.0000	0.0658	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1794	0.1475	3.0000e-004	7.7500e-003	7.7500e-003		7.1300e-003	7.1300e-003		0.0000	26.0606	26.0606	8.4300e-003	0.0000	26.2713
Total	0.0171	0.1794	0.1475	3.0000e-004	0.0658	7.7500e-003	0.0736	0.0337	7.1300e-003	0.0409	0.0000	26.0606	26.0606	8.4300e-003	0.0000	26.2713

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3.2 Fine Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0200e-003	0.0394	8.0600e-003	2.2000e-004	5.3900e-003	7.0000e-005	5.4600e-003	1.4800e-003	7.0000e-005	1.5500e-003	0.0000	21.4314	21.4314	1.0500e-003	0.0000	21.4578
Vendor	7.0000e-005	2.6300e-003	5.8000e-004	1.0000e-005	2.5000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.9420	0.9420	5.0000e-005	0.0000	0.9434
Worker	5.7000e-004	3.5000e-004	4.0100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2359	1.2359	3.0000e-005	0.0000	1.2365
Total	1.6600e-003	0.0424	0.0127	2.4000e-004	7.2900e-003	8.0000e-005	7.3800e-003	1.9900e-003	8.0000e-005	2.0800e-003	0.0000	23.6093	23.6093	1.1300e-003	0.0000	23.6376

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					0.0282	0.0000	0.0282	0.0144	0.0000	0.0144	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1794	0.1475	3.0000e-004		7.7500e-003	7.7500e-003		7.1300e-003	7.1300e-003	0.0000	26.0606	26.0606	8.4300e-003	0.0000	26.2713
Total	0.0171	0.1794	0.1475	3.0000e-004	0.0282	7.7500e-003	0.0359	0.0144	7.1300e-003	0.0216	0.0000	26.0606	26.0606	8.4300e-003	0.0000	26.2713

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3.2 Fine Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0200e-003	0.0394	8.0600e-003	2.2000e-004	5.0200e-003	7.0000e-005	5.1000e-003	1.3900e-003	7.0000e-005	1.4600e-003	0.0000	21.4314	21.4314	1.0500e-003	0.0000	21.4578
Vendor	7.0000e-005	2.6300e-003	5.8000e-004	1.0000e-005	2.4000e-004	0.0000	2.4000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.9420	0.9420	5.0000e-005	0.0000	0.9434
Worker	5.7000e-004	3.5000e-004	4.0100e-003	1.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.2359	1.2359	3.0000e-005	0.0000	1.2365
Total	1.6600e-003	0.0424	0.0127	2.4000e-004	6.7800e-003	8.0000e-005	6.8700e-003	1.8700e-003	8.0000e-005	1.9400e-003	0.0000	23.6093	23.6093	1.1300e-003	0.0000	23.6376

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0700	0.6401	0.7229	1.2000e-003		0.0311	0.0311		0.0293	0.0293	0.0000	103.1531	103.1531	0.0245	0.0000	103.7666
Total	0.0700	0.6401	0.7229	1.2000e-003		0.0311	0.0311		0.0293	0.0293	0.0000	103.1531	103.1531	0.0245	0.0000	103.7666

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3.3 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.3000e-004	0.0322	7.1200e-003	1.2000e-004	3.0900e-003	3.0000e-005	3.1200e-003	8.9000e-004	3.0000e-005	9.2000e-004	0.0000	11.5278	11.5278	6.6000e-004	0.0000	11.5443
Worker	4.7000e-003	2.9200e-003	0.0333	1.1000e-004	0.0137	8.0000e-005	0.0138	3.6400e-003	7.0000e-005	3.7100e-003	0.0000	10.2659	10.2659	2.1000e-004	0.0000	10.2711
Total	5.5300e-003	0.0351	0.0404	2.3000e-004	0.0168	1.1000e-004	0.0169	4.5300e-003	1.0000e-004	4.6300e-003	0.0000	21.7937	21.7937	8.7000e-004	0.0000	21.8154

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0700	0.6401	0.7229	1.2000e-003		0.0311	0.0311		0.0293	0.0293	0.0000	103.1530	103.1530	0.0245	0.0000	103.7665
Total	0.0700	0.6401	0.7229	1.2000e-003		0.0311	0.0311		0.0293	0.0293	0.0000	103.1530	103.1530	0.0245	0.0000	103.7665

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3.3 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.3000e-004	0.0322	7.1200e-003	1.2000e-004	2.8900e-003	3.0000e-005	2.9300e-003	8.4000e-004	3.0000e-005	8.7000e-004	0.0000	11.5278	11.5278	6.6000e-004	0.0000	11.5443
Worker	4.7000e-003	2.9200e-003	0.0333	1.1000e-004	0.0126	8.0000e-005	0.0127	3.3700e-003	7.0000e-005	3.4500e-003	0.0000	10.2659	10.2659	2.1000e-004	0.0000	10.2711
Total	5.5300e-003	0.0351	0.0404	2.3000e-004	0.0155	1.1000e-004	0.0156	4.2100e-003	1.0000e-004	4.3200e-003	0.0000	21.7937	21.7937	8.7000e-004	0.0000	21.8154

3.3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1038	0.9478	1.1398	1.9000e-003		0.0432	0.0432		0.0407	0.0407	0.0000	163.4536	163.4536	0.0387	0.0000	164.4199
Total	0.1038	0.9478	1.1398	1.9000e-003		0.0432	0.0432		0.0407	0.0407	0.0000	163.4536	163.4536	0.0387	0.0000	164.4199

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3.3 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-003	0.0507	0.0109	1.9000e-004	4.9000e-003	5.0000e-005	4.9500e-003	1.4100e-003	5.0000e-005	1.4600e-003	0.0000	18.1945	18.1945	1.0200e-003	0.0000	18.2200
Worker	7.0300e-003	4.1900e-003	0.0494	1.7000e-004	0.0217	1.2000e-004	0.0218	5.7600e-003	1.1000e-004	5.8700e-003	0.0000	15.6830	15.6830	3.0000e-004	0.0000	15.6906
Total	8.3300e-003	0.0549	0.0603	3.6000e-004	0.0266	1.7000e-004	0.0268	7.1700e-003	1.6000e-004	7.3300e-003	0.0000	33.8775	33.8775	1.3200e-003	0.0000	33.9106

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	0.1038	0.9478	1.1398	1.9000e-003		0.0432	0.0432		0.0407	0.0407	0.0000	163.4534	163.4534	0.0387	0.0000	164.4197
Total	0.1038	0.9478	1.1398	1.9000e-003		0.0432	0.0432		0.0407	0.0407	0.0000	163.4534	163.4534	0.0387	0.0000	164.4197

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3.3 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-003	0.0507	0.0109	1.9000e-004	4.5900e-003	5.0000e-005	4.6400e-003	1.3400e-003	5.0000e-005	1.3900e-003	0.0000	18.1945	18.1945	1.0200e-003	0.0000	18.2200
Worker	7.0300e-003	4.1900e-003	0.0494	1.7000e-004	0.0200	1.2000e-004	0.0201	5.3500e-003	1.1000e-004	5.4600e-003	0.0000	15.6830	15.6830	3.0000e-004	0.0000	15.6906
Total	8.3300e-003	0.0549	0.0603	3.6000e-004	0.0246	1.7000e-004	0.0248	6.6900e-003	1.6000e-004	6.8500e-003	0.0000	33.8775	33.8775	1.3200e-003	0.0000	33.9106

3.4 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3094					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	0.3112	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569

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3.4 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.3000e-004	1.5000e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.4767	0.4767	1.0000e-005	0.0000	0.4769
Total	2.1000e-004	1.3000e-004	1.5000e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.4767	0.4767	1.0000e-005	0.0000	0.4769

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	0.3094					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	0.3112	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

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3.4 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.3000e-004	1.5000e-003	1.0000e-005	6.1000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.4767	0.4767	1.0000e-005	0.0000	0.4769
Total	2.1000e-004	1.3000e-004	1.5000e-003	1.0000e-005	6.1000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.4767	0.4767	1.0000e-005	0.0000	0.4769

3.5 Asphalt Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	1.1800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0111	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

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3.5 Asphalt Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	3.2000e-004	3.7500e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1917	1.1917	2.0000e-005	0.0000	1.1923
Total	5.3000e-004	3.2000e-004	3.7500e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1917	1.1917	2.0000e-005	0.0000	1.1923

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	1.1800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0111	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

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3.5 Asphalt Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	3.2000e-004	3.7500e-003	1.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.1917	1.1917	2.0000e-005	0.0000	1.1923
Total	5.3000e-004	3.2000e-004	3.7500e-003	1.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.1917	1.1917	2.0000e-005	0.0000	1.1923

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1733	1.2931	2.2105	0.0114	0.9675	6.5700e-003	0.9740	0.2591	6.1200e-003	0.2652	0.0000	1,054.6375	1,054.6375	0.0438	0.0000	1,055.7333
Unmitigated	0.1733	1.2931	2.2105	0.0114	0.9675	6.5700e-003	0.9740	0.2591	6.1200e-003	0.2652	0.0000	1,054.6375	1,054.6375	0.0438	0.0000	1,055.7333

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	1,029.91	0.00	0.00	2,535,323	2,535,323
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	1,029.91	0.00	0.00	2,535,323	2,535,323

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Non-Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789

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	155.2493	155.2493	6.4100e-003	1.3300e-003	155.8047
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	155.2493	155.2493	6.4100e-003	1.3300e-003	155.8047
NaturalGas Mitigated	3.1500e-003	0.0287	0.0241	1.7000e-004		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	31.2020	31.2020	6.0000e-004	5.7000e-004	31.3874
NaturalGas Unmitigated	3.1500e-003	0.0287	0.0241	1.7000e-004		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	31.2020	31.2020	6.0000e-004	5.7000e-004	31.3874

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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					
Elementary School	584704	3.1500e-003	0.0287	0.0241	1.7000e-004		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	31.2020	31.2020	6.0000e-004	5.7000e-004	31.3874
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.1500e-003	0.0287	0.0241	1.7000e-004		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	31.2020	31.2020	6.0000e-004	5.7000e-004	31.3874

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					
Elementary School	584704	3.1500e-003	0.0287	0.0241	1.7000e-004		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	31.2020	31.2020	6.0000e-004	5.7000e-004	31.3874
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.1500e-003	0.0287	0.0241	1.7000e-004		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	31.2020	31.2020	6.0000e-004	5.7000e-004	31.3874

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	487253	155.2493	6.4100e-003	1.3300e-003	155.8047
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		155.2493	6.4100e-003	1.3300e-003	155.8047

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	487253	155.2493	6.4100e-003	1.3300e-003	155.8047
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		155.2493	6.4100e-003	1.3300e-003	155.8047

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2726	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0111
Unmitigated	0.2726	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0111

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	0.0309					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2412					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0111
Total	0.2726	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0111

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0309					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2412					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0111
Total	0.2726	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0111

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	26.2626	0.0641	1.7100e-003	28.3749
Unmitigated	26.2626	0.0641	1.7100e-003	28.3749

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.93554 / 4.97711	26.2626	0.0641	1.7100e-003	28.3749
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		26.2626	0.0641	1.7100e-003	28.3749

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.93554 / 4.97711	26.2626	0.0641	1.7100e-003	28.3749
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		26.2626	0.0641	1.7100e-003	28.3749

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	17.6156	1.0411	0.0000	43.6418
Unmitigated	17.6156	1.0411	0.0000	43.6418

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	86.78	17.6156	1.0411	0.0000	43.6418
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		17.6156	1.0411	0.0000	43.6418

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	86.78	17.6156	1.0411	0.0000	43.6418
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		17.6156	1.0411	0.0000	43.6418

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	1	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	6	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	1.81000E-003	1.21900E-002	1.81000E-002	3.00000E-005	6.10000E-004	6.10000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.40000E-004	0.00000E+000	2.55685E+000
Cranes	3.41500E-002	3.64740E-001	1.80910E-001	5.80000E-004	1.52000E-002	1.39800E-002	0.00000E+000	5.10114E+001	5.10114E+001	1.65000E-002	0.00000E+000	5.14239E+001
Excavators	1.89000E-003	1.54900E-002	3.25800E-002	5.00000E-005	7.60000E-004	7.00000E-004	0.00000E+000	4.53688E+000	4.53688E+000	1.47000E-003	0.00000E+000	4.57357E+000
Forklifts	3.36100E-002	3.14980E-001	3.93790E-001	5.30000E-004	1.87100E-002	1.72100E-002	0.00000E+000	4.63305E+001	4.63305E+001	1.49800E-002	0.00000E+000	4.67051E+001
Generator Sets	3.37100E-002	3.00230E-001	4.21590E-001	7.60000E-004	1.35100E-002	1.35100E-002	0.00000E+000	6.49989E+001	6.49989E+001	2.72000E-003	0.00000E+000	6.50668E+001
Graders	3.83000E-003	4.65300E-002	1.69300E-002	7.00000E-005	1.51000E-003	1.39000E-003	0.00000E+000	5.81374E+000	5.81374E+000	1.88000E-003	0.00000E+000	5.86075E+000
Pavers	3.67000E-003	3.48400E-002	5.78600E-002	9.00000E-005	1.63000E-003	1.50000E-003	0.00000E+000	8.25832E+000	8.25832E+000	2.67000E-003	0.00000E+000	8.32510E+000
Paving Equipment	3.30000E-003	2.99200E-002	5.14000E-002	8.00000E-005	1.45000E-003	1.33000E-003	0.00000E+000	7.15707E+000	7.15707E+000	2.31000E-003	0.00000E+000	7.21493E+000
Rollers	2.91000E-003	3.04900E-002	3.70000E-002	5.00000E-005	1.61000E-003	1.48000E-003	0.00000E+000	4.61114E+000	4.61114E+000	1.49000E-003	0.00000E+000	4.64843E+000
Rubber Tired Dozers	6.85000E-003	7.12700E-002	3.10600E-002	9.00000E-005	3.21000E-003	2.95000E-003	0.00000E+000	7.50242E+000	7.50242E+000	2.43000E-003	0.00000E+000	7.56309E+000
Tractors/Loaders/ Backhoes	4.88600E-002	4.93470E-001	7.41310E-001	1.03000E-003	2.34300E-002	2.15600E-002	0.00000E+000	9.08282E+001	9.08282E+001	2.93800E-002	0.00000E+000	9.15626E+001
Welders	2.79500E-002	1.60560E-001	1.91960E-001	2.90000E-004	5.80000E-003	5.80000E-003	0.00000E+000	2.16454E+001	2.16454E+001	2.27000E-003	0.00000E+000	2.17021E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	1.81000E-003	1.21900E-002	1.81000E-002	3.00000E-005	6.10000E-004	6.10000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.40000E-004	0.00000E+000	2.55684E+000
Cranes	3.41500E-002	3.64740E-001	1.80910E-001	5.80000E-004	1.52000E-002	1.39800E-002	0.00000E+000	5.10114E+001	5.10114E+001	1.65000E-002	0.00000E+000	5.14238E+001
Excavators	1.89000E-003	1.54900E-002	3.25800E-002	5.00000E-005	7.60000E-004	7.00000E-004	0.00000E+000	4.53688E+000	4.53688E+000	1.47000E-003	0.00000E+000	4.57356E+000
Forklifts	3.36100E-002	3.14980E-001	3.93790E-001	5.30000E-004	1.87100E-002	1.72100E-002	0.00000E+000	4.63305E+001	4.63305E+001	1.49800E-002	0.00000E+000	4.67051E+001
Generator Sets	3.37100E-002	3.00230E-001	4.21590E-001	7.60000E-004	1.35100E-002	1.35100E-002	0.00000E+000	6.49988E+001	6.49988E+001	2.72000E-003	0.00000E+000	6.50668E+001
Graders	3.83000E-003	4.65300E-002	1.69300E-002	7.00000E-005	1.51000E-003	1.39000E-003	0.00000E+000	5.81373E+000	5.81373E+000	1.88000E-003	0.00000E+000	5.86074E+000
Pavers	3.67000E-003	3.48400E-002	5.78600E-002	9.00000E-005	1.63000E-003	1.50000E-003	0.00000E+000	8.25831E+000	8.25831E+000	2.67000E-003	0.00000E+000	8.32509E+000
Paving Equipment	3.30000E-003	2.99200E-002	5.14000E-002	8.00000E-005	1.45000E-003	1.33000E-003	0.00000E+000	7.15706E+000	7.15706E+000	2.31000E-003	0.00000E+000	7.21493E+000
Rollers	2.91000E-003	3.04900E-002	3.70000E-002	5.00000E-005	1.61000E-003	1.48000E-003	0.00000E+000	4.61114E+000	4.61114E+000	1.49000E-003	0.00000E+000	4.64842E+000
Rubber Tired Dozers	6.85000E-003	7.12700E-002	3.10600E-002	9.00000E-005	3.21000E-003	2.95000E-003	0.00000E+000	7.50242E+000	7.50242E+000	2.43000E-003	0.00000E+000	7.56308E+000
Tractors/Loaders/Balckhoes	4.88600E-002	4.93470E-001	7.41310E-001	1.03000E-003	2.34300E-002	2.15600E-002	0.00000E+000	9.08281E+001	9.08281E+001	2.93800E-002	0.00000E+000	9.15624E+001
Welders	2.79500E-002	1.60560E-001	1.91960E-001	2.90000E-004	5.80000E-003	5.80000E-003	0.00000E+000	2.16454E+001	2.16454E+001	2.27000E-003	0.00000E+000	2.17021E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.91106E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17621E-006	1.17621E-006	0.00000E+000	0.00000E+000	1.16677E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.18648E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.07920E-006	1.07920E-006	0.00000E+000	0.00000E+000	1.28466E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23079E-006	1.23079E-006	0.00000E+000	0.00000E+000	1.22950E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.72006E-006	1.72006E-006	0.00000E+000	0.00000E+000	1.70627E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21090E-006	1.21090E-006	0.00000E+000	0.00000E+000	1.20119E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.39722E-006	1.39722E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.15126E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32221E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21108E-006	1.21108E-006	0.00000E+000	0.00000E+000	1.20136E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.23985E-007	9.23985E-007	0.00000E+000	0.00000E+000	9.21571E-007

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		

Yes	Clean Paved Road	% PM Reduction	9.00			
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Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.08	0.11
Asphalt Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Paving	Roads	0.00	0.00	0.00	0.00	0.08	0.07
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.04	0.01	0.04	0.01	0.08	0.07
Fine Grading	Fugitive Dust	0.07	0.03	0.03	0.01	0.57	0.57
Fine Grading	Roads	0.01	0.00	0.01	0.00	0.07	0.06

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	50.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Summer

**Temecula Valley STEAM Academy Phase I Mitigation Measures
Riverside-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	59.53	1000sqft	1.37	59,534.00	0
Other Asphalt Surfaces	100.44	1000sqft	2.31	0.00	0
Other Non-Asphalt Surfaces	352.84	1000sqft	8.10	0.00	0
Parking Lot	67.54	1000sqft	1.55	67,538.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - subtract nonpaintable area

Construction Phase - arch coat and paving overlapped to fit into 18 month schedule

Grading -

Construction Off-road Equipment Mitigation - see assumptions file, mitigation measures: 3 times a day at 61 percent reduction

Table Name	Column Name	Default Value	New Value
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tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialExported	0.00	18,553.00
tblLandUse	LandUseSquareFeet	59,530.00	59,534.00
tblLandUse	LandUseSquareFeet	100,440.00	0.00
tblLandUse	LandUseSquareFeet	352,840.00	0.00
tblLandUse	LandUseSquareFeet	67,540.00	67,538.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	5.3607	97.3822	32.7647	0.2166	22.5592	2.3736	24.9328	11.1317	2.1901	13.3218	0.0000	22,615.51 15	22,615.511 5	2.3132	0.0000	22,673.34 23
2021	28.8041	19.5186	18.8814	0.0380	0.7269	0.9658	1.6927	0.1958	0.9080	1.1039	0.0000	3,691.509 0	3,691.5090	0.7177	0.0000	3,708.272 1
Maximum	28.8041	97.3822	32.7647	0.2166	22.5592	2.3736	24.9328	11.1317	2.1901	13.3218	0.0000	22,615.51 15	22,615.511 5	2.3132	0.0000	22,673.34 23

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	5.3607	97.3822	32.7647	0.2166	10.7469	2.3736	13.1205	4.7864	2.1901	6.9765	0.0000	22,615.51 15	22,615.511 5	2.3132	0.0000	22,673.34 23

2021	28.8041	19.5186	18.8814	0.0380	0.6719	0.9658	1.6377	0.1823	0.9080	1.0904	0.0000	3,691.5090	3,691.5090	0.7177	0.0000	3,708.2721
Maximum	28.8041	97.3822	32.7647	0.2166	10.7469	2.3736	13.1205	4.7864	2.1901	6.9765	0.0000	22,615.5115	22,615.5115	2.3132	0.0000	22,673.3423
	ROG	NOx	CO	SO2	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	50.96	0.00	44.57	56.14	0.00	44.08	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Energy	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Mobile	1.8607	13.3650	22.4623	0.0929	6.7516	0.0641	6.8156	1.8065	0.0601	1.8666		9,473.1953	9,473.1953	0.4523		9,484.5017
Total	3.2407	13.5056	22.6394	0.0937	6.7516	0.0749	6.8265	1.8065	0.0710	1.8775		9,641.4183	9,641.4183	0.4558	3.0800e-003	9,653.7321

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	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Energy	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

Mobile	1.8607	13.3650	22.4623	0.0929	6.7516	0.0641	6.8156	1.8065	0.0601	1.8666		9,473.1953	9,473.1953	0.4523		9,484.5017
Total	3.2407	13.5056	22.6394	0.0937	6.7516	0.0749	6.8265	1.8065	0.0710	1.8775		9,641.4183	9,641.4183	0.4558	3.0800e-003	9,653.7321

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/3/2020	2/14/2020	5	10	
2	Rough Grading	Grading	2/15/2020	3/27/2020	5	30	
3	Fine Grading	Grading	3/28/2020	5/8/2020	5	30	
4	Building Construction	Building Construction	5/9/2020	7/2/2021	5	300	
5	Paving	Paving	7/3/2021	7/30/2021	5	20	
6	Architectural Coating	Architectural Coating	7/31/2021	8/27/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 11.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 89,301; Non-Residential Outdoor: 29,767; Striped Parking Area:

OffRoad Equipment

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
Rough Grading	Excavators	2	8.00	158	0.38
Rough Grading	Graders	1	8.00	187	0.41
Rough Grading	Rubber Tired Dozers	1	8.00	247	0.40

Rough Grading	Scrapers	2	8.00	367	0.48
Rough Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Fine Grading	Excavators	2	8.00	158	0.38
Fine Grading	Graders	1	8.00	187	0.41
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Fine Grading	Scrapers	2	8.00	367	0.48
Fine Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	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	2,319.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.3012	0.0000	18.3012	9.9663	0.0000	9.9663			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.3012	2.1974	20.4986	9.9663	2.0216	11.9879		3,685.1016	3,685.1016	1.1918		3,714.8975

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	1.1926	54.9107	6.7752	0.1766	4.0568	0.1750	4.2318	1.1121	0.1674	1.2795		18,732.1230	18,732.1230	1.1163		18,760.0308
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	0.0916	0.0542	0.7258	1.9900e-003	0.2012	1.2200e-003	0.2024	0.0534	1.1200e-003	0.0545		198.2870	198.2870	5.0800e-003		198.4141
Total	1.2842	54.9648	7.5010	0.1786	4.2580	0.1762	4.4342	1.1655	0.1685	1.3339		18,930.4100	18,930.4100	1.1214		18,958.4449

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					6.7806	0.0000	6.7806	3.6925	0.0000	3.6925			0.0000				0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918			3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	6.7806	2.1974	8.9780	3.6925	2.0216	5.7141	0.0000	3,685.1016	3,685.1016	1.1918			3,714.8975

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	1.1926	54.9107	6.7752	0.1766	3.7809	0.1750	3.9558	1.0444	0.1674	1.2117		18,732.1230	18,732.1230	1.1163			18,760.0308
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	0.0916	0.0542	0.7258	1.9900e-003	0.1855	1.2200e-003	0.1867	0.0495	1.1200e-003	0.0506		198.2870	198.2870	5.0800e-003			198.4141
Total	1.2842	54.9648	7.5010	0.1786	3.9663	0.1762	4.1425	1.0939	0.1685	1.2624		18,930.4100	18,930.4100	1.1214			18,958.4449

3.3 Rough Grading - 2020

Unmitigated Construction On-Site

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

Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

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	0.1018	0.0602	0.8064	2.2100e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		220.3189	220.3189	5.6500e-003		220.4601
Total	0.1018	0.0602	0.8064	2.2100e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		220.3189	220.3189	5.6500e-003		220.4601

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					3.2135	0.0000	3.2135	1.3325	0.0000	1.3325			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.2135	2.1739	5.3874	1.3325	2.0000	3.3325	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1018	0.0602	0.8064	2.2100e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		220.3189	220.3189	5.6500e-003		220.4601
Total	0.1018	0.0602	0.8064	2.2100e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		220.3189	220.3189	5.6500e-003		220.4601

3.4 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

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
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		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
Worker	0.1018	0.0602	0.8064	2.2100e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		220.3189	220.3189	5.6500e-003		220.4601
Total	0.1018	0.0602	0.8064	2.2100e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		220.3189	220.3189	5.6500e-003		220.4601

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					3.2135	0.0000	3.2135	1.3325	0.0000	1.3325			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.2135	2.1739	5.3874	1.3325	2.0000	3.3325	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1018	0.0602	0.8064	2.2100e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		220.3189	220.3189	5.6500e-003		220.4601

Total	0.1018	0.0602	0.8064	2.2100e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		220.3189	220.3189	5.6500e-003		220.4601
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3.5 Building Construction - 2020

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0585	2.1607	0.3953	5.4900e-003	0.1345	0.0123	0.1468	0.0387	0.0118	0.0505		578.3209	578.3209	0.0434		579.4054
Worker	0.2697	0.1595	2.1370	5.8600e-003	0.5924	3.5900e-003	0.5960	0.1571	3.3000e-003	0.1604		583.8451	583.8451	0.0150		584.2192
Total	0.3282	2.3202	2.5323	0.0114	0.7269	0.0159	0.7428	0.1958	0.0151	0.2109		1,162.1661	1,162.1661	0.0584		1,163.6246

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0585	2.1607	0.3953	5.4900e-003	0.1259	0.0123	0.1381	0.0366	0.0118	0.0484		578.3209	578.3209	0.0434		579.4054
Worker	0.2697	0.1595	2.1370	5.8600e-003	0.5461	3.5900e-003	0.5497	0.1457	3.3000e-003	0.1490		583.8451	583.8451	0.0150		584.2192
Total	0.3282	2.3202	2.5323	0.0114	0.6719	0.0159	0.6878	0.1823	0.0151	0.1974		1,162.1661	1,162.1661	0.0584		1,163.6246

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		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

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	0.0490	1.9433	0.3467	5.4400e-003	0.1345	3.7000e-003	0.1382	0.0387	3.5400e-003	0.0423		573.8272	573.8272	0.0411		574.8534
Worker	0.2513	0.1432	1.9595	5.6600e-003	0.5924	3.4900e-003	0.5959	0.1571	3.2100e-003	0.1603		564.3180	564.3180	0.0135		564.6544
Total	0.3003	2.0865	2.3062	0.0111	0.7269	7.1900e-003	0.7341	0.1958	6.7500e-003	0.2026		1,138.1451	1,138.1451	0.0545		1,139.5078

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0490	1.9433	0.3467	5.4400e-003	0.1259	3.7000e-003	0.1296	0.0366	3.5400e-003	0.0401		573.8272	573.8272	0.0411		574.8534
Worker	0.2513	0.1432	1.9595	5.6600e-003	0.5461	3.4900e-003	0.5496	0.1457	3.2100e-003	0.1490		564.3180	564.3180	0.0135		564.6544
Total	0.3003	2.0865	2.3062	0.0111	0.6719	7.1900e-003	0.6791	0.1823	6.7500e-003	0.1891		1,138.1451	1,138.1451	0.0545		1,139.5078

3.6 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		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7612	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		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
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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7612	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0405	0.5546	1.6000e-003	0.1546	9.9000e-004	0.1555	0.0413	9.1000e-004	0.0422		159.7126	159.7126	3.8100e-003		159.8078

Total	0.0711	0.0405	0.5546	1.6000e-003	0.1546	9.9000e-004	0.1555	0.0413	9.1000e-004	0.0422		159.7126	159.7126	3.8100e-003		159.8078
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3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.5331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	28.7520	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0522	0.0297	0.4067	1.1800e-003	0.1230	7.2000e-004	0.1237	0.0326	6.7000e-004	0.0333		117.1226	117.1226	2.7900e-003		117.1924
Total	0.0522	0.0297	0.4067	1.1800e-003	0.1230	7.2000e-004	0.1237	0.0326	6.7000e-004	0.0333		117.1226	117.1226	2.7900e-003		117.1924

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	28.5331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	28.7520	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0522	0.0297	0.4067	1.1800e-003	0.1133	7.2000e-004	0.1141	0.0303	6.7000e-004	0.0309		117.1226	117.1226	2.7900e-003		117.1924
Total	0.0522	0.0297	0.4067	1.1800e-003	0.1133	7.2000e-004	0.1141	0.0303	6.7000e-004	0.0309		117.1226	117.1226	2.7900e-003		117.1924

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8607	13.3650	22.4623	0.0929	6.7516	0.0641	6.8156	1.8065	0.0601	1.8666		9,473.1953	9,473.1953	0.4523		9,484.5017
Unmitigated	1.8607	13.3650	22.4623	0.0929	6.7516	0.0641	6.8156	1.8065	0.0601	1.8666		9,473.1953	9,473.1953	0.4523		9,484.5017

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	918.55	0.00	0.00	2,261,192	2,261,192
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	918.55	0.00	0.00	2,261,192	2,261,192

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

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	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
NaturalGas Unmitigated	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

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					
Elementary School	1428.82	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0000	0.0000
Total		0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

Mitigated

	Natural Gas 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					
Elementary School	1.42882	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

Unmitigated	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
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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	0.1564					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5600e-003	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Total	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

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	0.1564					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5600e-003	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Total	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

Temecula Valley STEAM Academy Phase I Mitigation Measures
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	59.53	1000sqft	1.37	59,534.00	0
Other Asphalt Surfaces	100.44	1000sqft	2.31	0.00	0
Other Non-Asphalt Surfaces	352.84	1000sqft	8.10	0.00	0
Parking Lot	67.54	1000sqft	1.55	67,538.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - subtract nonpaintable area

Construction Phase - arch coat and paving overlapped to fit into 18 month schedule

Grading -

Construction Off-road Equipment Mitigation - see assumptions file, mitigation measures: 3 times a day at 61 percent reduction

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialExported	0.00	18,553.00
tblLandUse	LandUseSquareFeet	59,530.00	59,534.00
tblLandUse	LandUseSquareFeet	100,440.00	0.00
tblLandUse	LandUseSquareFeet	352,840.00	0.00
tblLandUse	LandUseSquareFeet	67,540.00	67,538.00

2.0 Emissions Summary

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Energy	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Mobile	1.5808	13.3912	19.4049	0.0857	6.7516	0.0647	6.8162	1.8065	0.0607	1.8672		8,749.1454	8,749.1454	0.4655		8,760.7834
Total	2.9608	13.5318	19.5821	0.0865	6.7516	0.0755	6.8271	1.8065	0.0716	1.8781		8,917.3684	8,917.3684	0.4691	3.0800e-003	8,930.0137

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	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Energy	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Mobile	1.5808	13.3912	19.4049	0.0857	6.7516	0.0647	6.8162	1.8065	0.0607	1.8672		8,749.1454	8,749.1454	0.4655		8,760.7834
Total	2.9608	13.5318	19.5821	0.0865	6.7516	0.0755	6.8271	1.8065	0.0716	1.8781		8,917.3684	8,917.3684	0.4691	3.0800e-003	8,930.0137

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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
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	2/3/2020	2/14/2020	5	10	
2	Rough Grading	Grading	2/15/2020	3/27/2020	5	30	
3	Fine Grading	Grading	3/28/2020	5/8/2020	5	30	
4	Building Construction	Building Construction	5/9/2020	7/2/2021	5	300	
5	Paving	Paving	7/3/2021	7/30/2021	5	20	
6	Architectural Coating	Architectural Coating	7/31/2021	8/27/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 11.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 89,301; Non-Residential Outdoor: 29,767; Striped Parking Area: 4,052 (Architectural Coating – sqft)

OffRoad Equipment

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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
Rough Grading	Excavators	2	8.00	158	0.38
Rough Grading	Graders	1	8.00	187	0.41
Rough Grading	Rubber Tired Dozers	1	8.00	247	0.40
Rough Grading	Scrapers	2	8.00	367	0.48
Rough Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Fine Grading	Excavators	2	8.00	158	0.38
Fine Grading	Graders	1	8.00	187	0.41
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Fine Grading	Scrapers	2	8.00	367	0.48
Fine Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

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	2,319.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.3012	0.0000	18.3012	9.9663	0.0000	9.9663			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.3012	2.1974	20.4986	9.9663	2.0216	11.9879		3,685.1016	3,685.1016	1.1918		3,714.8975

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2545	55.3909	7.9352	0.1721	4.0568	0.1774	4.2343	1.1121	0.1698	1.2818		18,263.4658	18,263.4658	1.2219		18,294.0130
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	0.0897	0.0560	0.5871	1.7900e-003	0.2012	1.2200e-003	0.2024	0.0534	1.1200e-003	0.0545		177.8824	177.8824	4.4200e-003		177.9929
Total	1.3442	55.4469	8.5223	0.1739	4.2580	0.1787	4.4367	1.1655	0.1709	1.3363		18,441.3483	18,441.3483	1.2263		18,472.0059

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					6.7806	0.0000	6.7806	3.6925	0.0000	3.6925			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	6.7806	2.1974	8.9780	3.6925	2.0216	5.7141	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2545	55.3909	7.9352	0.1721	3.7809	0.1774	3.9583	1.0444	0.1698	1.2141		18,263.4658	18,263.4658	1.2219		18,294.0130
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	0.0897	0.0560	0.5871	1.7900e-003	0.1855	1.2200e-003	0.1867	0.0495	1.1200e-003	0.0506		177.8824	177.8824	4.4200e-003		177.9929
Total	1.3442	55.4469	8.5223	0.1739	3.9663	0.1787	4.1450	1.0939	0.1709	1.2647		18,441.3483	18,441.3483	1.2263		18,472.0059

3.3 Rough Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.3 Rough Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0997	0.0623	0.6524	1.9800e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		197.6472	197.6472	4.9100e-003		197.7699
Total	0.0997	0.0623	0.6524	1.9800e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		197.6472	197.6472	4.9100e-003		197.7699

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					3.2135	0.0000	3.2135	1.3325	0.0000	1.3325			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.2135	2.1739	5.3874	1.3325	2.0000	3.3325	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.3 Rough Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0997	0.0623	0.6524	1.9800e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		197.6472	197.6472	4.9100e-003		197.7699
Total	0.0997	0.0623	0.6524	1.9800e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		197.6472	197.6472	4.9100e-003		197.7699

3.4 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.4 Fine Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0997	0.0623	0.6524	1.9800e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		197.6472	197.6472	4.9100e-003		197.7699
Total	0.0997	0.0623	0.6524	1.9800e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		197.6472	197.6472	4.9100e-003		197.7699

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					3.2135	0.0000	3.2135	1.3325	0.0000	1.3325			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.2135	2.1739	5.3874	1.3325	2.0000	3.3325	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.4 Fine Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0997	0.0623	0.6524	1.9800e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		197.6472	197.6472	4.9100e-003		197.7699
Total	0.0997	0.0623	0.6524	1.9800e-003	0.2061	1.3500e-003	0.2074	0.0550	1.2500e-003	0.0562		197.6472	197.6472	4.9100e-003		197.7699

3.5 Building Construction - 2020

Unmitigated Construction On-Site

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

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0617	2.1494	0.4628	5.2800e-003	0.1345	0.0124	0.1469	0.0387	0.0119	0.0506		556.5898	556.5898	0.0483		557.7965
Worker	0.2641	0.1650	1.7287	5.2600e-003	0.5924	3.5900e-003	0.5960	0.1571	3.3000e-003	0.1604		523.7650	523.7650	0.0130		524.0902
Total	0.3259	2.3144	2.1916	0.0105	0.7269	0.0160	0.7429	0.1958	0.0152	0.2110		1,080.3548	1,080.3548	0.0613		1,081.8867

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0617	2.1494	0.4628	5.2800e-003	0.1259	0.0124	0.1383	0.0366	0.0119	0.0485		556.5898	556.5898	0.0483		557.7965
Worker	0.2641	0.1650	1.7287	5.2600e-003	0.5461	3.5900e-003	0.5497	0.1457	3.3000e-003	0.1490		523.7650	523.7650	0.0130		524.0902
Total	0.3259	2.3144	2.1916	0.0105	0.6719	0.0160	0.6879	0.1823	0.0152	0.1975		1,080.3548	1,080.3548	0.0613		1,081.8867

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		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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
Vendor	0.0521	1.9266	0.4102	5.2400e-003	0.1345	3.8100e-003	0.1383	0.0387	3.6400e-003	0.0424		552.2438	552.2438	0.0457		553.3873
Worker	0.2466	0.1480	1.5817	5.0800e-003	0.5924	3.4900e-003	0.5959	0.1571	3.2100e-003	0.1603		506.2526	506.2526	0.0117		506.5450
Total	0.2987	2.0746	1.9918	0.0103	0.7269	7.3000e-003	0.7342	0.1958	6.8500e-003	0.2027		1,058.4963	1,058.4963	0.0574		1,059.9324

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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
Vendor	0.0521	1.9266	0.4102	5.2400e-003	0.1259	3.8100e-003	0.1297	0.0366	3.6400e-003	0.0402		552.2438	552.2438	0.0457		553.3873
Worker	0.2466	0.1480	1.5817	5.0800e-003	0.5461	3.4900e-003	0.5496	0.1457	3.2100e-003	0.1490		506.2526	506.2526	0.0117		506.5450
Total	0.2987	2.0746	1.9918	0.0103	0.6719	7.3000e-003	0.6792	0.1823	6.8500e-003	0.1892		1,058.4963	1,058.4963	0.0574		1,059.9324

3.6 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		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7612	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.6 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	0.0698	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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7612	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.6 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
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	0.0698	0.0419	0.4476	1.4400e-003	0.1546	9.9000e-004	0.1555	0.0413	9.1000e-004	0.0422		143.2790	143.2790	3.3100e-003		143.3618
Total	0.0698	0.0419	0.4476	1.4400e-003	0.1546	9.9000e-004	0.1555	0.0413	9.1000e-004	0.0422		143.2790	143.2790	3.3100e-003		143.3618

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.5331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	28.7520	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.7 Architectural Coating - 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	0.0512	0.0307	0.3283	1.0500e-003	0.1230	7.2000e-004	0.1237	0.0326	6.7000e-004	0.0333		105.0713	105.0713	2.4300e-003		105.1320
Total	0.0512	0.0307	0.3283	1.0500e-003	0.1230	7.2000e-004	0.1237	0.0326	6.7000e-004	0.0333		105.0713	105.0713	2.4300e-003		105.1320

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	28.5331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	28.7520	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

3.7 Architectural Coating - 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
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	0.0512	0.0307	0.3283	1.0500e-003	0.1133	7.2000e-004	0.1141	0.0303	6.7000e-004	0.0309		105.0713	105.0713	2.4300e-003		105.1320
Total	0.0512	0.0307	0.3283	1.0500e-003	0.1133	7.2000e-004	0.1141	0.0303	6.7000e-004	0.0309		105.0713	105.0713	2.4300e-003		105.1320

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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	1.5808	13.3912	19.4049	0.0857	6.7516	0.0647	6.8162	1.8065	0.0607	1.8672		8,749.1454	8,749.1454	0.4655		8,760.7834
Unmitigated	1.5808	13.3912	19.4049	0.0857	6.7516	0.0647	6.8162	1.8065	0.0607	1.8672		8,749.1454	8,749.1454	0.4655		8,760.7834

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	918.55	0.00	0.00	2,261,192	2,261,192
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	918.55	0.00	0.00	2,261,192	2,261,192

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

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	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
NaturalGas Unmitigated	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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					
Elementary School	1428.82	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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					
Elementary School	1.42882	0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0154	0.1401	0.1177	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.0960	168.0960	3.2200e-003	3.0800e-003	169.0949

6.0 Area Detail

6.1 Mitigation Measures Area

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Unmitigated	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

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	0.1564					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5600e-003	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Total	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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	0.1564					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5600e-003	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354
Total	1.3646	5.5000e-004	0.0595	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1270	0.1270	3.4000e-004		0.1354

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Winter

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

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

Equipment Type	Number
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11.0 Vegetation

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Annual

**Temecula Valley STEAM Academy Phase I Mitigation Measures
Riverside-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	59.53	1000sqft	1.37	59,534.00	0
Other Asphalt Surfaces	100.44	1000sqft	2.31	0.00	0
Other Non-Asphalt Surfaces	352.84	1000sqft	8.10	0.00	0
Parking Lot	67.54	1000sqft	1.55	67,538.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - subtract nonpaintable area

Construction Phase - arch coat and paving overlapped to fit into 18 month schedule

Grading -

Construction Off-road Equipment Mitigation - see assumptions file, mitigation measures: 3 times a day at 61 percent reduction

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialExported	0.00	18,553.00
tblLandUse	LandUseSquareFeet	59,530.00	59,534.00
tblLandUse	LandUseSquareFeet	100,440.00	0.00
tblLandUse	LandUseSquareFeet	352,840.00	0.00
tblLandUse	LandUseSquareFeet	67,540.00	67,538.00

2.0 Emissions Summary

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-3-2020	5-2-2020	1.9695	1.9695
2	5-3-2020	8-2-2020	0.8532	0.8532
3	8-3-2020	11-2-2020	0.7870	0.7870
4	11-3-2020	2-2-2021	0.7604	0.7604
5	2-3-2021	5-2-2021	0.6901	0.6901
6	5-3-2021	8-2-2021	0.6536	0.6536
7	8-3-2021	9-30-2021	0.2711	0.2711
		Highest	1.9695	1.9695

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	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154
Energy	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	173.8341	173.8341	6.5600e-003	1.7600e-003	174.5219
Mobile	0.2059	1.7712	2.6008	0.0114	0.8634	8.3500e-003	0.8717	0.2313	7.8400e-003	0.2392	0.0000	1,055.0275	1,055.0275	0.0534	0.0000	1,056.3619
Waste						0.0000	0.0000		0.0000	0.0000	15.7095	0.0000	15.7095	0.9284	0.0000	38.9196
Water						0.0000	0.0000		0.0000	0.0000	0.5476	22.8743	23.4219	0.0572	1.5200e-003	25.3057
Total	0.4574	1.7968	2.6297	0.0115	0.8634	0.0103	0.8737	0.2313	9.8100e-003	0.2411	16.2571	1,251.7503	1,268.0075	1.0456	3.2800e-003	1,295.1244

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154
Energy	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	173.8341	173.8341	6.5600e-003	1.7600e-003	174.5219
Mobile	0.2059	1.7712	2.6008	0.0114	0.8634	8.3500e-003	0.8717	0.2313	7.8400e-003	0.2392	0.0000	1,055.0275	1,055.0275	0.0534	0.0000	1,056.3619
Waste						0.0000	0.0000		0.0000	0.0000	15.7095	0.0000	15.7095	0.9284	0.0000	38.9196
Water						0.0000	0.0000		0.0000	0.0000	0.5476	22.8743	23.4219	0.0572	1.5200e-003	25.3057
Total	0.4574	1.7968	2.6297	0.0115	0.8634	0.0103	0.8737	0.2313	9.8100e-003	0.2411	16.2571	1,251.7503	1,268.0075	1.0456	3.2800e-003	1,295.1244

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/3/2020	2/14/2020	5	10	
2	Rough Grading	Grading	2/15/2020	3/27/2020	5	30	
3	Fine Grading	Grading	3/28/2020	5/8/2020	5	30	
4	Building Construction	Building Construction	5/9/2020	7/2/2021	5	300	
5	Paving	Paving	7/3/2021	7/30/2021	5	20	
6	Architectural Coating	Architectural Coating	7/31/2021	8/27/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 11.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 89,301; Non-Residential Outdoor: 29,767; Striped Parking Area: 4,052 (Architectural Coating – sqft)

OffRoad Equipment

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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
Rough Grading	Excavators	2	8.00	158	0.38
Rough Grading	Graders	1	8.00	187	0.41
Rough Grading	Rubber Tired Dozers	1	8.00	247	0.40
Rough Grading	Scrapers	2	8.00	367	0.48
Rough Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Fine Grading	Excavators	2	8.00	158	0.38
Fine Grading	Graders	1	8.00	187	0.41
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Fine Grading	Scrapers	2	8.00	367	0.48
Fine Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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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	2,319.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0915	0.0000	0.0915	0.0498	0.0000	0.0498	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e-004	0.0915	0.0110	0.1025	0.0498	0.0101	0.0599	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

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3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0900e-003	0.2811	0.0364	8.7000e-004	0.0200	8.8000e-004	0.0209	5.4900e-003	8.4000e-004	6.3300e-003	0.0000	84.0747	84.0747	5.2700e-003	0.0000	84.2064
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	4.1000e-004	2.9000e-004	3.0900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8276	0.8276	2.0000e-005	0.0000	0.8282
Total	6.5000e-003	0.2814	0.0395	8.8000e-004	0.0210	8.9000e-004	0.0219	5.7500e-003	8.5000e-004	6.6000e-003	0.0000	84.9023	84.9023	5.2900e-003	0.0000	85.0345

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					0.0339	0.0000	0.0339	0.0185	0.0000	0.0185	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e-004	0.0339	0.0110	0.0449	0.0185	0.0101	0.0286	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

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3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0900e-003	0.2811	0.0364	8.7000e-004	0.0186	8.8000e-004	0.0195	5.1600e-003	8.4000e-004	6.0000e-003	0.0000	84.0747	84.0747	5.2700e-003	0.0000	84.2064
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	4.1000e-004	2.9000e-004	3.0900e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.2000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.8276	0.8276	2.0000e-005	0.0000	0.8282
Total	6.5000e-003	0.2814	0.0395	8.8000e-004	0.0196	8.9000e-004	0.0204	5.4000e-003	8.5000e-004	6.2500e-003	0.0000	84.9023	84.9023	5.2900e-003	0.0000	85.0345

3.3 Rough Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872
Total	0.0668	0.7530	0.4794	9.3000e-004	0.1301	0.0326	0.1627	0.0540	0.0300	0.0840	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872

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3.3 Rough Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605
Total	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605

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					0.0482	0.0000	0.0482	0.0200	0.0000	0.0200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871
Total	0.0668	0.7530	0.4794	9.3000e-004	0.0482	0.0326	0.0808	0.0200	0.0300	0.0500	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871

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3.3 Rough Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.0400e-003	2.0000e-005	3.0600e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605
Total	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.0400e-003	2.0000e-005	3.0600e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605

3.4 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872
Total	0.0668	0.7530	0.4794	9.3000e-004	0.1301	0.0326	0.1627	0.0540	0.0300	0.0840	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872

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3.4 Fine Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605
Total	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605

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					0.0482	0.0000	0.0482	0.0200	0.0000	0.0200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871
Total	0.0668	0.7530	0.4794	9.3000e-004	0.0482	0.0326	0.0808	0.0200	0.0300	0.0500	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871

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3.4 Fine Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.0400e-003	2.0000e-005	3.0600e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605
Total	1.3800e-003	9.7000e-004	0.0103	3.0000e-005	3.0400e-003	2.0000e-005	3.0600e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.7588	2.7588	7.0000e-005	0.0000	2.7605

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1791	1.6212	1.4237	2.2700e-003		0.0944	0.0944		0.0888	0.0888	0.0000	195.7104	195.7104	0.0478	0.0000	196.9041
Total	0.1791	1.6212	1.4237	2.2700e-003		0.0944	0.0944		0.0888	0.0888	0.0000	195.7104	195.7104	0.0478	0.0000	196.9041

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3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0400e-003	0.1846	0.0361	4.6000e-004	0.0112	1.0400e-003	0.0123	3.2300e-003	1.0000e-003	4.2300e-003	0.0000	43.6328	43.6328	3.4900e-003	0.0000	43.7200
Worker	0.0206	0.0144	0.1540	4.6000e-004	0.0492	3.0000e-004	0.0495	0.0131	2.8000e-004	0.0134	0.0000	41.1840	41.1840	1.0300e-003	0.0000	41.2097
Total	0.0256	0.1990	0.1901	9.2000e-004	0.0604	1.3400e-003	0.0618	0.0163	1.2800e-003	0.0176	0.0000	84.8167	84.8167	4.5200e-003	0.0000	84.9297

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	0.1791	1.6212	1.4237	2.2700e-003		0.0944	0.0944		0.0888	0.0888	0.0000	195.7102	195.7102	0.0478	0.0000	196.9039
Total	0.1791	1.6212	1.4237	2.2700e-003		0.0944	0.0944		0.0888	0.0888	0.0000	195.7102	195.7102	0.0478	0.0000	196.9039

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3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0400e-003	0.1846	0.0361	4.6000e-004	0.0105	1.0400e-003	0.0115	3.0600e-003	1.0000e-003	4.0600e-003	0.0000	43.6328	43.6328	3.4900e-003	0.0000	43.7200
Worker	0.0206	0.0144	0.1540	4.6000e-004	0.0454	3.0000e-004	0.0457	0.0121	2.8000e-004	0.0124	0.0000	41.1840	41.1840	1.0300e-003	0.0000	41.2097
Total	0.0256	0.1990	0.1901	9.2000e-004	0.0559	1.3400e-003	0.0572	0.0152	1.2800e-003	0.0165	0.0000	84.8167	84.8167	4.5200e-003	0.0000	84.9297

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	0.1245	1.1418	1.0857	1.7600e-003		0.0628	0.0628		0.0590	0.0590	0.0000	151.7224	151.7224	0.0366	0.0000	152.6375
Total	0.1245	1.1418	1.0857	1.7600e-003		0.0628	0.0628		0.0590	0.0590	0.0000	151.7224	151.7224	0.0366	0.0000	152.6375

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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	3.2800e-003	0.1283	0.0247	3.5000e-004	8.6900e-003	2.5000e-004	8.9300e-003	2.5100e-003	2.3000e-004	2.7400e-003	0.0000	33.5585	33.5585	2.5600e-003	0.0000	33.6225
Worker	0.0149	0.0100	0.1093	3.4000e-004	0.0382	2.3000e-004	0.0384	0.0101	2.1000e-004	0.0103	0.0000	30.8563	30.8563	7.2000e-004	0.0000	30.8743
Total	0.0182	0.1383	0.1340	6.9000e-004	0.0469	4.8000e-004	0.0473	0.0126	4.4000e-004	0.0131	0.0000	64.4148	64.4148	3.2800e-003	0.0000	64.4968

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	0.1245	1.1418	1.0857	1.7600e-003		0.0628	0.0628		0.0590	0.0590	0.0000	151.7222	151.7222	0.0366	0.0000	152.6373
Total	0.1245	1.1418	1.0857	1.7600e-003		0.0628	0.0628		0.0590	0.0590	0.0000	151.7222	151.7222	0.0366	0.0000	152.6373

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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	3.2800e-003	0.1283	0.0247	3.5000e-004	8.1300e-003	2.5000e-004	8.3800e-003	2.3700e-003	2.3000e-004	2.6000e-003	0.0000	33.5585	33.5585	2.5600e-003	0.0000	33.6225
Worker	0.0149	0.0100	0.1093	3.4000e-004	0.0352	2.3000e-004	0.0354	9.4000e-003	2.1000e-004	9.6100e-003	0.0000	30.8563	30.8563	7.2000e-004	0.0000	30.8743
Total	0.0182	0.1383	0.1340	6.9000e-004	0.0433	4.8000e-004	0.0438	0.0118	4.4000e-004	0.0122	0.0000	64.4148	64.4148	3.2800e-003	0.0000	64.4968

3.6 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	5.0600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0176	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

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3.6 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	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	5.0600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0176	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

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3.6 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	1.5200e-003	1.0000e-005	1.5300e-003	4.1000e-004	1.0000e-005	4.2000e-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	1.5200e-003	1.0000e-005	1.5300e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2853					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.2875	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

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3.7 Architectural Coating - 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	4.7000e-004	3.2000e-004	3.4600e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9777	0.9777	2.0000e-005	0.0000	0.9783
Total	4.7000e-004	3.2000e-004	3.4600e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9777	0.9777	2.0000e-005	0.0000	0.9783

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	0.2853					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.2875	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

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3.7 Architectural Coating - 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	4.7000e-004	3.2000e-004	3.4600e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.9777	0.9777	2.0000e-005	0.0000	0.9783
Total	4.7000e-004	3.2000e-004	3.4600e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.9777	0.9777	2.0000e-005	0.0000	0.9783

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2059	1.7712	2.6008	0.0114	0.8634	8.3500e-003	0.8717	0.2313	7.8400e-003	0.2392	0.0000	1,055.0275	1,055.0275	0.0534	0.0000	1,056.3619
Unmitigated	0.2059	1.7712	2.6008	0.0114	0.8634	8.3500e-003	0.8717	0.2313	7.8400e-003	0.2392	0.0000	1,055.0275	1,055.0275	0.0534	0.0000	1,056.3619

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	918.55	0.00	0.00	2,261,192	2,261,192
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	918.55	0.00	0.00	2,261,192	2,261,192

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	146.0040	146.0040	6.0300e-003	1.2500e-003	146.5263
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	146.0040	146.0040	6.0300e-003	1.2500e-003	146.5263
NaturalGas Mitigated	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956
NaturalGas Unmitigated	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956

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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					
Elementary School	521518	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	521518	2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		2.8100e-003	0.0256	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8302	27.8302	5.3000e-004	5.1000e-004	27.9956

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	434598	138.4723	5.7200e-003	1.1800e-003	138.9677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	23638.3	7.5317	3.1000e-004	6.0000e-005	7.5586
Total		146.0040	6.0300e-003	1.2400e-003	146.5263

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	434598	138.4723	5.7200e-003	1.1800e-003	138.9677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	23638.3	7.5317	3.1000e-004	6.0000e-005	7.5586
Total		146.0040	6.0300e-003	1.2400e-003	146.5263

6.0 Area Detail**6.1 Mitigation Measures Area**

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154
Unmitigated	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154

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	0.0285					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2195					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.9000e-004	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154
Total	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154

Temecula Valley STEAM Academy Phase I Mitigation Measures - 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	0.0285					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2195					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.9000e-004	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154
Total	0.2487	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0144	0.0144	4.0000e-005	0.0000	0.0154

7.0 Water Detail

7.1 Mitigation Measures Water

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	23.4219	0.0572	1.5200e-003	25.3057
Unmitigated	23.4219	0.0572	1.5200e-003	25.3057

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.72619 / 4.43877	23.4219	0.0572	1.5200e-003	25.3057
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		23.4219	0.0572	1.5200e-003	25.3057

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.72619 / 4.43877	23.4219	0.0572	1.5200e-003	25.3057
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		23.4219	0.0572	1.5200e-003	25.3057

8.0 Waste Detail

8.1 Mitigation Measures Waste

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.7095	0.9284	0.0000	38.9196
Unmitigated	15.7095	0.9284	0.0000	38.9196

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	77.39	15.7095	0.9284	0.0000	38.9196
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		15.7095	0.9284	0.0000	38.9196

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	77.39	15.7095	0.9284	0.0000	38.9196
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		15.7095	0.9284	0.0000	38.9196

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Temecula Valley STEAM Academy Phase I Mitigation Measures - Riverside-South Coast County, Annual

Equipment Type	Number
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11.0 Vegetation

Temecula Valley STEAM Academy Phase I Mitigation Measures

Riverside-South Coast County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rough Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	5	No Change	0.00
Scrapers	Diesel	No Change	0	4	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	11	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr						Unmitigated mt/yr						
Air Compressors	2.19000E-003	1.52700E-002	1.81800E-002	3.00000E-005	9.40000E-004	9.40000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.80000E-004	0.00000E+000	2.55763E+000
Cranes	5.71900E-002	6.76560E-001	2.70050E-001	7.60000E-004	2.77200E-002	2.55000E-002	0.00000E+000	6.65313E+001	6.65313E+001	2.15200E-002	0.00000E+000	6.70693E+001
Excavators	1.47000E-002	1.44760E-001	1.96070E-001	3.10000E-004	7.01000E-003	6.45000E-003	0.00000E+000	2.72220E+001	2.72220E+001	8.80000E-003	0.00000E+000	2.74421E+001
Forklifts	6.19200E-002	5.60620E-001	5.28680E-001	6.90000E-004	4.09500E-002	3.76700E-002	0.00000E+000	6.04311E+001	6.04311E+001	1.95400E-002	0.00000E+000	6.09197E+001
Generator Sets	5.71300E-002	5.01330E-001	5.54470E-001	9.90000E-004	2.75700E-002	2.75700E-002	0.00000E+000	8.47811E+001	8.47811E+001	4.58000E-003	0.00000E+000	8.48956E+001
Graders	1.42700E-002	1.89770E-001	5.44300E-002	2.00000E-004	6.07000E-003	5.58000E-003	0.00000E+000	1.74919E+001	1.74919E+001	5.66000E-003	0.00000E+000	1.76334E+001
Pavers	4.92000E-003	5.19000E-002	5.81000E-002	9.00000E-005	2.51000E-003	2.31000E-003	0.00000E+000	8.25649E+000	8.25649E+000	2.67000E-003	0.00000E+000	8.32324E+000
Paving Equipment	3.84000E-003	3.88100E-002	5.08300E-002	8.00000E-005	1.92000E-003	1.76000E-003	0.00000E+000	7.15688E+000	7.15688E+000	2.31000E-003	0.00000E+000	7.21475E+000
Rollers	3.79000E-003	3.84800E-002	3.76100E-002	5.00000E-005	2.35000E-003	2.16000E-003	0.00000E+000	4.61011E+000	4.61011E+000	1.49000E-003	0.00000E+000	4.64739E+000
Rubber Tired Dozers	4.85800E-002	5.09950E-001	1.85920E-001	3.80000E-004	2.49700E-002	2.29800E-002	0.00000E+000	3.37749E+001	3.37749E+001	1.09200E-002	0.00000E+000	3.40480E+001
Scrapers	5.95700E-002	7.05120E-001	4.47520E-001	9.10000E-004	2.75000E-002	2.53000E-002	0.00000E+000	7.98512E+001	7.98512E+001	2.58300E-002	0.00000E+000	8.04969E+001
Tractors/Loaders/Backhoes	9.54300E-002	9.61320E-001	1.07666E+000	1.47000E-003	5.94000E-002	5.46400E-002	0.00000E+000	1.29284E+002	1.29284E+002	4.18100E-002	0.00000E+000	1.30330E+002
Welders	4.87300E-002	2.31610E-001	2.61900E-001	3.80000E-004	1.22000E-002	1.22000E-002	0.00000E+000	2.82331E+001	2.82331E+001	3.96000E-003	0.00000E+000	2.83320E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	2.19000E-003	1.52700E-002	1.81800E-002	3.00000E-005	9.40000E-004	9.40000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.80000E-004	0.00000E+000	2.55763E+000
Cranes	5.71900E-002	6.76560E-001	2.70050E-001	7.60000E-004	2.77200E-002	2.55000E-002	0.00000E+000	6.65312E+001	6.65312E+001	2.15200E-002	0.00000E+000	6.70692E+001
Excavators	1.47000E-002	1.44760E-001	1.96070E-001	3.10000E-004	7.01000E-003	6.45000E-003	0.00000E+000	2.72220E+001	2.72220E+001	8.80000E-003	0.00000E+000	2.74421E+001
Forklifts	6.19200E-002	5.60610E-001	5.28680E-001	6.90000E-004	4.09500E-002	3.76700E-002	0.00000E+000	6.04310E+001	6.04310E+001	1.95400E-002	0.00000E+000	6.09196E+001
Generator Sets	5.71300E-002	5.01320E-001	5.54470E-001	9.90000E-004	2.75700E-002	2.75700E-002	0.00000E+000	8.47810E+001	8.47810E+001	4.58000E-003	0.00000E+000	8.48955E+001
Graders	1.42700E-002	1.89770E-001	5.44300E-002	2.00000E-004	6.07000E-003	5.58000E-003	0.00000E+000	1.74919E+001	1.74919E+001	5.66000E-003	0.00000E+000	1.76334E+001
Pavers	4.92000E-003	5.19000E-002	5.81000E-002	9.00000E-005	2.51000E-003	2.31000E-003	0.00000E+000	8.25648E+000	8.25648E+000	2.67000E-003	0.00000E+000	8.32323E+000
Paving Equipment	3.84000E-003	3.88100E-002	5.08300E-002	8.00000E-005	1.92000E-003	1.76000E-003	0.00000E+000	7.15688E+000	7.15688E+000	2.31000E-003	0.00000E+000	7.21474E+000
Rollers	3.79000E-003	3.84800E-002	3.76100E-002	5.00000E-005	2.35000E-003	2.16000E-003	0.00000E+000	4.61011E+000	4.61011E+000	1.49000E-003	0.00000E+000	4.64738E+000
Rubber Tired Dozers	4.85800E-002	5.09950E-001	1.85920E-001	3.80000E-004	2.49700E-002	2.29800E-002	0.00000E+000	3.37748E+001	3.37748E+001	1.09200E-002	0.00000E+000	3.40479E+001
Scrapers	5.95700E-002	7.05120E-001	4.47520E-001	9.10000E-004	2.75000E-002	2.53000E-002	0.00000E+000	7.98511E+001	7.98511E+001	2.58300E-002	0.00000E+000	8.04968E+001
Tractors/Loaders/Balckhoes	9.54300E-002	9.61320E-001	1.07666E+000	1.47000E-003	5.94000E-002	5.46400E-002	0.00000E+000	1.29284E+002	1.29284E+002	4.18100E-002	0.00000E+000	1.30330E+002
Welders	4.87300E-002	2.31610E-001	2.61900E-001	3.80000E-004	1.22000E-002	1.22000E-002	0.00000E+000	2.82331E+001	2.82331E+001	3.96000E-003	0.00000E+000	2.83320E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20244E-006	1.20244E-006	0.00000E+000	0.00000E+000	1.19280E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10205E-006	1.10205E-006	0.00000E+000	0.00000E+000	1.09321E-006
Forklifts	0.00000E+000	1.78374E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15834E-006	1.15834E-006	0.00000E+000	0.00000E+000	1.31320E-006
Generator Sets	0.00000E+000	1.99469E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17792E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14338E-006	1.14338E-006	0.00000E+000	0.00000E+000	1.13421E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21117E-006	1.21117E-006	0.00000E+000	0.00000E+000	1.20146E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.38605E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.15175E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18431E-006	1.18431E-006	0.00000E+000	0.00000E+000	1.17481E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12710E-006	1.12710E-006	0.00000E+000	0.00000E+000	1.11806E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16023E-006	1.16023E-006	0.00000E+000	0.00000E+000	1.15093E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.06258E-006	1.06258E-006	0.00000E+000	0.00000E+000	1.05887E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00	
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day) 3.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	9.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.08	0.06
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.11	0.03	0.10	0.03	0.08	0.07
Fine Grading	Fugitive Dust	0.13	0.05	0.05	0.02	0.63	0.63
Fine Grading	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.08	0.07
Rough Grading	Fugitive Dust	0.13	0.05	0.05	0.02	0.63	0.63
Rough Grading	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Site Preparation	Fugitive Dust	0.09	0.05	0.03	0.02	0.63	0.63
Site Preparation	Roads	0.02	0.01	0.02	0.01	0.07	0.06

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	50.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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Temecula Valley Operational Run - Riverside-South Coast County, Summer

Temecula Valley Operational Run
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	126.28	1000sqft	2.90	126,281.00	0
Other Asphalt Surfaces	162.55	1000sqft	3.73	162,551.00	0
Other Non-Asphalt Surfaces	645.06	1000sqft	14.81	645,061.00	0
Parking Lot	67.54	1000sqft	1.55	67,540.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
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

Temecula Valley Operational Run - Riverside-South Coast County, Summer

Project Characteristics -

Land Use -

Construction Phase -

Vehicle Trips - based on trip gen from R Garland

Area Coating -

Water And Wastewater - see assumptions

Energy Mitigation - based on 2019 standards for nonres

Water Mitigation -

Fleet Mix - adjusted for in the fleet mix worksheet, based on 2025 final opening

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.61
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.01	0.01
tblFleetMix	LHD2	4.6600e-003	0.00
tblFleetMix	MCY	4.4760e-003	4.9120e-003
tblFleetMix	MDV	0.11	0.12
tblFleetMix	MH	8.4000e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.4130e-003	0.00
tblFleetMix	SBUS	9.0500e-004	1.4410e-003
tblFleetMix	UBUS	1.1340e-003	0.00
tblLandUse	LandUseSquareFeet	126,280.00	126,281.00
tblLandUse	LandUseSquareFeet	162,550.00	162,551.00
tblLandUse	LandUseSquareFeet	645,060.00	645,061.00

Temecula Valley Operational Run - Riverside-South Coast County, Summer

tblVehicleTrips	WD_TR	15.43	18.77
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

Temecula Valley Operational Run - 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	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335
Energy	0.0327	0.2971	0.2496	1.7800e-003		0.0226	0.0226		0.0226	0.0226		356.5581	356.5581	6.8300e-003	6.5400e-003	358.6770
Mobile	3.6894	4.7674	47.5014	0.1540	17.1222	0.1003	17.2225	4.5507	0.0927	4.6433		15,361.3234	15,361.3234	0.3824		15,370.8829
Total	6.9292	5.0655	47.8530	0.1557	17.1222	0.1232	17.2455	4.5507	0.1156	4.6663		15,718.1007	15,718.1007	0.3898	6.5400e-003	15,729.7934

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	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335
Energy	0.0249	0.2262	0.1900	1.3600e-003		0.0172	0.0172		0.0172	0.0172		271.4482	271.4482	5.2000e-003	4.9800e-003	273.0613
Mobile	3.6894	4.7674	47.5014	0.1540	17.1222	0.1003	17.2225	4.5507	0.0927	4.6433		15,361.3234	15,361.3234	0.3824		15,370.8829
Total	6.9214	4.9946	47.7934	0.1553	17.1222	0.1178	17.2401	4.5507	0.1102	4.6609		15,632.9907	15,632.9907	0.3882	4.9800e-003	15,644.1777

Temecula Valley Operational Run - 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
Percent Reduction	0.11	1.40	0.12	0.27	0.00	4.37	0.03	0.00	4.66	0.12	0.00	0.54	0.54	0.42	23.85	0.54

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/3/2020	2/28/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 20.09

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Temecula Valley Operational Run - Riverside-South Coast County, Summer

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536

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	0.0763	0.0451	0.6048	1.6600e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		165.2392	165.2392	4.2400e-003		165.3451
Total	0.0763	0.0451	0.6048	1.6600e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		165.2392	165.2392	4.2400e-003		165.3451

Temecula Valley Operational Run - Riverside-South Coast County, Summer

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0763	0.0451	0.6048	1.6600e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		165.2392	165.2392	4.2400e-003		165.3451
Total	0.0763	0.0451	0.6048	1.6600e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		165.2392	165.2392	4.2400e-003		165.3451

4.0 Operational Detail - Mobile

Temecula Valley Operational Run - Riverside-South Coast County, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6894	4.7674	47.5014	0.1540	17.1222	0.1003	17.2225	4.5507	0.0927	4.6433		15,361.32 34	15,361.32 34	0.3824		15,370.88 29
Unmitigated	3.6894	4.7674	47.5014	0.1540	17.1222	0.1003	17.2225	4.5507	0.0927	4.6433		15,361.32 34	15,361.32 34	0.3824		15,370.88 29

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	2,370.28	0.00	0.00	5,834,914	5,834,914
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	2,370.28	0.00	0.00	5,834,914	5,834,914

4.3 Trip Type Information

Temecula Valley Operational Run - Riverside-South Coast County, Summer

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.612479	0.039087	0.208517	0.119519	0.014044	0.000000	0.000000	0.000000	0.000000	0.000000	0.004912	0.001441	0.000000
Other Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Other Non-Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Parking Lot	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Temecula Valley Operational Run - 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					
NaturalGas Mitigated	0.0249	0.2262	0.1900	1.3600e-003		0.0172	0.0172		0.0172	0.0172		271.4482	271.4482	5.2000e-003	4.9800e-003	273.0613
NaturalGas Unmitigated	0.0327	0.2971	0.2496	1.7800e-003		0.0226	0.0226		0.0226	0.0226		356.5581	356.5581	6.8300e-003	6.5400e-003	358.6770

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					
Elementary School	3030.74	0.0327	0.2971	0.2496	1.7800e-003		0.0226	0.0226		0.0226	0.0226		356.5581	356.5581	6.8300e-003	6.5400e-003	358.6770
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0327	0.2971	0.2496	1.7800e-003		0.0226	0.0226		0.0226	0.0226		356.5581	356.5581	6.8300e-003	6.5400e-003	358.6770

Temecula Valley Operational Run - 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					
Elementary School	2.30731	0.0249	0.2262	0.1900	1.3600e-003		0.0172	0.0172		0.0172	0.0172		271.4482	271.4482	5.2000e-003	4.9800e-003	273.0613
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0249	0.2262	0.1900	1.3600e-003		0.0172	0.0172		0.0172	0.0172		271.4482	271.4482	5.2000e-003	4.9800e-003	273.0613

6.0 Area Detail

6.1 Mitigation Measures Area

Temecula Valley Operational Run - 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	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335
Unmitigated	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335

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	0.3874					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4200e-003	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335
Total	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335

Temecula Valley Operational Run - 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	0.3874					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4200e-003	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335
Total	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335

7.0 Water Detail

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Temecula Valley Operational Run - Riverside-South Coast County, Summer

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Temecula Valley Operational Run - Riverside-South Coast County, Winter

**Temecula Valley Operational Run
Riverside-South Coast County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	126.28	1000sqft	2.90	126,281.00	0
Other Asphalt Surfaces	162.55	1000sqft	3.73	162,551.00	0
Other Non-Asphalt Surfaces	645.06	1000sqft	14.81	645,061.00	0
Parking Lot	67.54	1000sqft	1.55	67,540.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
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

Temecula Valley Operational Run - Riverside-South Coast County, Winter

Project Characteristics -

Land Use -

Construction Phase -

Vehicle Trips - based on trip gen from R Garland

Area Coating -

Water And Wastewater - see assumptions

Energy Mitigation - based on 2019 standards for nonres

Water Mitigation -

Fleet Mix - adjusted for in the fleet mix worksheet, based on 2025 final opening

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.61
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.01	0.01
tblFleetMix	LHD2	4.6600e-003	0.00
tblFleetMix	MCY	4.4760e-003	4.9120e-003
tblFleetMix	MDV	0.11	0.12
tblFleetMix	MH	8.4000e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.4130e-003	0.00
tblFleetMix	SBUS	9.0500e-004	1.4410e-003
tblFleetMix	UBUS	1.1340e-003	0.00
tblLandUse	LandUseSquareFeet	126,280.00	126,281.00
tblLandUse	LandUseSquareFeet	162,550.00	162,551.00
tblLandUse	LandUseSquareFeet	645,060.00	645,061.00

Temecula Valley Operational Run - Riverside-South Coast County, Winter

tblVehicleTrips	WD_TR	15.43	18.77
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

Temecula Valley Operational Run - 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	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335
Energy	0.0327	0.2971	0.2496	1.7800e-003		0.0226	0.0226		0.0226	0.0226		356.5581	356.5581	6.8300e-003	6.5400e-003	358.6770
Mobile	2.9975	4.9589	39.5475	0.1388	17.1222	0.1003	17.2226	4.5507	0.0927	4.6434		13,850.7218	13,850.7218	0.3523		13,859.5303
Total	6.2373	5.2569	39.8992	0.1405	17.1222	0.1233	17.2455	4.5507	0.1156	4.6663		14,207.4991	14,207.4991	0.3597	6.5400e-003	14,218.4407

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	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335
Energy	0.0249	0.2262	0.1900	1.3600e-003		0.0172	0.0172		0.0172	0.0172		271.4482	271.4482	5.2000e-003	4.9800e-003	273.0613
Mobile	2.9975	4.9589	39.5475	0.1388	17.1222	0.1003	17.2226	4.5507	0.0927	4.6434		13,850.7218	13,850.7218	0.3523		13,859.5303
Total	6.2295	5.1860	39.8396	0.1401	17.1222	0.1179	17.2401	4.5507	0.1102	4.6609		14,122.3892	14,122.3892	0.3581	4.9800e-003	14,132.8250

Temecula Valley Operational Run - 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	0.13	1.35	0.15	0.30	0.00	4.37	0.03	0.00	4.66	0.12	0.00	0.60	0.60	0.45	23.85	0.60

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/3/2020	2/28/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 20.09

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Temecula Valley Operational Run - Riverside-South Coast County, Winter

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0467	0.4893	1.4900e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		148.2354	148.2354	3.6800e-003		148.3274
Total	0.0748	0.0467	0.4893	1.4900e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		148.2354	148.2354	3.6800e-003		148.3274

Temecula Valley Operational Run - Riverside-South Coast County, Winter

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0467	0.4893	1.4900e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		148.2354	148.2354	3.6800e-003		148.3274
Total	0.0748	0.0467	0.4893	1.4900e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		148.2354	148.2354	3.6800e-003		148.3274

4.0 Operational Detail - Mobile

Temecula Valley Operational Run - Riverside-South Coast County, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.9975	4.9589	39.5475	0.1388	17.1222	0.1003	17.2226	4.5507	0.0927	4.6434		13,850.72 18	13,850.72 18	0.3523		13,859.53 03
Unmitigated	2.9975	4.9589	39.5475	0.1388	17.1222	0.1003	17.2226	4.5507	0.0927	4.6434		13,850.72 18	13,850.72 18	0.3523		13,859.53 03

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	2,370.28	0.00	0.00	5,834,914	5,834,914
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	2,370.28	0.00	0.00	5,834,914	5,834,914

4.3 Trip Type Information

Temecula Valley Operational Run - Riverside-South Coast County, Winter

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
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.612479	0.039087	0.208517	0.119519	0.014044	0.000000	0.000000	0.000000	0.000000	0.000000	0.004912	0.001441	0.000000
Other Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Other Non-Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Parking Lot	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Temecula Valley Operational Run - 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					
NaturalGas Mitigated	0.0249	0.2262	0.1900	1.3600e-003		0.0172	0.0172		0.0172	0.0172		271.4482	271.4482	5.2000e-003	4.9800e-003	273.0613
NaturalGas Unmitigated	0.0327	0.2971	0.2496	1.7800e-003		0.0226	0.0226		0.0226	0.0226		356.5581	356.5581	6.8300e-003	6.5400e-003	358.6770

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					
Elementary School	3030.74	0.0327	0.2971	0.2496	1.7800e-003		0.0226	0.0226		0.0226	0.0226		356.5581	356.5581	6.8300e-003	6.5400e-003	358.6770
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0327	0.2971	0.2496	1.7800e-003		0.0226	0.0226		0.0226	0.0226		356.5581	356.5581	6.8300e-003	6.5400e-003	358.6770

Temecula Valley Operational Run - 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					
Elementary School	2.30731	0.0249	0.2262	0.1900	1.3600e-003		0.0172	0.0172		0.0172	0.0172		271.4482	271.4482	5.2000e-003	4.9800e-003	273.0613
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0249	0.2262	0.1900	1.3600e-003		0.0172	0.0172		0.0172	0.0172		271.4482	271.4482	5.2000e-003	4.9800e-003	273.0613

6.0 Area Detail

6.1 Mitigation Measures Area

Temecula Valley Operational Run - 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	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335
Unmitigated	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335

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	0.3874					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4200e-003	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335
Total	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335

Temecula Valley Operational Run - 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	0.3874					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4200e-003	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335
Total	3.2072	9.3000e-004	0.1021	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2192	0.2192	5.7000e-004		0.2335

7.0 Water Detail

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Temecula Valley Operational Run - Riverside-South Coast County, Winter

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Temecula Valley Operational Run - Riverside-South Coast County, Annual

**Temecula Valley Operational Run
Riverside-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	126.28	1000sqft	2.90	126,281.00	0
Other Asphalt Surfaces	162.55	1000sqft	3.73	162,551.00	0
Other Non-Asphalt Surfaces	645.06	1000sqft	14.81	645,061.00	0
Parking Lot	67.54	1000sqft	1.55	67,540.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
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

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Project Characteristics -

Land Use -

Construction Phase -

Vehicle Trips - based on trip gen from R Garland

Area Coating -

Water And Wastewater - see assumptions

Energy Mitigation - based on 2019 standards for nonres

Water Mitigation -

Fleet Mix - adjusted for in the fleet mix worksheet, based on 2025 final opening

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.55	0.61
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LHD1	0.01	0.01
tblFleetMix	LHD2	4.6600e-003	0.00
tblFleetMix	MCY	4.4760e-003	4.9120e-003
tblFleetMix	MDV	0.11	0.12
tblFleetMix	MH	8.4000e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.4130e-003	0.00
tblFleetMix	SBUS	9.0500e-004	1.4410e-003
tblFleetMix	UBUS	1.1340e-003	0.00
tblLandUse	LandUseSquareFeet	126,280.00	126,281.00
tblLandUse	LandUseSquareFeet	162,550.00	162,551.00
tblLandUse	LandUseSquareFeet	645,060.00	645,061.00

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tblVehicleTrips	WD_TR	15.43	18.77
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

Temecula Valley Operational Run - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-3-2020	5-2-2020	0.3402	0.3402
		Highest	0.3402	0.3402

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	0.5848	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0249	0.0249	6.0000e-005	0.0000	0.0265
Energy	5.9600e-003	0.0542	0.0456	3.3000e-004		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	360.2857	360.2857	0.0136	3.6600e-003	361.7142
Mobile	0.3939	0.6595	5.3775	0.0185	2.1889	0.0130	2.2019	0.5825	0.0120	0.5945	0.0000	1,671.4984	1,671.4984	0.0423	0.0000	1,672.5567
Waste						0.0000	0.0000		0.0000	0.0000	33.3230	0.0000	33.3230	1.9693	0.0000	82.5563
Water						0.0000	0.0000		0.0000	0.0000	1.2955	48.5228	49.8183	6.4600e-003	3.2300e-003	50.9430
Total	0.9846	0.7138	5.4358	0.0188	2.1889	0.0172	2.2061	0.5825	0.0162	0.5987	34.6185	2,080.3317	2,114.9502	2.0318	6.8900e-003	2,167.7967

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5848	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0249	0.0249	6.0000e-005	0.0000	0.0265
Energy	4.5400e-003	0.0413	0.0347	2.5000e-004		3.1400e-003	3.1400e-003		3.1400e-003	3.1400e-003	0.0000	312.6381	312.6381	0.0119	3.1100e-003	313.8628
Mobile	0.3939	0.6595	5.3775	0.0185	2.1889	0.0130	2.2019	0.5825	0.0120	0.5945	0.0000	1,671.4984	1,671.4984	0.0423	0.0000	1,672.5567
Waste						0.0000	0.0000		0.0000	0.0000	33.3230	0.0000	33.3230	1.9693	0.0000	82.5563
Water						0.0000	0.0000		0.0000	0.0000	1.0364	43.4513	44.4877	5.3600e-003	2.6300e-003	45.4040
Total	0.9832	0.7009	5.4249	0.0187	2.1889	0.0162	2.2051	0.5825	0.0152	0.5977	34.3594	2,027.6126	2,061.9720	2.0290	5.7400e-003	2,114.4063

	ROG	NOx	CO	SO2	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	0.14	1.81	0.20	0.43	0.00	5.70	0.04	0.00	6.05	0.16	0.75	2.53	2.50	0.14	16.69	2.46

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/3/2020	2/28/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 20.09

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386

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	6.9000e-004	4.8000e-004	5.1600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3794	1.3794	3.0000e-005	0.0000	1.3803
Total	6.9000e-004	4.8000e-004	5.1600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3794	1.3794	3.0000e-005	0.0000	1.3803

Temecula Valley Operational Run - Riverside-South Coast County, Annual

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385

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	6.9000e-004	4.8000e-004	5.1600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3794	1.3794	3.0000e-005	0.0000	1.3803
Total	6.9000e-004	4.8000e-004	5.1600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3794	1.3794	3.0000e-005	0.0000	1.3803

4.0 Operational Detail - Mobile

Temecula Valley Operational Run - Riverside-South Coast County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3939	0.6595	5.3775	0.0185	2.1889	0.0130	2.2019	0.5825	0.0120	0.5945	0.0000	1,671.4984	1,671.4984	0.0423	0.0000	1,672.5567
Unmitigated	0.3939	0.6595	5.3775	0.0185	2.1889	0.0130	2.2019	0.5825	0.0120	0.5945	0.0000	1,671.4984	1,671.4984	0.0423	0.0000	1,672.5567

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	2,370.28	0.00	0.00	5,834,914	5,834,914
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	2,370.28	0.00	0.00	5,834,914	5,834,914

4.3 Trip Type Information

Temecula Valley Operational Run - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.612479	0.039087	0.208517	0.119519	0.014044	0.000000	0.000000	0.000000	0.000000	0.000000	0.004912	0.001441	0.000000
Other Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Other Non-Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Parking Lot	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	267.6968	267.6968	0.0111	2.2900e-003	268.6545
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	301.2535	301.2535	0.0124	2.5700e-003	302.3312
NaturalGas Mitigated	4.5400e-003	0.0413	0.0347	2.5000e-004		3.1400e-003	3.1400e-003		3.1400e-003	3.1400e-003	0.0000	44.9413	44.9413	8.6000e-004	8.2000e-004	45.2084
NaturalGas Unmitigated	5.9600e-003	0.0542	0.0456	3.3000e-004		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	59.0322	59.0322	1.1300e-003	1.0800e-003	59.3830

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					
Elementary School	1.10622e+006	5.9600e-003	0.0542	0.0456	3.3000e-004		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	59.0322	59.0322	1.1300e-003	1.0800e-003	59.3830
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		5.9600e-003	0.0542	0.0456	3.3000e-004		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	59.0322	59.0322	1.1300e-003	1.0800e-003	59.3830

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	842168	4.5400e-003	0.0413	0.0347	2.5000e-004		3.1400e-003	3.1400e-003		3.1400e-003	3.1400e-003	0.0000	44.9413	44.9413	8.6000e-004	8.2000e-004	45.2084
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.5400e-003	0.0413	0.0347	2.5000e-004		3.1400e-003	3.1400e-003		3.1400e-003	3.1400e-003	0.0000	44.9413	44.9413	8.6000e-004	8.2000e-004	45.2084

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	921851	293.7216	0.0121	2.5100e-003	294.7724
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	23639	7.5319	3.1000e-004	6.0000e-005	7.5588
Total		301.2535	0.0124	2.5700e-003	302.3312

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	816533	260.1649	0.0107	2.2200e-003	261.0956
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	23639	7.5319	3.1000e-004	6.0000e-005	7.5588
Total		267.6968	0.0111	2.2800e-003	268.6545

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5848	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0249	0.0249	6.0000e-005	0.0000	0.0265
Unmitigated	0.5848	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0249	0.0249	6.0000e-005	0.0000	0.0265

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	0.0707					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1800e-003	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0249	0.0249	6.0000e-005	0.0000	0.0265
Total	0.5848	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0249	0.0249	6.0000e-005	0.0000	0.0265

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0707					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1800e-003	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0249	0.0249	6.0000e-005	0.0000	0.0265
Total	0.5848	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0249	0.0249	6.0000e-005	0.0000	0.0265

7.0 Water Detail

7.1 Mitigation Measures Water

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

Temecula Valley Operational Run - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	44.4877	5.3600e-003	2.6300e-003	45.4040
Unmitigated	49.8183	6.4600e-003	3.2300e-003	50.9430

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	3.66173 / 9.41588	49.8183	6.4600e-003	3.2300e-003	50.9430
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		49.8183	6.4600e-003	3.2300e-003	50.9430

Temecula Valley Operational Run - Riverside-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	2.92938 / 8.84151	44.4877	5.3600e-003	2.6300e-003	45.4040
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		44.4877	5.3600e-003	2.6300e-003	45.4040

8.0 Waste Detail

8.1 Mitigation Measures Waste

Temecula Valley Operational Run - Riverside-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	33.3230	1.9693	0.0000	82.5563
Unmitigated	33.3230	1.9693	0.0000	82.5563

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	164.16	33.3230	1.9693	0.0000	82.5563
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		33.3230	1.9693	0.0000	82.5563

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	164.16	33.3230	1.9693	0.0000	82.5563
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		33.3230	1.9693	0.0000	82.5563

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Temecula Valley Operational Run - Riverside-South Coast County, Annual

Equipment Type	Number
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11.0 Vegetation

Temecula Valley Operational Run Riverside-South Coast County, Mitigation Report

Construction Mitigation Summary

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

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	3	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr						Unmitigated mt/yr						
Concrete/Industrial Saws	4.18000E-003	3.29900E-002	3.68700E-002	6.00000E-005	1.98000E-003	1.98000E-003	0.00000E+000	5.37656E+000	5.37656E+000	3.40000E-004	0.00000E+000	5.38508E+000
Excavators	7.35000E-003	7.23800E-002	9.80300E-002	1.50000E-004	3.51000E-003	3.23000E-003	0.00000E+000	1.36110E+001	1.36110E+001	4.40000E-003	0.00000E+000	1.37211E+001
Rubber Tired Dozers	2.15900E-002	2.26640E-001	8.26300E-002	1.70000E-004	1.11000E-002	1.02100E-002	0.00000E+000	1.50111E+001	1.50111E+001	4.85000E-003	0.00000E+000	1.51324E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr						Mitigated mt/yr						
Concrete/Industrial Saws	4.18000E-003	3.29900E-002	3.68700E-002	6.00000E-005	1.98000E-003	1.98000E-003	0.00000E+000	5.37656E+000	5.37656E+000	3.40000E-004	0.00000E+000	5.38507E+000
Excavators	7.35000E-003	7.23800E-002	9.80300E-002	1.50000E-004	3.51000E-003	3.23000E-003	0.00000E+000	1.36110E+001	1.36110E+001	4.40000E-003	0.00000E+000	1.37210E+001
Rubber Tired Dozers	2.15900E-002	2.26640E-001	8.26300E-002	1.70000E-004	1.11000E-002	1.02100E-002	0.00000E+000	1.50110E+001	1.50110E+001	4.85000E-003	0.00000E+000	1.51324E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.85698E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	7.34700E-007	7.34700E-007	0.00000E+000	0.00000E+000	1.45761E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.33235E-006	1.33235E-006	0.00000E+000	0.00000E+000	1.32167E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %	Vehicle Speed (mph)	0.00
No	Clean Paved Road	% PM Reduction	0.00	

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.14	11.14	11.17	11.28	11.14
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	23.83	23.88	23.86	24.24	23.79	23.79	0.00	23.87	23.87	23.89	24.07	23.87
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	10.45	10.70	17.03	18.58	10.87
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.07	0.27		

No	Land Use	Improve Walkability Design	0.00		
No	Land Use	Improve Destination Accessibility	0.00		
No	Land Use	Increase Transit Accessibility	0.25		
No	Land Use	Integrate Below Market Rate Housing	0.00		
	Land Use	Land Use SubTotal	0.00		
No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			

No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	50.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	30.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
Yes	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Construction Localized Significance Thresholds: Site Preparation

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
26	3.50	25	82	23

Source Receptor Distance (meters)	Temecula Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	8	4	2
NOx	302	Graders	0.5			0
CO	1,532	Dozers	0.5	8	3	1.5
PM10	9.99	Scrapers	1			0
PM2.5	6.00				Acres	3.50

	Acres	25	50	100	200	500
NOx	3	280	322	415	571	985
	4	325	369	468	622	1028
CO	3	303	346	442	597	1007
	4	1388	1953	3281	7115	26693
PM10	3	1677	2333	3782	7831	27975
	4	1533	2143	3532	7473	27334
PM2.5	3	9	27	45	82	193
	4	11	33	52	89	200
PM2.5	3	10	30	49	86	197
	4	5	7	12	26	96
Temecula Valley	3	7	9	14	28	100
	4	6	8	13	27	98

Temecula Valley

	3.50 Acres	25	50	100	200	500
NOx	303	346	442	597	1007	
CO	1533	2143	3532	7473	27334	
PM10	10	30	49	86	197	
PM2.5	6	8	13	27	98	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
26	3	26	4
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Rough Grading

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
26	4.00	25	82	23

Source Receptor Distance (meters)	Temecula Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
	25	Tractors	0.5	0.0625	8	2	1
NOx	325	Graders	0.5	0.0625	8	1	0.5
CO	1,676	Dozers	0.5	0.0625	8	1	0.5
PM10	10.99	Scrapers	1	0.125	8	2	2
PM2.5	6.67					Acres	4.00

	Acres	25	50	100	200	500
NOx	4	325	369	468	622	1028
	4	325	369	468	622	1028
	4	325	369	468	622	1028
CO	4	1677	2333	3782	7831	27975
	4	1677	2333	3782	7831	27975
	4	1677	2333	3782	7831	27975
PM10	4	11	33	52	89	200
	4	11	33	52	89	200
	4	11	33	52	89	200
PM2.5	4	7	9	14	28	100
	4	7	9	14	28	100
	4	7	9	14	28	100

Temecula Valley

4.00 Acres		25	50	100	200	500
NOx	25	325	369	468	622	1028
CO	1677	2333	3782	7831	27975	
PM10	11	33	52	89	200	
PM2.5	7	9	14	28	100	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
26	4	26	4
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Fine Grading

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
26	4.00	25	82	13.33

Source Receptor Distance (meters)	Temecula Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
	25	Tractors	0.5	0.0625	8	2	1
NOx	325	Graders	0.5	0.0625	8	1	0.5
CO	1,676	Dozers	0.5	0.0625	8	1	0.5
PM10	10.99	Scrapers	1	0.125	8	2	2
PM2.5	6.67					Acres	4.00

	Acres	25	50	100	200	500
NOx	4	325	369	468	622	1028
	4	325	369	468	622	1028
	4	325	369	468	622	1028
CO	4	1677	2333	3782	7831	27975
	4	1677	2333	3782	7831	27975
	4	1677	2333	3782	7831	27975
PM10	4	11	33	52	89	200
	4	11	33	52	89	200
	4	11	33	52	89	200
PM2.5	4	7	9	14	28	100
	4	7	9	14	28	100
	4	7	9	14	28	100

Temecula Valley

	4.00 Acres	25	50	100	200	500
NOx	25	325	369	468	622	1028
CO	1677	2333	3782	7831	27975	
PM10	11	33	52	89	200	
PM2.5	7	9	14	28	100	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
26	4	26	4
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
26	1.31	25	82	13.33

Source Receptor Distance (meters)	Temecula Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
25		Tractors	0.5	7	3	1.3125
NOx	184	Graders	0.5			0
CO	859	Dozers	0.5			0
PM10	4.94	Scrapers	1			0
PM2.5	3.31				Acres	1.31

	Acres	25	50	100	200	500
NOx	1	162	203	292	460	896
	2	234	275	363	521	941
CO	1	750	1105	1176	1716	23866
	2	1100	1572	2781	6399	25412
PM10	1	859	1251	2365	5782	24349
	2	4	12	30	67	178
PM2.5	1	7	20	38	75	186
	2	5	15	33	70	181
PM2.5	1	3	4	8	20	86
	2	4	6	10	23	91
		3	5	9	21	88

Temecula Valley

	1.31 Acres	25	50	100	200	500
NOx	185	226	314	479	910	
CO	859	1251	2365	5782	24349	
PM10	5	15	33	70	181	
PM2.5	3	5	9	21	88	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
26	1	26	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Architectural Coating and Paving

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
26	0.00	25	82	13.33

Source Receptor Distance (meters)	Temecula Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	0.0625		0
NOx	162	Graders	0.5	0.0625		0
CO	750	Dozers	0.5	0.0625		0
PM10	4.00	Scrapers	1	0.125		0
PM2.5	3.00				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	162	203	292	460	896
	1	162	203	292	460	896
CO	1	750	1105	2176	5501	23866
	1	750	1105	2176	5501	23866
		750	1105	2176	5501	23866
PM10	1	4	12	30	67	178
	1	4	12	30	67	178
PM2.5		4	12	30	67	178
	1	3	4	8	20	86
	1	3	4	8	20	86
		3	4	8	20	86

Temecula Valley

	0.00 Acres	25	50	100	200	500
NOx	25	162	203	292	460	896
CO	750	1105	2176	5501	23866	
PM10	4	12	30	67	178	
PM2.5	3	4	8	20	86	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
26	1	26	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Fine Grading

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
26	2.50	25	82	9.67

Source Receptor Distance (meters)	Temecula Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
	25	Tractors	0.5	0.0625	8	3	1.5
NOx	257	Graders	0.5	0.0625	8	1	0.5
CO	1,244	Dozers	0.5	0.0625	8	1	0.5
PM10	8.00	Scrapers	1	0.125			0
PM2.5	4.67					Acres	2.50

	Acres	25	50	100	200	500
NOx	2	234	275	363	521	941
	3	280	322	415	571	985
		257	299	389	546	963
CO	2	1100	1572	2781	6399	25412
	3	1388	1953	3281	7115	26693
		1244	1762	3031	6757	26053
PM10	2	7	20	38	75	186
	3	9	27	45	82	193
		8	23	42	79	190
PM2.5	2	4	6	10	23	91
	3	5	7	12	26	96
		5	7	11	24	93

Temecula Valley

	2.50 Acres	25	50	100	200	500
NOx	257	299	389	546	963	
CO	1244	1762	3031	6757	26053	
PM10	8	23	42	79	190	
PM2.5	5	7	11	24	93	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
26	2	26	3
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
26	1.31	25	82	9.67

Source Receptor Distance (meters)	Temecula Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
25		Tractors	0.5	7	3	1.3125
NOx	184	Graders	0.5			0
CO	859	Dozers	0.5			0
PM10	4.94	Scrapers	1			0
PM2.5	3.31				Acres	1.31

	Acres	25	50	100	200	500
NOx	1	162	203	292	460	896
	2	234	275	363	521	941
CO	1	750	1105	1176	2176	5501
	2	1100	1572	2781	6399	25412
PM10	1	859	1251	2365	5782	24349
	2	4	12	30	67	178
PM2.5	1	7	20	38	75	186
	2	5	15	33	70	181
PM2.5	1	3	4	8	20	86
	2	4	6	10	23	91
		3	5	9	21	88

Temecula Valley

	1.31 Acres	25	50	100	200	500
NOx	185	226	314	479	910	
CO	859	1251	2365	5782	24349	
PM10	5	15	33	70	181	
PM2.5	3	5	9	21	88	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
26	1	26	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Architectural Coating

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
26	0.00	25	82	9.67

Source Receptor Distance (meters)	Temecula Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	0.0625		0
NOx	162	Graders	0.5	0.0625		0
CO	750	Dozers	0.5	0.0625		0
PM10	4.00	Scrapers	1	0.125		0
PM2.5	3.00				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	162	203	292	460	896
	1	162	203	292	460	896
CO	1	750	1105	2176	5501	23866
	1	750	1105	2176	5501	23866
		750	1105	2176	5501	23866
PM10	1	4	12	30	67	178
	1	4	12	30	67	178
PM2.5		4	12	30	67	178
	1	3	4	8	20	86
	1	3	4	8	20	86
		3	4	8	20	86

Temecula Valley

	0.00 Acres	25	50	100	200	500
NOx	25	162	203	292	460	896
CO	750	1105	2176	5501	23866	
PM10	4	12	30	67	178	
PM2.5	3	4	8	20	86	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
26	1	26	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Paving

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
26	0.00	25	82	9.67

Source Receptor Distance (meters)	Temecula Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	0.0625		0
NOx	162	Graders	0.5	0.0625		0
CO	750	Dozers	0.5	0.0625		0
PM10	4.00	Scrapers	1	0.125		0
PM2.5	3.00				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	162	203	292	460	896
	1	162	203	292	460	896
CO	1	750	1105	2176	5501	23866
	1	750	1105	2176	5501	23866
		750	1105	2176	5501	23866
PM10	1	4	12	30	67	178
	1	4	12	30	67	178
PM2.5		4	12	30	67	178
	1	3	4	8	20	86
	1	3	4	8	20	86
		3	4	8	20	86

Temecula Valley

	0.00 Acres	25	50	100	200	500
NOx	25	162	203	292	460	896
CO	750	1105	2176	5501	23866	
PM10	4	12	30	67	178	
PM2.5	3	4	8	20	86	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
26	1	26	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008