

APPENDIX E

Air Quality and Greenhouse Gas Report

CV Link

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October 2016

AIR QUALITY AND GREENHOUSE GAS REPORT



Riverside County, California

Prepared for:

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- B. “Four Seasons Weather Monitoring,” Four Seasons Palm Springs, 2011-2016.

SECTION I. INTRODUCTION & PROJECT DESCRIPTION

A. Introduction

The purpose of this report is to assess the potential air quality impacts associated with the construction and operation of the proposed CV Link project. This report describes the current air quality regulations and provides historical air quality monitoring concentrations and minimization measures to further reduce projected emissions of criteria pollutants and greenhouse gases.

B. Project Description

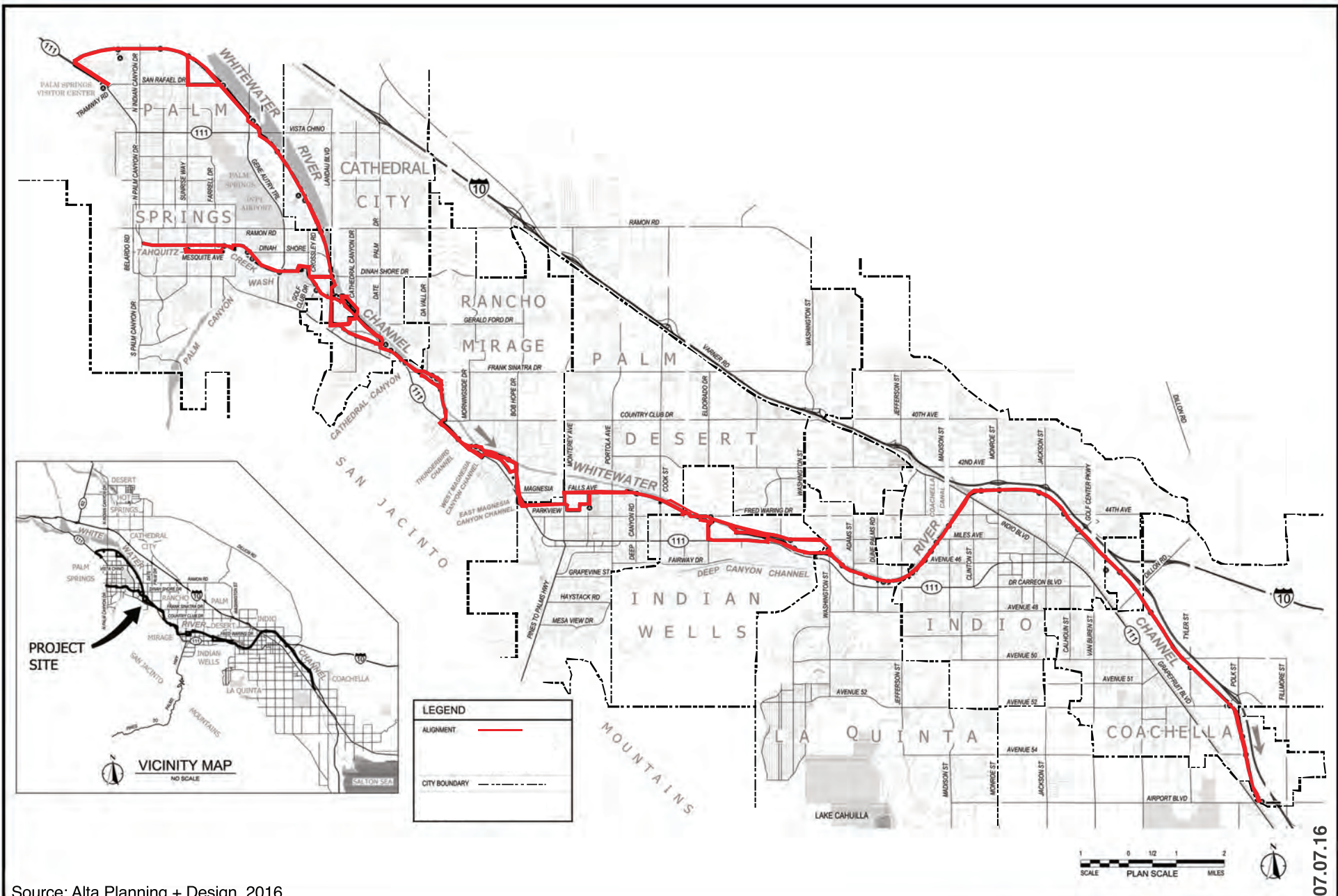
CV Link is proposed as a ± 44 mile non-automobile, multi-modal transportation path network that extends across 10 jurisdictions, including incorporated seven cities, Riverside County and three Native American tribes within the Coachella Valley. This Air Quality and Greenhouse Gas Report evaluates potential impacts associated with the near-term construction and on-going operation of CV Link's core route from Palm Springs to Coachella, with the exception of the City of Rancho Mirage.

The two western termini of the core alignment are at Highway 111 (North Palm Canyon Drive) in northern Palm Springs and at South Palm Canyon Drive at Tahquitz Creek in central Palm Springs. The eastern terminus of the CV Link core alignment is at Airport Boulevard (Ave 56) and the Coachella Valley Stormwater Channel (CVSC) in the City of Coachella and the unincorporated community of Thermal. As part of the proposed project, the Rancho Mirage segment of approximately 8.29 miles will not be included due to the City's decision to not participate in the project. Nonetheless, this report also analyses a project alternative that does include the City of Rancho Mirage. As a result, the proposed project includes two mid-point termini will be constructed at or near the jurisdictional boundaries of Cathedral City to the west, and Palm Desert to the east. To the extent possible, CV Link will be constructed on service and maintenance roads atop embankments and levees of regional stormwater channels, including Tahquitz Creek, the Chino Creek/Whitewater River floodplain, and the Whitewater River Stormwater Channel (WWR) and the Coachella Valley Stormwater Channel (CVSC).

It is anticipated that the project will contribute to local reductions in traffic volumes resulting in reductions of both criteria air pollutants and greenhouse gas emissions.

C. Project Location

The proposed project is located in the Coachella Valley region of central Riverside County, a northwest-southeast trending valley bounded by mountains on the north, west, and south. The valley is located approximately 100 miles east of Los Angeles and about 75 miles west of the Colorado River. Its low-lying desert terrain slopes gently to the southeast toward the Salton Sea. It includes nine (9) incorporated cities, unincorporated county land, reservations of several Native American tribes, and thousands of acres of local, state, and federal parkland and open space. The proposed CV Link route will extend $44\pm$ miles across eight (8) municipalities and reservation land of three (3) Native American Tribes. The following map provides the geographic overview of CV Link.



07.07.16

Source: Alta Planning + Design, 2016



CV Link Project
CV Link Overview Map
Coachella Valley Association of Governments



Exhibit
1

SECTION II. EXISTING CONDITIONS

Introduction

The project site is located within the Salton Sea Air Basin (SSAB) and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Air quality in the Salton Sea Air Basin has been impacted by emissions associated with increased development, population growth, and vehicle emissions. Although air pollution is emitted locally from various sources, some of the degradation of air quality within the Salton Sea Air Basin can be attributed to sources tributary to but located outside of the basin. In the project area, air quality is regulated by the SCAQMD, as well as federal and state policy.

A. Climatic Conditions and Air Quality

The proposed CV Link project is located within the Coachella Valley portion of the SSAB immediately east of the San Jacinto Mountains. Meteorological conditions are largely attributable to the low desert geographic setting and the mountains surrounding the region that isolate the Coachella Valley from moderating coastal influences and create a hot and dry low-lying desert condition. As the desert heats up a large area of thermal low pressure develops, which draws dense, cooler coastal air through the narrow San Geronio Pass and into the valley, generating strong winds that cross the most active fluvial (water-related) erosion zones in the valley. These strong winds sweep up, suspend and transport large quantities of sand and dust, reducing visibility, damaging property, and constituting a significant health threat. The region is also subject to seasonal northeasterly Santa Ana winds that are associated with high pressure parked over Nevada and the four corners region.

The Coachella Valley portion of the SSAB is typical of a low desert climate, with summer temperatures that frequently exceed 110°F and drop into the 20's during winter. The valley floor historically receives an average of four to six inches of rainfall per year with greater precipitation at higher elevations.

Air inversions, where a layer of stagnant air is trapped near the ground and is loaded with pollutants from motor vehicles and other sources, occasionally occur in the Coachella Valley due to local geological and climatic conditions. Inversions create conditions of haziness caused by suspended water vapor, dust, and a variety of chemical aerosols. Due to local climatic conditions, inversion layers generally form 6,000 to 8,000 feet above the desert floor.

Regulating agencies, including SCAQMD, have developed standards and regulations to reduce emissions and enhance air quality throughout the SSAB. These are further described below.

B. Air Quality Management and Regulation

Federal and state agencies have adopted air quality standards for a variety of pollutants. In 1971, the Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS) for managing criteria pollutants. The California Clean Air Act (CCAA) became effective on January 1, 1989 and mandated health-based air quality standards at the state level. The California Air Resources Board (CARB) is responsible for enforcing state standards,

which are generally more stringent than federal standards. One of the ways standards are applied is through State Implementation Plans (SIP), which are prepared to assist regional air quality management districts in meeting the federal and state ambient air quality standards in accordance with the deadlines specified in the federal Clean Air Act (CAA) and emission reduction targets of the California Clean Air Act.

Regional and local agencies have also assumed some responsibility for assuring that state and federal air quality standards are achieved. For the Coachella Valley, including the subject project site, the South Coast Air Quality Management District (SCAQMD) is responsible for establishing air quality measurement criteria and relevant management policies for the SSAB.

The 2003 PM₁₀ Coachella Valley State Implementation Plan (CVSIP) was jointly developed by the SCAQMD, Coachella Valley Association of Governments (CVAG) and its member cities, and was approved by the U.S. EPA. The 2003 PM₁₀ CVSIP updated the 1990 plan, which was drafted as a requirement of the federal Clean Air Act to demonstrate expeditious attainment of PM₁₀ standards.¹ On April 18, 2003, the EPA approved the updated CVSIP.

The SSAB, including the Coachella Valley, is subject to the provisions of the SCAQMD Rule Book,² which sets forth policies and other measures designed to meet federal and state ambient air quality standards. These rules, along with SCAQMD's 2012 Air Quality Management Plan³ and future 2016 Air Quality Management Plan are intended to satisfy the planning requirements of both the federal and state Clean Air Acts. The SCAQMD also monitors daily pollutant levels and meteorological conditions throughout the District. Currently there are three monitoring sites in the Coachella Valley, located in Palm Springs, Indio, and Mecca.

The California Environmental Quality Act (CEQA) also sets forth standards to determine a project's potential to affect air quality. These standards as defined by the California Environmental Quality Act (CEQA) are described below.

Air Quality Significance Thresholds

The following significant thresholds or criteria are not strictly those recommended in § 15064.7 of the CEQA Guidelines, rather they are derived from Appendix G of the Guidelines, and are used to determine if and to what extent a project may have a potentially significant impact on air quality. The project would have a significant effect to air quality if the proposed project would:

- a) Conflict with or obstruct implementation of the applicable air quality plan;
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air

¹ "2003 Coachella Valley PM₁₀ State Implementation Plan, August 1, 2003, p.ES-1.

² South Coast Air Quality Management District Rules and Regulations, Adopted February 4, 1977.

³ "Final 2012 Air Quality Management Plan," prepared by the South Coast Air Quality Management District, December 2012.

- quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- d) Expose sensitive receptors to substantial pollutant concentrations; or
 - e) Create objectionable odors affecting a substantial number of people.

In addition, CV Link would be considered to have a significant effect on greenhouse gas emissions if it is determined that the project would:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

A significant effect on the environment is defined as a “substantial, or potentially substantial, adverse change to the environment” (California Public Resources Code Section 21068).

C. Air Quality Standards

Federal and state air quality standards established for criteria pollutants are designed to protect the general population and especially that segment of the population that is most susceptible to respiratory distress or infection, including the elderly, children, asthmatics, or those who are weak from disease or illness.

The following air pollutants are collectively known as criteria air pollutants and are defined as those pollutants for which established air quality standards have been adopted by federal and state governments:

Ozone (O₃) is a pungent, colorless, toxic gas, and a component of photochemical smog. It is formed when byproducts of combustion react in the presence of ultraviolet sunlight. This process takes place in the atmosphere where oxides of nitrogen combine with reactive organic gases, such as hydrocarbons. Exposure to ozone can result in diminished breathing capacity, increased sensitivity to infections, and inflammation of the lung tissue. Children and people with pre-existing lung disease are most susceptible to the effects of ozone.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas and a byproduct from the partial combustion of fossil fuels, most notably from automobiles and other motor vehicles. Carbon monoxide passes through the lungs directly into the blood stream and reduces the amount of oxygen reaching the vital organs, such as the heart, brain and tissues. In high concentrations, carbon monoxide can contribute to the development of heart disease, anemia, and impaired psychological behavior. Individuals that have heart and blood diseases, smokers, babies in utero, and people with chronic hypoxemia are most susceptible to the effects of CO. The SSAB is in non-attainment for the federal 8-hour O₃ standard.

Nitrogen Oxide (NO_x) includes Nitric oxide (NO) and Nitrogen dioxide (NO₂), which are the primary oxides of nitrogen, and combined are known as nitrogen oxides. These oxides are

produced at high temperatures during combustion as byproducts of motor vehicles, power plants, and off-road equipment. NO_x contributes to the formation of ozone serving as the primary receptor of ultraviolet light and initiating the photochemical reaction. Short-term exposure to nitrogen dioxide can result in airway constriction, diminished lung capacity, and is highly toxic by inhalation. Populations living near roadways are more likely to experience effects of nitrogen oxides due to elevated exposure to motor vehicle exhaust. The SSAB is in attainment for NO₂.

Sulfur Dioxide (SO₂) results from the combustion of high-sulfur content fuels, such as coal and petroleum. Sources include motor vehicle fuel combustion, chemical manufacturing plants, and sulfur recovery plants. Sulfur dioxide is a colorless, pungent, extremely irritating gas that can cause airway constriction and severe breathing difficulties in asthmatics. High levels of exposure can cause fluid accumulation in the lungs, damage to lung tissue, and sloughing off of cells lining the respiratory tract. The SSAB is in attainment for SO₂.

Particulate Matter (PM₁₀ and PM_{2.5}) consist of fine suspended particles of ten microns or smaller in diameter, and are the byproducts of road dust, sand, diesel soot, windstorms, and the abrasion of tires and brakes. The elderly, children and adults with pre-existing respiratory or cardiovascular disease are most susceptible to the effects of PM. Elevated PM₁₀ and PM_{2.5} levels are also associated with an increase in mortality rates, respiratory infections, occurrences and severity of asthma attacks and hospital admissions. The SSAB is a non-attainment area for PM₁₀ and is classified as attainment/unclassifiable for PM_{2.5}.

Volatile Organic Compounds (VOC) are also known as Reactive Organic Gas (ROG). This class of pollutants has no state or federal ambient air quality standards and is not classified as criteria pollutants; however, they are regulated because they are responsible for contributing to the formation of ozone. They also contribute to higher PM₁₀ levels because they transform into organic aerosols when released into the atmosphere. VOCs pose a health threat when people are exposed to high concentrations. Benzene, for example, is a hydrogen component of VOC emissions known to be a carcinogen.

Lead (Pb) occurs in the atmosphere as particulate matter resulting from the manufacturing of batteries, paint, ink, and ammunition. Exposure to lead can result in anemia, kidney disease, gastrointestinal dysfunction, and neuromuscular and neurological disorders. Babies in utero, infants, and children are especially susceptible to health risks associated with exposure to lead by impacting the central nervous system and cause learning disorders. The SSAB is in attainment for lead.

Table 3 on the following page shows the state and national ambient air quality standards for criteria pollutants.

Table 1
State and National Ambient Air Quality Standards

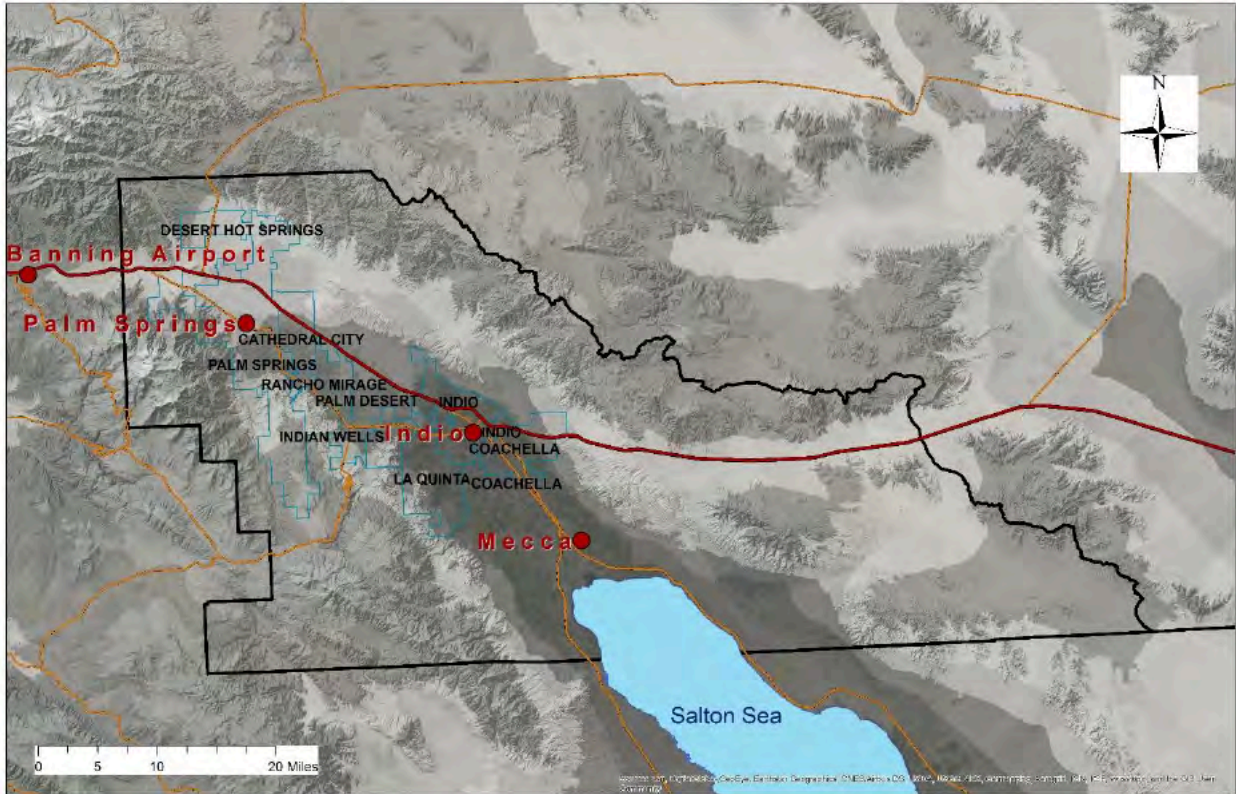
Pollutant	State Standards		National Standards**	
	Averaging Time	Concentration	Averaging Time	Concentration
Ozone (O ₃)	1-hour 8-hour	0.09 ppm 0.07 ppm	1-hour 8-hour	0.070 ppm
Carbon Monoxide (CO)	1-hour 8-hour	20.0 ppm 9.0 ppm	1-hour 8-hour	35.0 ppm 9.0 ppm
Nitrogen Dioxide (NO ₂)	1-hour AAM	0.18 ppm 0.030 ppm	AAM	0.10 ppm* 0.053 ppm
Sulfur Dioxide (SO ₂)	1-hour 24-hour	0.25 ppm 0.04 ppm	1 & 24 hour AAM	.075ppm**
Particulate Matter (PM ₁₀)	24-hour AAM	50 µg/m ³ 20 µg/m ³	24-hour AAM	150 µg/m ³
Particulate Matter (PM _{2.5})	AAM 24-hour	12 µg/m ³ 35 µg/m ³	AAM 24-hour	12 µg/m ³ 35 µg/m ³
Lead	30 day Avg.	1.5 µg/m ³	3 month Avg.	0.15 µg/m ³
Visibility Reducing Particles	8-hour	No standard	No federal Standard	No federal Standard
Sulfates	24-hour	25µg/m ³	No federal Standard	No federal Standard
Hydrogen Sulfide	1-hour	0.03 ppm	No federal Standard	No federal Standard
Vinyl Chloride	24-hour	0.01 ppm	No federal Standard	No federal Standard

Source: California Air Resources Board, 06/04/13
Notes: ppm = parts per million; ppb= parts per billion; µg/ m³ = micrograms per cubic meter of air;
AAM = Annual Arithmetic Mean; * Note that this standard became effective as of January 22,2010.
** Final rule signed June 2, 2010, effective as of August 23,2010

The air quality of a particular locale is considered to be in attainment if the measured ambient air pollutant levels for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, and PM₁₀ and PM_{2.5} are not exceeded and all other standards are not equaled or exceeded at any time in any consecutive three-year period. Attainment also assumes the national standards (other than O₃, PM₁₀, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O₃ standard is in attainment when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Refer to Table 1 above for attainment standards.

D. Regional Air Quality Monitoring

The South Coast Air Quality Management District operates and maintains three air quality monitoring stations within Source Receptor Area (SRA) 30 (Coachella Valley). SR 30 includes the Indio and Palm Springs monitoring stations, which have been operational since 1985 and 1987, respectively. The Mecca monitoring station has been in operation since 2013, however monitoring data has not yet been released. The map below shows the locations of the three monitoring stations in the Coachella Valley.



The following tables (Tables 2 through 4) show the maximum concentration and number of days annual that state and federal standards for ozone and particulate matter (PM₁₀ and PM_{2.5}) were exceeded between 2000 and 2015 in the Coachella Valley.

Table 2 shows that the federal 24-hour standard for PM₁₀ was exceeded more frequently at the Indio station between 2010 and 2015. PM₁₀ levels continue to exceed state standards.

Table 2
PM₁₀ Monitoring Data for the Coachella Valley

Monitoring Station	Year	Maximum Concentration (µg/m ³ /24hours) **	No. Days Exceeding 24-hr. Standards		Annual Average (µg/m ³)
			Federal ¹	State ²	AAM ³
Palm Springs	2010	144.8	0.0	0.0	19.4
	2011	396.9	2.0	0.0	21.7
	2012	143.4	0.0	0.0	19.9
	2013	185.8	1.0	13.1	23.1
	2014	313.8	1.1	*	25.4
	2015	199.0	1.0	*	*
Indio	2010	107.0	0.0	23.9	28.8
	2011	375.9	2.0	18.6	32.6
	2012	270.6	N/A	43.2	33.6
	2013	255.2	3.0	85.2	37.5
	2014	322.3	6.1	94.9	43.5
	2015	381.0	*	*	*

Source: Annual air quality site monitoring reports per ARB. <http://www.arb.ca.gov/adam/> Accessed June 18, 2015.
 1 = > 150 µg/m³ in 24 hour period; 2 = > 50 µg/m³ in 24 hour period; 3 Federal Annual Average Standard AAM > 50µg/m³ revoked December 17, 2006. State standard is AAM > 20µg/m³
 4 State Annual Average Standard = AGM > 20µg/m³
 * There are insufficient (or no) data available to determine the value.
 ** Data may include exceptional events.

Table 3 shows that both the federal 24 hour PM_{2.5} standard and the AAM state standard of >12 µg/m³ have not been exceeded at either monitoring station from 2010 to 2015.

Table 3
PM_{2.5} Monitoring Data for the Coachella Valley

Monitoring Station	Year	Max Concentration (µg/m ³ /24hours)	No. Days Exceeding 24-hr. Standards Federal ^a	Annual Average (µg/m ³) AAM ^{b, c}
Palm Springs	2010	12.8	0.0	5.9
	2011	26.3	0.0	6.0
	2012	15.5	0.0	6.5
	2013	18.5	0.0	6.5
	2014	15.5	**	**
	2015	22.7	**	**
Indio	2010	16.0	0.0	6.8
	2011	35.4	0.0	7.2
	2012	18.4	0.0	7.6
	2013	25.8	0.0	8.3
	2014	16.8	**	**
	2015	24.6	**	**

Source: Annual air quality site monitoring reports, prepared by ARB. <http://www.arb.ca.gov/adam/> Accessed June 18, 2015.

a = > 35 µg/m³ in 24 hour period, Federal standard as of December 17, 2006.

b Federal Annual Average Standard = AAM > 15µg/m³

c State Annual Average Standard = AAM > 12µg/m³ as of July 5, 2003.

* Less than 12 full months of data; may not be representative.

** There was insufficient (or no) data available to determine the value.

Table 4 shows that the Palm Springs monitoring station exceeds the 8 hour federal and state ozone standards more frequently than the Indio site. This exceedance is attributable to the Palm Springs station's location closer to the San Gorgonio Pass where ozone is imported into the SSAB from air basins to the west.

Table 4
Ozone Monitoring Data for the Coachella Valley

Monitoring Station	Year	Max. Concentration		No. Days Standard Exceeded		
		1 Hour ppm	8 Hour ppm	Federal ¹	State ²	
				8 Hour	1 Hour	8 Hour
Palm Springs	2010	0.114	0.099	52	20	78
	2011	0.124	0.099	49	21	69
	2012	0.126	0.101	51	17	79
	2013	0.113	0.104	46	10	82
	2014	0.108	0.093	35	9	61
	2015	0.102	0.092	26	3	51
Indio	2010	0.100	0.087	19	6	45
	2011	0.099	0.090	19	3	42
	2012	0.102	0.089	24	2	45
	2013	0.105	0.087	18	2	38
	2014	0.095	0.091	10	2	30
	2015	0.093	0.085	4	0	12

Source: ARB Annual Air Quality Data Tables. <http://www.arb.ca.gov/adam/> Accessed June 18, 2015.
¹ = > 0.070 parts per million for the 8 hour standard.
² = > 0.09 and 0.070 parts per million in 1 hour and 8 hour respectively.

Criteria Air Pollutants Summary

Air quality in the Salton Sea Air Basin exceeds state and federal standards for fugitive dust (PM₁₀) and ozone (O₃), and is in attainment/unclassified for PM_{2.5}. Ambient air quality in the SSAB, including the project site, does not exceed state and federal standards for carbon monoxide, nitrogen dioxides, sulfur dioxide, lead, sulfates, hydrogen sulfide, or Vinyl Chloride. The following table shows the basin's federal and state attainment status for criteria pollutants.

Table 5
Salton Sea Air Basin Designation Status

Criteria Pollutants	Federal Designation	State Designation
Ozone - 8 hour standard	Severe 15- Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
PM ₁₀	Serious-Nonattainment	Nonattainment
PM _{2.5}	Unclassified/Attainment	Nonattainment

Source: CARB Air Quality Planning Branch, June 2013. This information has been cross-checked with the U.S. EPA Green Book, last updated June 17, 2016

E. Regional Pollutants of Concern

Local air quality conditions are determined by climate, geography, and regional activities, including grading, construction and vehicular traffic, as well as heating, cooling, and ventilation equipment. The criteria pollutants of concern in the project area and the Coachella Valley are ozone (O₃), and particulate matter (PM₁₀, and PM_{2.5}). These are further described below:

PM₁₀ Emissions

Historically, PM₁₀ levels in the Coachella Valley are elevated due to fugitive dust emissions from grading and construction activities, agricultural practices, and strong wind. The finer materials, including sand and silt, can be picked up and transported by the wind and are referred to as “blowsand”. PM₁₀ particles associated with blowsand are of two types: (1) natural PM₁₀ produced by direct particle erosion and fragmentation, and (2) secondary PM₁₀ whereby sand deposited on roadways is further pulverized by motor vehicles and then re-suspended in the air by those vehicles. The project is located in a PM₁₀ non-attainment area for the state and federal PM₁₀ standard.

The Coachella Valley had become eligible for redesignation as attainment due to the annual average PM₁₀ concentrations meeting the revoked federal standard. On February 25, 2010 the California Air Resources Board approved the Coachella Valley PM₁₀ Redesignation Request and Maintenance Plan from serious non-attainment to attainment for the PM₁₀ National Ambient Air Quality Standard under CAA Section 107. The PM₁₀ data from the Coachella Valley monitors shows attainment of the PM₁₀ 24-hour NAAQS after the removal of the flagged high-wind exceptional events, for which SCAQMD supporting documentation will be submitted and subsequent U.S. EPA approval will be required. However, U.S. EPA has requested that SCAQMD conduct additional ambient monitoring in the southeastern portion of the Coachella Valley before the redesignation can be considered. This new station has been in operation since 2013 in the community of Mecca, and redesignation will be revisited upon analysis of the required 3 full years of data. As of June 17, 2016 the Environmental Protection Agency has not re-designated the PM₁₀ classification for the Coachella Valley⁴. The Coachella Valley continues to exceed the state standard and is in a serious non-attainment area for PM₁₀.

SCAQMD employs measures to reduce particulate matter in the District, sets forth new measures that could further reduce particulate matter, and lists those new measures that need further evaluation prior to implementation. In addition, applicable state code and AQMD Rules, including Rule 403 (Fugitive Dust), enforce fugitive dust compliance for all activities within the SSAB.

PM_{2.5} Emissions

Federal and state standards have been developed to regulate fine particulate matter smaller than 2.5 microns in diameter. To achieve federal attainment, a jurisdiction must provide the Environmental Protection Agency (EPA) with air quality monitoring data that does not violate the fine particle standards over a three-year period. The Coachella Valley is defined as attainment/unclassified for PM_{2.5}, based on the state and federal PM_{2.5} standards and does not require Implementation Plans to demonstrate attainment.

⁴ “EPA Green Book Designated Non-attainment Areas for All Criteria Pollutants,” as of 6/16/16. Accessed 7/11/16.

Ozone Emissions

Under the Federal Clean Air Act, the Coachella Valley portion of the SSAB is classified as a “severe-15” O₃ non-attainment area for the 8-hour state standard, which means that the region must come into compliance with Federal ozone standards by December 31, 2027. With future emission controls, the Coachella Valley will achieve the 2008 8-hour federal O₃ standard by 2024.

SCAQMD studies indicate that most O₃ is transported to the Salton Sea Air Basin from the upwind South Coast Air Basin (SCAB). It is difficult to quantify the amount of ozone contributed from SCAB; however, reduced O₃ concentration in the SSAB depends, in part, upon reduced ozone emissions in the South Coast Air Basin.

Toxic Air Contaminants

Toxic Air Contaminants (TAC) cause or contribute to an increase in deaths or serious illness or pose a present or potential hazard to human health. The CARB’s Toxic Air Contaminants Program establishes the process for the identification and control of substances such as asbestos, benzene, beryllium, inorganic arsenic, mercury, vinyl chloride, and other contaminants not addressed by the ambient air pollution program. TACs are required to be inventoried on a statewide level. There are a number of processes and facilities within the state that generate TACs, including electroplating and anodizing operations, gasoline distribution facilities, petroleum refineries, and others. The primary health concern associated with TACs is from mobile sources of particulate matter, which are known for their carcinogenic potential. Approximately 84 percent of the carcinogenic risk is attributed to diesel particulate emissions within the South Coast Air Basin.

Diesel Particulate Matter (DPM)

Diesel particulate matter is one form of particulate matter, described above, that results from the combustion of diesel fuels during the operation of motor vehicle (cars, buses, and trucks) locomotives, marine vessels and heavy-duty equipment. It has been identified as a probable carcinogen and is listed by the EPA as a toxic air contaminant (TAC). Diesel exhaust is either gas or particle and is classified by size and composition. The reference concentration (RFC) for diesel exhaust, which includes diesel particulate matter is 5µg/m³. This value is less than the 15µg/m³ threshold established by the National Ambient Air Quality Standard.

F. Climate Change and Greenhouse Gasses

Air pollution is a chemical, physical or biological process that modifies the chemistry and other characteristics of the atmosphere. The primary contributor to air pollution is the burning of fossil fuels used in transportation, power and heat generation, and industrial processes. The byproducts from the combustion of fossil fuels can contain a number air polluting substances. These emissions are responsible for the poor air quality that is evident in industrial centers worldwide.

Some air polluting agents are also greenhouse gases (GHG) such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases (hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride), which are released into the atmosphere through natural processes and human activities. These gases are termed greenhouse gases due to their shared characteristic of trapping heat, and are believed to be responsible for the global average

increase in surface temperatures of 0.7-1.5 °F that were observed during the 20th century.⁵ The quantity of greenhouse gases in the atmosphere has increased significantly over a relatively short period. More recently, the concentration of CO₂ in the atmosphere had increased by 42%, methane by 15%, and NO_x by 9% from 1990 to 2010.⁶

Carbon dioxide is the primary greenhouse gas that has raised the most concern of atmospheric scientists due to current atmospheric levels, current and projected emission levels, and the highly correlated temperature regression curve that has been observed, predicting a future path of rising carbon dioxide levels. Currently (2015), carbon dioxide concentrations in the atmosphere are around 400 ppm. Comparatively, prior to the Industrial Revolution, about 250 years ago, CO₂ levels were 278 ppm, and over the past 650,000 years carbon dioxide levels have fluctuated between 180 and 300 ppm, making present day atmospheric CO₂ levels substantially greater than at any point in the past 650,000 years.⁷

In 2004, the State of California generated 492 million metric tons of carbon dioxide equivalent (CO₂E). In 2013 the State of California generated 459.3 million metric tons of CO₂E, representing an overall decrease of 7% since 2004⁸. During the 2000 to 2013 period, per capita GHG emissions in California have continued to drop from a peak in 2001 of 14.0 tonnes per person to 12.0 tonnes per person in 2013, representing a 14% decrease. GHG emission reductions are attributed to energy conservation measures such as use of more fuel-efficient vehicles, energy efficient lighting, appliances and building materials that are prescribed under Title 24 of the California Building Code.

There is much debate over what the effects of climate change will be, but there is a general consensus that the levels of emissions need to be reduced in order to minimize GHG emissions and limit the amount of carbon dioxide and other pollutants that are released into the atmosphere.

Climate Change Regulation

California was the first state to establish regulations that require the reduction of emissions of GHGs from motor vehicles. On September 24, 2004, the California Air Resources Board adopted a bill that requires all motor vehicles of 2009 vintage or later to reduce their greenhouse gas emissions by about 30% by the year 2016. On June 1, 2005 Governor Arnold Schwarzenegger issued executive order S-3-05, which calls for reduction in GHG emission to 1990 levels by 2020 and for an 80 percent reduction below 1990 levels by 2050.

The California Global Warming Solutions Act (AB 32) was adopted by the state legislature in 2006. It sets forth a program to achieve 1990 emission levels by 2020 and requires CARB to proclaim 1990 GHG emissions and develop a Scoping Plan, which sets forth GHG reduction methods. CARB has reported that 1990 GHG emissions totaled 427 million metric tons (MMT) for the state of California; CARB adopted a GHG scoping plan on December 11, 2008. The Scoping Plan includes a cap and trade program, green building strategies, recycling and waste reduction, and Voluntary Early Actions and Reductions. More recently, Executive Order B-30-

⁵ U.S. Environmental Protection Agency, State of Knowledge.

⁶ U.S. Environmental Protection Agency, Figure 1: Global Greenhouse Gas Emissions by Gas, 1990-2010, May 2014. <http://www.epa.gov/climatechange/science/recentac.html>

⁷ “Working Group III Contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report, Climate Change 2007: Mitigation of Climate Change,” prepared by the Intergovernmental Panel on Climate Change, May 2007.

⁸ “2015 California GHG Emission Inventory,” California Air and Resources Board, June 16, 2015.

15 was issued by Governor Brown on April 29, 2015 establishing a new California goal to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 ensuring the state will continue its efforts to reduce carbon pollution.

California SB 375 was signed by the Governor in September 2008 and is intended to at least in part implement greenhouse gas reduction targets set forth in AB 32. The bill encourages regional land use planning to reduce vehicle miles traveled and requires jurisdictions to adopt a sustainable communities strategy.

Greenhouse Gasses Analyzed

For the purpose of this analysis the emission of the following greenhouse gases are evaluated: carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O).

Carbon Dioxide (CO₂): is an odorless and colorless gas that is emitted from natural sources such as the decomposition of dead organic matter, respiration of bacteria, plants, animals and fungus, evaporation from oceans, and volcanic out gassing. Manmade sources of CO₂ include the combustion of coal, oil, natural gas, and wood. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks.

Methane (CH₄): is released naturally as part of biological processes such as in low oxygen environments like swamplands, bogs, or in rice production (at the roots of the plants) and in cattle raising. Mining of coal, the combustion of fossil fuels and biomass burning also generate methane emissions. Methane is a more efficient absorber of radiation compared to CO₂, however its atmospheric concentration is less than carbon dioxide.

Nitrous Oxide (N₂O): is more commonly known as laughing gas and is a colorless greenhouse gas that in small doses can cause dizziness, euphoria, and sometimes slight hallucinations.

Chlorofluorocarbons (CFCs)

CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C₂H₆) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source, but were first synthesized in 1928. It was used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons (HFCs)

HFCs are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF₃), HFC-134a (CF₃CH₂F), and HFC-152a (CH₃CHF₂). Prior to 1990, the only significant emissions were HFC-

23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons (PFCs)

PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF₄) and hexafluoroethane (C₂F₆). Concentrations of CF₄ in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

Sulfur Hexafluoride (SF₆)

SF₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

E. Regional/Local Conformity

The conformity requirement is based on Federal Clean Air Act Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. "Transportation Conformity" applies to highway and transit projects and takes place on two levels: the regional—or planning and programming—level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and "maintenance" (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), and in some areas (although not in California), sulfur dioxide (SO₂). California has nonattainment or maintenance areas for all of these transportation-related "criteria pollutants" except SO₂, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years for the RTP, and 4 years for the FTIP. RTP and FTIP conformity is uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the Clean Air Act

and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA), make determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept, scope, and “open-to-traffic” schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Conformity analysis at the project-level includes verification that the project is included in the regional conformity analysis and a “hot-spot” analysis if an area is “nonattainment” or “maintenance” for carbon monoxide (CO) and/or particulate matter (PM₁₀ or PM_{2.5}). A region is “nonattainment” if one or more of the monitoring stations in the region measures a violation of the relevant standard and the U.S. EPA officially designates the area nonattainment. Areas that were previously designated as nonattainment areas but subsequently meet the standard may be officially redesignated to attainment by the U.S. EPA, and are then called “maintenance” areas. “Hot-spot” analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA purposes. Conformity does include some specific procedural and documentation standards for projects that require a hot-spot analysis. In general, projects must not cause the “hot-spot”-related standard to be violated, and must not cause any increase in the number and severity of violations in nonattainment areas.

CV Link project is exempt from regional conformity per 40 CFR 93.126, Table 2 – Exempt Projects because CV Link is considered a bicycle and pedestrian facility under the Air Quality category. In addition, the proposed project is listed in the Final 2017 Federal Transportation Improvement Plan (FTIP, September 2016) (Project ID: Riv131005) which was found to be consistent with Southern California Association of Governments (SCAG) approved Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Therefore, no additional conformity or “Hot Spot” analysis is required for this project.

SECTION III. PROPOSED PROJECT IMPACTS

Development of CV Link will result in the direct and indirect generation and emission of air pollutants during project construction and operation of various facility features, such as pathway lighting and water demands for landscaping. Criteria air pollutant and greenhouse gas emissions from grading and construction will be temporary; however, emissions from daily operation will be ongoing. The following discussion describes the major sources of air pollutants associated with the development of CV Link, and emission projections for criteria account for haul trips if it is assumed there is a net balance of cut and fill materials onsite.

Due to the regional nature of CV Link, it is possible that material cut from one segment of the Link may be used as fill for another portion. Therefore, materials may require hauling trips regardless of a net balance of materials. For analysis purposes, it is assumed that all cut and fill material projections will require hauling, resulting in 238,500 cubic yards of export and 135,000 cubic yards of import. It is assumed that each haul trip will travel 30 miles and carry up to 20 tons (16 cubic yards) per haul. This will overstate overall construction emissions associated with grading and provide a conservative emission estimate for analysis.

Construction Disturbance and Paving Assumptions

Total length of the proposed CV Link Route is 44 miles. When considering all alignment variations, the total length, for analysis purposes, is approximately 57.62 miles. Although pathway widths will vary in size at different locations, ranging from 15 feet to 30 feet wide, it was conservatively assumed that the construction of the entire 57.62 miles of alignment variations would have a paved pathway of approximately 30 feet wide resulting in a total paved area of 209.53 acres. An additional 10-foot buffer was added to account for construction staging, landscaping and other ground disturbing activities, resulting in a total project area of 279.37 acres of possible disturbance.

Table 6
Unmitigated Construction Emissions Summary
Maximum Daily Emissions

(lbs./day)

Year	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}
2018	96.07	118.30	10.16	0.22	26.80	13.37
2019	92.40	108.45	9.52	0.22	24.32	12.50
2020	38.60	38.22	3.95	0.06	2.62	2.00
2021	38.33	35.00	3.64	0.06	2.41	1.80
SCAQMD Threshold*	550.00	100.00	75.00	150.00	150.00	55.00
Exceeds Threshold	No	Yes	No	No	No	No

Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents the average unmitigated emissions from summer and winter.
* Source: "SCAQMD Air Quality Significance Thresholds" prepared by South Coast Air Quality Management District, March 2015.

As shown in the table above, SCAQMD daily thresholds for CO, ROG, SO_x, PM₁₀ and PM_{2.5} will not be exceeded during construction of any phase of project development. However, NO_x emissions have the potential to slightly exceed SCAQMD thresholds due to simultaneous use of construction equipment and material hauling. To reduce NO_x emissions and overall project impacts to less than significant levels, the following mitigation measures were applied:

AQ-1: To reduce particulate matter and NO_x emissions construction equipment should utilize aqueous diesel fuels, diesel particulate filters and diesel oxidation catalyst with a minimum 30% reduction rating during all construction activities.

As shown in Table 7 below, adherence to the above mitigation measures would reduce construction-related criteria pollutant emissions below SCAQMD thresholds. Construction emissions will be further minimized through best development practices, proper maintenance of construction equipment, and other recommendations set forth in Section V that limit the project’s contribution to air pollutant emissions during construction. Therefore, impacts to air quality resulting from construction of CV Link will be less than significant.

Table 7
Mitigated Construction Emissions Summary
Maximum Daily Emissions

	(lbs./day)					
Year	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}
2018	96.07	94.44	10.16	0.22	18.38	9.21
2019	92.40	86.61	9.52	0.22	15.89	8.34
2020	38.60	29.20	3.95	0.06	2.62	2.00
2021	38.33	26.75	3.64	0.06	2.41	1.80
SCAQMD Threshold*	550.00	100.00	75.00	150.00	150.00	55.00
Exceeds Threshold	No	No	No	No	No	No
<small>Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents the average mitigated emissions from summer and winter. * Source: “SCAQMD Air Quality Significance Thresholds” prepared by South Coast Air Quality Management District, March 2015.</small>						

Localized Construction-Related Significance Thresholds and Emissions

The purpose of analyzing Localized Significance Thresholds (LST) is to determine whether a project may generate significant adverse localized air quality impacts in relation to the nearest exposed individual, or sensitive receptor. Land uses that are air quality sensitive receptors include, but are not limited to, schools, churches, residences, hospitals, day care facilities, and elderly care facilities. Sensitive receptors in proximity to CV Link include single- and multi-family residences, public parks, and schools.

Use of LSTs by a local government is voluntary and are designed for projects that are less than or equal to five acres. The maximum area of disturbance associated with buildout of CV Link project is approximately 280 acres and it is assumed that buildout would occur gradually over the course of four years. Although the total project area is greater than five-acres, the area of daily

disturbance (for purposes of LST analysis only) is limited to five acres or less per day at any given location, which is equivalent to one mile of pathway construction.⁹ As such, the five acre look up table is appropriate under the SCAQMD’s methodology to screen for potential localized air quality impacts.¹⁰

The Mass Rate Look-Up tables for LSTs were used to determine if the proposed project would have the potential to generate significant adverse localized air quality impacts during construction. The LST for Source Receptor Area (SRA) 30 (Coachella Valley) was used to determine LST emission thresholds. The distance from the emission source and the maximum daily site disturbance also determines emission thresholds. Sensitive receptors will vary depending upon which portion of the Link is being developed. For analysis purposes, the worst case scenario of a sensitive receptor being within 25 meters of the proposed pathway was used.

Results show that LST thresholds are not expected to be exceeded during project development under unmitigated conditions. The project will be developed in accordance to SCAQMD Rule 403, and apply best management practices to ensure impacts to sensitive receptors are further reduced. Impacts will be less than significant.

Table 8
Localized Significance Thresholds
25 Meters, 5 Acres

(lbs per day)

	CO	NO_x	PM₁₀	PM_{2.5}
1-mile Path	13.67	16.53	4.47	2.53
LST	2,292	304	14	8
Exceed?	No	No	No	No
Source: CalEEMod Version 2013.2.2. See Appendix A. Emissions show the highest emitting day for all emissions generated onsite during construction.				
Note: Assumes 1-mile of CV Link path would require a 2-month construction duration.				

Potential Odors

The proposed project is not expected to generate significant objectionable odors during any phase of construction. The proposed project has the potential to result in short-term odors associated with paving and other construction activities. However, construction-related odors

⁹ The equipment specific grading rates are based on the SCAQMD’s Fact Sheet for Applying CalEEMod to Localized Significance Thresholds guidance document. Per SCAQMD’s guidance, the identified equipment is used to determine the maximum daily soil disturbance area for the purposes of evaluating localized construction impacts and is not an exhaustive list of all equipment that would be used during project construction. Additionally, the acreage identified in this table is used for the purposes of identifying a conservative Localized Significance Threshold (i.e., smaller disturbed areas have lower Localized Significance Thresholds) and does not represent a daily limit on the grading allowed on the site. In summary, then, the LST methodology focuses on the equipment that may be operated and acreage that may be disturbed in areas immediate proximate to potential sensitive receptors, even if other equipment may be operated or other acreage may be disturbed in areas that are farther away from the sensitive receptor.

¹⁰ South Coast AQMD, “Fact Sheet for Applying CalEEMod to Localized Significance Thresholds.”

would be quickly dispersed below detectable thresholds and as distance from the construction site increases. Therefore, impacts from objectionable odors are expected to be less than significant.

B. Operational Emissions

CalEEMod generates operational air pollutant emissions from three emission source categories: Energy, Mobile, and Area sources. Energy sources refer to direct and indirect use of fossil fuels for energy use, including natural gas and electricity usage in buildings, lighting for parking structures, ventilation, and operation of elevators. Mobile sources refer to emissions associated with motor vehicle trips generated by specific land uses. Area sources refer to consumable products such as landscaping, building maintenance and cleaning supplies, kitchen and restroom supplies, pavement off-gassing, and periodic reapplication of architectural coatings.

Operational Emissions of Criteria Pollutants

Operational emissions associated with CV Link will be negligible and limited to area source emissions, such as pavement off gassing¹¹ and energy used to water landscaping. Energy demands will be limited to lighting and recharge stations, specifically light tubes, bollards, charging stations and LED lighting. Energy use for the project will not result in the direct emission of criteria pollutants; however, energy use will result in emission of greenhouse gases and is further discussed in the Greenhouse Gas Emissions section of this document. CV Link will not generate new mobile source emissions; instead the project is expected to reduce mobile source emissions by promoting and providing alternative modes of transportation, including biking and low-speed electric vehicles.

The following table summarizes the annual daily emissions of CV Link after project buildout. SCAQMD thresholds will not be exceeded for any criteria pollutant. Therefore impacts are considered less than significant.

**Table 9
Operational Emissions of Criteria Pollutants
(Lbs per Day)**

	CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
Operation	0.02	0.00	58.86	0.00	0.00	0.00
SCAQMD Threshold	550.00	100.00	75.00	150.00	150.00	55.00
Significant	No	No	No	No	No	No
Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents average daily unmitigated emission across summer and winter activities.						

Operational Emission Reductions of Criteria Pollutants

CV Link will not generate new mobile source emissions, instead the project is expected to reduce mobile source emissions by promoting and providing alternative modes of transportation, including biking and electric vehicles. The CV Link Traffic Report (2016) prepared by Urban

¹¹ Off gassing refers to the volatile organic compounds (VOC) emissions that result from evaporation of solvents contained in surface coatings, such as paints and material sealants.

Crossroads projects the Proposed Project, once constructed and in use, would result in a reduction of 7,410,993 annual vehicle miles traveled by 2040. The following table summarizes the daily reduction in mobile source criteria pollutants that would result due to the reduction in vehicle miles. Overall, operation of CV Link will result in a significant net reduction of daily criteria pollutants, and impacts would be less than significant.

Table 10
Operational Emission Reductions of Criteria Pollutants
(Lbs per Day)

	CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
Mobile Source Reductions	23,326.89	2,583.27	3,251.46	5.40	36.20	23.13
Operational Emissions	0.02	0.00	58.86	0.00	0.00	0.00
Net Operational Emissions	-23,326.87	-2,583.27	-3,192.60	-5.40	-36.20	-23.13

Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents average daily-unmitigated emission across summer and winter activities.

Objectionable Odors

Operation of CV Link will not produce objectionable odors. Operation, or use, of CV Link will be limited to pedestrian, bicyclist, and low-speed electric vehicle use. There will be no impacts associated with objectionable odors.

Potential Health Risks

Due to climatic conditions of the Coachella Valley, there has been growing concerns that participation in outdoor activities during high wind or high temperature events are unsafe and unhealthy for the population. Monthly wind and temperature monitoring data from the Four Seasons in Palm Springs has been submitted to the project proponent for consideration while designing CV Link. Data has been collected from May 2011 through June 2016 and is provided in Appendix B.

With regards to air quality, a typical Health Risk Assessment (HRA) is a technical study that evaluates how toxic emissions are released from a facility (industrial plant, transportation corridor, etc.), how they disperse throughout the community, and the potential for those toxic pollutants to impact human health. An HRA can also analysis the effects of placing a project in the vicinity of an emission source that has the potential to impact health. In addition, Hot-spot Analyses for PM and CO can be performed to measure the risk of placing a project in the vicinity of local roadway, highway, freeway, or rail line. With regard to hot-spot analyses, segments of CV Link located along the Whitewater River/Coachella Valley Stormwater Channel have less potential to expose sensitive receptors to harmful toxics and emissions, such as diesel particulate matter, when compared to segments located on or near Highway 111.

CV Link does not require the preparation of a HRA or Hot-spot Analysis. There are currently no state or federal regulations restricting project development due to local climatic conditions and weather patterns. The SCAQMD provides daily weather alerts online to inform residents when there are days of particularly poor air quality with the intent for individuals to determine personal safety and activity preference.

C. Greenhouse Gas Emissions

Construction Related Greenhouse Gas Emissions

Construction activities will also result in short-term GHG emissions associated with operation of construction equipment, employee commute, material hauling, and other ground disturbing activities. The following table summarizes the estimated GHG emissions from construction of CV Link. There are currently no construction-related GHG emission thresholds for projects of this nature. However, development of CV Link will incorporate current construction technologies and various forms of resource conservation to minimize GHG emissions.

GHG emissions from construction are temporary and will not substantially affect climate or interfere with a GHG reduction plan. All components of construction, including equipment, fuels, materials, and management practices, will be subject to current regulations of GHGs. To determine if construction emissions will result in a cumulative considerable impact, buildout GHG emissions were amortized over a 30-year period and added to annual operational emissions. (See the Operational GHG Emissions Summary below.)

Table 11
Construction GHG Emissions Summary
(Metric Tons/Year)

	CO ₂	CH ₄	N ₂ O	Total CO ₂ e
Buildout	3,712.85	0.72	0.00	3,728.04
Source: CalEEMod Versions 2013.2.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for construction of the proposed project. CO ₂ e includes the remaining GHG pollutants, such as hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride.				

Operational Greenhouse Gas Emissions

There are five emission source categories that contribute either directly or indirectly to operational GHG emissions, including energy/electricity usage, water usage, solid waste disposal, area emissions (pavement and architectural coating off-gassing), and mobile sources. Operational GHG emissions associated with the Proposed Project will be limited to off-site energy production, water demands, and solid waste disposal. According to the project Master Plan, CV Link will require 819,527 kWh per year for various lighting needs and charging stations. The project proposes a 2kW solar energy production system to be placed on top of shade structures that will offset demands by 735,840 kWh per year, resulting in a net demand of 83,687 kWh annually. Annual solid waste generated from CV Link is projected to be 2,875 tons per year. The water budget for landscaped areas is projected to be 5.6 million gallons per year.

The project will also result in significant GHG reductions due to the motor vehicle trips that may be avoided and the associated reduction in Valley-wide vehicle miles traveled. The following table shows the projected annual reduction in emissions of GHGs plus the amortized construction emissions. As shown below, it is expected that CV Link will result in a net GHG reduction of 63,283.67 tonnes per year. Due to the project’s direct significant reduction in GHG emissions as compared to baseline conditions, the Proposed Project will not generate GHGs, directly or indirectly, that would impact the environment.

On December 5, 2008, the SCAQMD formally adopted a greenhouse gas significance threshold of 10,000 MTCO₂e/yr that only applies to stationary sources (industrial uses) where SCAQMD is the lead agency (SCAQMD Resolution No. 08-35). This threshold was adopted based upon an October 2008 staff report and draft interim guidance document¹² that also recommended a threshold for all projects using a tiered approach.

It was recommended by SCAQMD staff that a project’s greenhouse gas emissions would be considered significant if it could not comply with at least one of the following “tiered” tests:

- Tier 1: Is there an applicable exemption?
- Tier 2: Is the project compliant with a greenhouse gas reduction plan that is, at a minimum, consistent with the goals of AB 32?
- Tier 3: Is the project below an absolute threshold (10,000 MTCO₂e/yr for industrial projects; 3,000 MTCO₂e/yr for residential and commercial projects)?
- Tier 4: Is the project below a (yet to be set) performance threshold?
- Tier 5: Would the project achieve a screening level with off-site mitigation?

CV Link is consistent with Tier 2, in that the project will result in an overall positive impact on the environment by reducing Valley-wide GHG emissions consistent with AB 32.

Table 12
Operational GHG Emission Reduction Summary
(Metric Tons/Year)

	CO₂	CH₄	N₂O	CO₂e
Energy Use	23.95	0.00	0.00	24.04
Water Use	17.96	0.00	0.00	18.03
Solid Waste	583.59	34.48	0.00	1,307.88
Annual Reductions	-63,024.77	-5.80	-0.00	-63,146.74
Buildout plus Amortized Construction Emissions ¹				-61,672.53
Exceeds Thresholds?				No
Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for operation of the proposed project and assumes an annual avoidance of 7,410,993 vehicle miles in 2040. 1. Buildout construction GHG emissions were amortized over 30-years then added to buildout operational GHG emissions. $3,728.03/30 = 124.26$				

¹² Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, prepared by SCAQMD, October 2008.

D. Cumulative Impacts

Cumulative air quality impacts were assessed on a regional scale given the dispersing nature of pollutant emissions and aggregate impacts from surrounding jurisdictions and air management districts. Any activity resulting in emissions of PM₁₀, ozone, or ozone precursors will unavoidably contribute, at some level, to regional non-attainment designations of ozone and PM₁₀. However, the level of impact a single project may have on regional air quality is difficult to measure. The Coachella Valley is subject to the SCAQMD 2012 Air Quality Management Plan, soon to be superseded by the 2016 Air Quality Management Plan, and 2002 PM₁₀ Coachella Valley State Implementation Plan (CVSIP) to ensure levels of criteria pollutants are regulated and minimized to the best of the region's ability, particularly through the enforcement of SCAQMD daily thresholds.

The SSAB is designated as nonattainment under both the CAAQS and the NAAQS for ozone and PM₁₀. Emissions of CO, NOX and ROG that exceed the SCAQMD operational thresholds would contribute to the ozone nonattainment designation, while emissions of PM₁₀ that exceed the SCAQMD thresholds would contribute to the PM₁₀ nonattainment designation of the SSAB.

Construction activities associated with development of CV Link will not exceed SCAQMD daily thresholds for criteria pollutants under mitigated conditions. In addition, air quality impacts associated with CV Link will be more than offset by the significant reduction in motor vehicle miles traveled. However, emission of CO, NOx, ROG, and PM₁₀ during construction of the project are unavoidable and will marginally contribute to regional ozone and PM₁₀ non-attainment designations. The following discussions address cumulative impacts related to ozone and PM₁₀.

Regulation of Ozone

As previously discussed, SCAQMD studies indicate that most ozone is transported to the Salton Sea Air Basin from the upwind sources in the South Coast Air Basin. The amount of ozone contributed from other air basins is difficult to quantify; however, improved air quality in the project area depends upon reduced ozone emissions in the South Coast Air Basin. Therefore, cumulative impacts to ozone are better managed on a multi-regional scale as opposed to single projects. The SCAQMD 2012 AQMP and Draft 2016 AQMP provide current and future measures to reduce both stationary and mobile source ozone emissions. Proposed measures to reduce ozone include emission reductions from coatings and solvents, RECLAIM facilities, early transitions to cleaner mobile technologies, and incentives to adopt net zero and near zero technologies¹³.

CalEEMod does not calculate ozone emissions directly and therefore emissions of ozone precursors (CO, NOx, and ROG) were evaluated to determine project-related impacts to ozone. Ozone precursors are the primary pollutants involved in the chemical reaction process that forms ozone. The proposed project will not exceed local construction or operational thresholds for ozone precursors under required mitigated conditions. In addition, the reduction of criteria

¹³ Final 2012 Air Quality Management Plan, South Coast Air Quality Management District, February 2013.

pollutants associated with reduced vehicle miles traveled significantly outweighs new emissions created during project construction.

Development of CV Link will adhere to ozone reduction measures set forth in the SCAQMD AQMP. In addition, the project will result in significant reductions of future ozone precursors related to mobile source emissions. Therefore, the proposed project is considered less than significant in regards to cumulative air quality impacts related to ozone.

Regulation of PM₁₀

Similar to ozone, PM₁₀ is regulated through the SCAQMD 2012 and Draft 2016 Air Quality Management Plan and 2002 PM₁₀ Coachella Valley State Implementation Plan (CVSIP). Additional PM₁₀ reduction measures include applicable state code and AQMD Rules, such as Rule 403 (Fugitive Dust), which enforces fugitive dust compliance for all activities within the SSAB. As shown in the analysis above, the proposed project will not exceed local daily thresholds for PM₁₀. Therefore, cumulative impacts to PM₁₀ are considered less than significant.

In conclusion, cumulative air quality impacts related to construction and operation of CV Link project are considered less than significant. Development and operation of the proposed project will not exceed air quality maximum daily thresholds for CO, NO_x and PM₁₀, which are cumulative thresholds by their nature. In addition, the proposed project is consistent with regulation requirements of ozone and PM₁₀ in the Salton Sea Air Basin. Therefore impacts related to ozone and PM₁₀ emissions will be less than significant. CV Link will not result in a cumulatively considerable contribution to GHG emissions, but will result in a significant avoidance of long-term GHG emissions.

E. Conclusions

Development of CV Link would not violate State or Federal air quality standards or substantially contribute to an existing air quality violation in the Salton Sea Air Basin. The project will result in a significant net reduction in both criteria pollutants and GHG emissions. The proposed project does not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan or applicable GHG reduction plans. Nor does the project create objectionable odors affecting a substantial number of people. The project is not of local air quality concern and will not result in a CO or PM₁₀ hotspots.

The proposed project will adhere to all regulatory requirements to assure that air pollutant emissions generated by the subject undertaking are minimized. Furthermore, the recommendations set forth in Section V are designed to limit air pollutant emissions resulting from the proposed project. As such, the proposed CV Link project would have a less than significant impact to air quality.

SECTION IV. PROJECT ALTERNATIVES

A. Alternative 1 – Project without Rancho Mirage and Indian Wells

Alternative 1, similar to the Proposed Project, will eliminate all Rancho Mirage segments in addition to all Indian Wells segments. Construction of the Proposed Project will include additional termini on the east and west sides of Rancho Mirage. For Alternative 1, east and west CV Link termini have also been selected for the east and west boundaries of Indian Wells.

The total length of the Alternative 1 Route is approximately 40 miles. The same pathway width assumption of 30 feet and buffer of 10 feet used for the Proposed Project was also assumed for Alternative 1. Therefore, the paved area for Alternative 1 (including all alignments) is approximately 175.27 acres and total disturbed area is 233.69 acres.

Due to the regional nature of CV Link, it is possible that material cut from one segment may be used as fill for another portion. Therefore, materials may require hauling trips regardless of a net balance of materials. For analysis purposes, it is assumed that all cut and fill material projections will require hauling, resulting in 112,500 cubic yards of export and 198,750 cubic yards of import for Alternative 1. It is assumed that each haul trip will travel 30 miles and carry up to 20 tons (or 16 cubic yards) per haul. This overstates overall construction emissions associated with grading and provides a conservative emission estimate for analysis.

**Table 13
Construction Emissions Summary
Alternative 1
Maximum Daily Emissions**

(lbs./day)							
	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}	
Overall Project Buildout							
2018	88.40	111.80	9.59	0.20	24.81	12.79	
2019	85.01	102.48	8.98	0.20	22.67	12.01	
2020	38.31	38.31	3.94	0.06	2.25	1.91	
2021	38.06	35.08	3.62	0.06	2.04	1.71	
SCAQMD Threshold*	550.00	100.00	75.00	150.00	150.00	55.00	
Exceeds Threshold	No	Yes	No	No	No	No	
Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents the average mitigated emissions from summer and winter.							
* Source: "SCAQMD Air Quality Significance Thresholds" prepared by South Coast Air Quality Management District, March 2015.							

As shown in the table above, SCAQMD daily thresholds for CO, ROG, SO_x, PM₁₀ and PM_{2.5} will not be exceeded during construction of any phase of Alternative 1 development. However, NO_x emissions have the potential to slightly exceed SCAMD thresholds due to simultaneous use of construction equipment and material hauling. To reduce NO_x emissions and overall project

impacts to less than significant levels, the same mitigation measures applied to the Proposed Project will be applied to Alternative 1. The list of mitigation measures are presented in Section V of this Report.

As shown in Table 14 below, adherence to the above mitigation measures would reduce construction-related criteria pollutant emissions below SCAQMD thresholds. Construction emissions will be further minimized through best development practices, proper maintenance of construction equipment, and other recommendations set forth in Section V that limit the project’s contribution to air pollutant emissions during construction. Therefore, impacts to air quality resulting from construction of Alternative 1 will be less than significant.

Table 14
Mitigated Construction Emissions Summary
Alternative 1
Maximum Daily Emissions

(lbs./day)							
Year	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}	
Overall Project Buildout							
2018	88.40	87.94	9.60	0.20	16.57	8.64	
2019	85.01	80.63	8.98	0.20	14.43	7.86	
2020	38.31	29.26	3.94	0.06	2.25	1.91	
2021	38.06	26.81	3.62	0.06	2.04	1.71	
SCAQMD Threshold*	550.00	100.00	75.00	150.00	150.00	55.00	
Exceeds Threshold	No	No	No	No	No	No	
Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents the average mitigated emissions from summer and winter.							
* Source: “SCAQMD Air Quality Significance Thresholds” prepared by South Coast Air Quality Management District, March 2015.							

Localized Construction-Related Significance Thresholds and Emissions

The same LST parameters used to analyze the Proposed Project were used to analyze impacts associated with Alternative 1. The maximum area of disturbance associated with buildout of Alternative 1 is approximately 233 acres and it is assumed that buildout would occur gradually over the course of four years. Although the total project area is greater than five acres, the area of daily disturbance (for purposes of LST analysis only) is limited to five acres or less per day at any given location, which is equivalent to one mile of pathway construction. As such, the five acre look up table is appropriate under the SCAQMD’s methodology to screen for potential localized air quality impacts.

The Mass Rate Look-Up tables for LSTs were used to determine if the Proposed Project would have the potential to generate significant adverse localized air quality impacts during construction. The LST for Source Receptor Area (SRA) 30 (Coachella Valley) was used to determine LST emission thresholds. The distance from the emission source and the maximum daily site disturbance also determines emission thresholds. Sensitive receptors will vary

depending upon which portion of the Link is being developed. For analysis purposes, the worst case scenario of a sensitive receptor being within 25 meters was used.

Results show that LST thresholds are not expected to be exceeded during Alternative 1 development under mitigated conditions. The alternative will be developed in accordance to SCAQMD Rule 403, and apply best management practices to ensure impacts to sensitive receptors are less than significant.

Table 15
Localized Significance Thresholds
Alternative 1
25 Meters, 5 Acres
(lbs per day)

	CO	NO_x	PM₁₀	PM_{2.5}
	13.67	16.53	4.47	2.53
LST	2,292	304	14	8
Exceed?	No	No	No	No
Source: CalEEMod Version 2013.2.2. See Appendix A. Emissions show the highest emitting day for all emissions generated onsite during construction. Note: Assumes 1-mile of CV Link path would require a 2-month construction duration.				

Potential Odors

Alternative 1 is not expected to generate significant objectionable odors during any phase of construction. The proposed project has the potential to result in short-term odors associated with paving and other construction activities. However, construction-related odors would be quickly dispersed below detectable thresholds and as distance from the construction site increases. Therefore, impacts from objectionable odors are expected to be less than significant.

B. Operational Emissions

Operational emissions associated with Alternative 1 will be negligible and limited to area source emissions, such as pavement off-gassing and landscape watering. Energy demands are limited to lighting and recharge stations. Alternative 1 will not generate new mobile source emissions, instead the project is expected to reduce mobile source emissions by promoting and providing alternative modes of transportation, including biking and electric vehicles. Projected mobile source emission reductions are discussed in the following section.

The following table summarizes the annual daily emissions of CV Link after project buildout. SCAQMD thresholds will not be exceeded for any criteria pollutant. Therefore impacts are considered less than significant.

Table 16
Operational Emissions of Criteria Pollutants
Alternative 1
(Lbs per Day)

	CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
Operation	0.01	0.00	49.24	0.00	0.00	0.00
SCAQMD Threshold	550.00	100.00	75.00	150.00	150.00	55.00
Significant	No	No	No	No	No	No

Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents average daily unmitigated emission across summer and winter activities.

Operational Emission Reductions of Criteria Pollutants

Alternative 1 is expected to reduce overall vehicle miles traveled by promoting the use of alternative modes of transportation. The CV Link Traffic Report (2016) prepared by Urban Crossroads projects that Alternative 1 would result in a reduction of 6,422,918 annual vehicle miles by 2040. The following table summarizes the daily reduction in mobile source criteria pollutants that would result due to the reduction in vehicle miles. Overall, operation of CV Link will result in a significant net reduction of daily criteria pollutants.

Table 17
Operational Emission Reductions of Criteria Pollutants
Alternative 1
(Lbs per Day)

	CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
Mobile Source Reductions	-21,494.72	-2,380.38	-2,996.30	-4.97	-33.35	-21.31
Operational Emissions	0.01	0.00	49.24	0.00	0.00	0.00
Net Operational Emissions	-21,494.71	-2,380.38	-2,947.06	-4.97	-33.35	-21.31

Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents average daily-unmitigated emission across summer and winter activities.

Objectionable Odors

Operation of Alternative 1 will not produce objectionable odors. Operation, or use, of Alternative 1 will be limited to pedestrian, bicyclist, and low-speed electric vehicle use. There will be no impacts associated with objectionable odors.

Potential Health Risks

As previously discussed under the Proposed Project, Alternative 1 does not require the preparation of a HRA or Hot-spot Analysis to analyze potential health risks.

C. Greenhouse Gas Emissions

Construction Related Greenhouse Gas Emissions

Construction activities will also result in short-term GHG emissions associated with operation of construction equipment, employee commute, material hauling, and other ground disturbing activities. The following table summarizes the estimated GHG emissions from construction of CV Link. There are currently no construction-related GHG emission thresholds for projects of this nature. However, development of Alternative 1 will incorporate current construction technologies and various forms of resource conservation to minimize GHG emissions.

GHG emissions from construction are temporary and will not substantially affect climate or interfere with a GHG reduction plan. All components of construction, including equipment, fuels, materials, and management practices, will be subject to current regulations of GHGs. To determine if construction emissions will result in a cumulative considerable impact, buildout GHG emissions were amortized over a 30-year period and added to annual operational emissions. (See the Operational GHG Emissions Summary below.)

Table 18
Construction GHG Emissions Summary
Alternative 1

(Metric Tons/Year)

	CO ₂	CH ₄	N ₂ O	Total CO ₂ e
Buildout	3,454.24	0.72	0.00	3,469.40
Source: CalEEMod Versions 2013.2.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for construction of the proposed project.				

Operational Greenhouse Gas Emissions

Operational GHG emissions associated with Alternative 1 will be limited to off-site energy production and water use. Similar to the Proposed Project, the net energy demand of 83,687 kWh per year, 4.1 million gallons of water per year, and 2,875 tons of solid waste per year was applied to Alternative 1. The project will result in significant GHG reductions due to the motor vehicle trips that may be avoided and the associated reduction in Valley-wide vehicle miles traveled. The following table shows the projected annual reduction in emissions of GHGs plus the amortized construction emissions. As shown in Table 19 on the following page, it is expected that Alternative 1 will result in a net GHG reduction of 56,755.46 metric tons per year. This is 4,917.07 metric tons fewer than the Proposed Project GHG reductions (61,672.53 tons of CO₂e reductions). Due to the project's direct significant reduction in GHG emissions, the Proposed Project will not conflict with adopted GHG reduction plans, policies or regulations under any alternative or the Proposed Project. Overall the project will have a positive impact on the environment by reducing Valley-wide GHG emissions.

Table 19
Operational GHG Emission Reduction Summary

(Metric Tons/Year)				
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Energy Use	23.95	0.00	0.00	24.04
Water Use	16.89	0.00	0.00	16.96
Solid Waste	583.59	34.48	0.00	1,307.88
Annual Reductions	-58,074.59	-5.35	-0.00	-58,186.98
Buildout plus Amortized Construction Emissions¹				-56,755.46
<small>Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for operation of Alternative 1 and assumes an annual avoidance of 6,422,918 vehicle miles in 2040. 1. Buildout construction GHG emissions were amortized over 30-years then added to buildout operational GHG emissions. $3,469.39/30 = 115.64$</small>				

D. Cumulative Impacts

Cumulative air quality impacts associated with Alternative 1 would be similar to the Proposed Project due to the dispersing nature of pollutant emissions and aggregate impacts from surrounding jurisdictions and air management districts. As such, cumulative air quality impacts related to construction and operation of Alternative 1 are considered less than significant. Development and operation of Alternative 1 will not exceed air quality maximum daily thresholds for CO, NO_x and PM₁₀, which are cumulative thresholds by their nature. In addition, Alternative 1 is consistent with regulation requirements of ozone and PM₁₀ in the Salton Sea Air Basin. Therefore impacts related to ozone and PM₁₀ emissions will be less than significant. Alternative 1 will not result in a cumulatively considerable contribution to GHG emissions, but will result in a significant avoidance of long-term GHG emissions.

E. Conclusions

Development of Alternative 1 would not violate State or Federal air quality standards or substantially contribute to an existing air quality violation in the Salton Sea Air Basin. The project will result in a significant net reduction in both criteria pollutants and GHG emissions. The proposed project does not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan or applicable GHG reduction plans. Nor does the project create objectionable odors affecting a substantial number of people. The project is not of local air quality concern and will not result in a CO or PM₁₀ hotspots.

Alternative 1 will adhere to all regulatory requirements to assure that air pollutant emissions generated by the subject undertaking are minimized. Furthermore, the recommendations set forth in Section V are designed to limit air pollutant emissions resulting from the proposed project. As such, Alternative 1 would have a less than significant impact to air quality.

B. Alternative 2 – Project with All Eight Cities

Alternative 2 proposes to include all Cities listed in the proposed project, and also includes connectivity through the Rancho Mirage. The total length of the Alternative 2 route is approximately 49 miles. The same pathway width assumption of 30 feet and buffer of 10 feet used for the Proposed Project was also assumed for Alternative 2. Therefore, it is assumed that the paved area for Alternative 2 is approximately 233.96 acres and total disturbed area of 311.95 acres

The following table provides construction-related air quality impacts for buildout of Alternative 2.

Table 20
Mitigated Construction Emissions Summary
Alternative 2
Maximum Daily Emissions

(lbs./day)							
Year	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}	
Overall Project Buildout							
2018	31.82	45.31	4.29	0.05	14.25	31.82	
2019	91.54	120.63	11.25	0.15	32.89	91.54	
2020	103.81	124.12	12.05	0.18	34.16	103.81	
2021	99.31	110.79	11.10	0.18	33.53	99.31	
SCAQMD Threshold*	550.00	100.00	75.00	150.00	150.00	55.00	
Exceeds Threshold	No	Yes	No	No	No	No	
Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents the average mitigated emissions from summer and winter. * Source: "SCAQMD Air Quality Significance Thresholds" prepared by South Coast Air Quality Management District, March 2015.							

As shown in the table above, SCAQMD daily thresholds for CO, ROG, SO_x, PM₁₀ and PM_{2.5} will not be exceeded during construction of any phase of Alternative 2 development. However, NO_x emissions have the potential to slightly exceed SCAMD thresholds due to simultaneous use of construction equipment and material hauling. To reduce NO_x emissions and overall project impacts to less than significant levels, the same mitigation measures applied to the Proposed Project will be applied to Alternative 2, with the exception of oxidation catalysts be increased from a 30% NO_x reduction to a 35% NO_x reduction. The list of mitigation measures are presented in Section V of this Report.

As shown in Table 21 below, adherence to mitigation measures would reduce construction-related criteria pollutant emissions below SCAQMD thresholds. Construction emissions will be further minimized through best development practices, proper maintenance of construction equipment, and other recommendations set forth in Section V that limit the project’s contribution to air pollutant emissions during construction. Therefore, impacts to air quality resulting from construction of Alternative 2 will be less than significant.

Table 21
Mitigated Construction Emissions Summary
Alternative 2
Maximum Daily Emissions
(lbs./day)

Year	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}
Overall Project Buildout						
2018	98.91	94.68	10.37	0.24	19.20	4.53
2019	95.24	86.85	9.72	0.24	16.47	4.17
2020	38.31	27.75	3.94	0.06	2.25	1.84
2021	38.06	25.43	3.62	0.06	2.04	1.65
SCAQMD Threshold*	550.00	100.00	75.00	150.00	150.00	55.00
Exceeds Threshold	No	No	No	No	No	No
Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents the average mitigated emissions from summer and winter.						
* Source: "SCAQMD Air Quality Significance Thresholds" prepared by South Coast Air Quality Management District, March 2015.						

Localized Construction-Related Significance Thresholds and Emissions

The same LST parameters used to analyze the Proposed Project were used to analyze impacts associated with Alternative 2. The maximum area of disturbance associated with buildout of Alternative 1 is approximately 312 acres and it is assumed that buildout would occur gradually over the course of four years. Although the total project area is greater than five-acres, the area of daily disturbance (for purposes of LST analysis only) is limited to five acres or less per day at any given location, which is equivalent to one mile of pathway construction. As such, the five acre look up table is appropriate under the SCAQMD's methodology to screen for potential localized air quality impacts.

The Mass Rate Look-Up tables for LSTs were used to determine if the Proposed Project would have the potential to generate significant adverse localized air quality impacts during construction. The LST for Source Receptor Area (SRA) 30 (Coachella Valley) was used to determine LST emission thresholds. The distance from the emission source and the maximum daily site disturbance also determines emission thresholds. Sensitive receptors will vary depending upon which portion of the Link is being developed. For analysis purposes, the worst case scenario of a sensitive receptor being within 25 meters was used.

Results show that LST thresholds are not expected to be exceeded during project development under mitigated conditions. The project will be developed in accordance to SCAQMD Rule 403, and apply best management practices to ensure impacts to sensitive receptors are less than significant.

Table 22
Localized Significance Thresholds
Alternative 2
25 Meters, 5 Acres

(lbs per day)				
	CO	NO_x	PM₁₀	PM_{2.5}
	13.67	16.53	4.47	2.53
LST	2,292	304	14	8
Exceed?	No	No	No	No
Source: CalEEMod Version 2013.2.2. See Appendix A. Emissions show the highest emitting day for all emissions generated onsite during construction. Note: Assumes 1-mile of CV Link path would require a 2-month construction duration.				

Potential Odors

Alternative 2 is not expected to generate significant objectionable odors during any phase of construction. The proposed project has the potential to result in short-term odors associated with paving and other construction activities. However, construction-related odors would be quickly dispersed below detectable thresholds and as distance from the construction site increases. Therefore, impacts from objectionable odors are expected to be less than significant.

B. Operational Emissions

Operational emissions associated with Alternative 2 will be negligible and limited to area source emissions, such as pavement off-gassing and landscape watering. Energy demands are limited to lighting and recharge stations. Alternative 2 will not generate new mobile source emissions, instead the project is expected to reduce mobile source emissions by promoting and providing alternative modes of transportation, including biking and electric vehicles. Projected mobile source emission reductions are discussed in the following section.

The following table summarizes the annual daily emissions of CV Link after project buildout. SCAQMD thresholds will not be exceeded for any criteria pollutant. Therefore impacts are considered less than significant.

Table 23
Operational Emissions of Criteria Pollutants
Alternative 2
(Lbs per Day)

	CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
Operational	0.02	0.00	65.72	0.00	0.00	0.00
SCAQMD Threshold	550.00	100.00	75.00	150.00	150.00	55.00
Significant	No	No	No	No	No	No
Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents average daily unmitigated emission across summer and winter activities.						

Operational Emission Reductions of Criteria Pollutants

Alternative 2 is expected to reduce overall vehicle miles traveled by promoting the use of alternative modes of transportation. The CV Link Traffic Report (2016) prepared by Urban Crossroads projects that Alternative 2 would result in a reduction of 9,071,027 annual vehicle miles by 2040. The following table summarizes the daily reduction in mobile source criteria pollutants that would result due to the reduction in vehicle miles. Overall, operation of Alternative 2 will result in a significant net reduction of daily criteria pollutants.

Table 24
Operational Emission Reductions of Criteria Pollutants
Alternative 2
(Lbs per Day)

	CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
Mobile Source Reductions	-26,464.31	-2,931.70	-3,687.63	-6.16	-43.51	-26.93
Operational Emissions	0.02	0.00	65.72	0.00	0.00	0.00
Net Operational Emissions	-26,464.29	-2,931.70	-3,621.91	-6.16	-43.51	-26.93
Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Value shown represents average daily-unmitigated emission across summer and winter activities.						

Objectionable Odors

Operation of Alternative 2 will not produce objectionable odors. Operation, or use, of Alternative 2 will be limited to pedestrian, bicyclist, and low-speed electric vehicle use. There will be no impacts associated with objectionable odors.

Potential Health Risks

As previously discussed under the Proposed Project, Alternative 2 does not require the preparation of a HRA or Hot-spot Analysis to analyze potential health risks.

C. Greenhouse Gas Emissions

GHG emissions from construction are temporary and will not substantially affect climate or interfere with a GHG reduction plan. All components of construction, including equipment, fuels, materials, and management practices, will be subject to current regulations of GHGs. To determine if construction emissions will result in a cumulative considerable impact, buildout GHG emissions were amortized over a 30-year period and added to annual operational emissions. (See the Operational GHG Emissions Summary below.)

Table 25
Construction GHG Emissions Summary
Alternative 2

(Metric Tons/Year)

	CO ₂	CH ₄	N ₂ O	Total CO ₂ e
Buildout	3,831.20	0.72	0.00	3,846.39
Source: CalEEMod Versions 2013.2.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for construction of the proposed project.				

Operational Greenhouse Gas Emissions

Operational GHG emissions associated with Alternative 2 will be limited to off-site energy production and water use. Similar to the Proposed Project, the net energy demand of 83,687 kWh per year, 4.1 million gallons of water per year, and 2,875 tons of solid waste per year was applied to Alternative 2. The project will result in significant GHG reductions due to the motor vehicle trips that may be avoided and the associated reduction in Valley-wide vehicle miles traveled. The following table shows the projected annual reduction in emissions of GHGs plus the amortized construction emissions. As shown below, it is expected that Alternative 2 will result in a net GHG reduction of 70,557.20 metric tons per year. This is 8,884.67 metric tons more than the Proposed Project GHG reductions (61,672.53 tons of CO₂e reductions). Due to the project's direct significant reduction in GHG emissions, the Proposed Project will not conflict with adopted GHG reduction plans, policies or regulations. Overall the project will have a positive impact on the environment by reducing Valley-wide GHG emissions.

Table 26
Operational GHG Emission Reduction Summary
Alternative 2

(Metric Tons/Year)

	CO ₂	CH ₄	N ₂ O	CO ₂ e
Energy Use	23.95	0.00	0.00	24.04
Water Use	19.45	0.00	0.00	19.53
Solid Waste	583.59	34.48	0.00	1,307.88
Annual Reductions	-71,898.24	-6.60	0.00	-72,036.86
Buildout plus Amortized Construction Emissions¹				-70,557.20
Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for operation of Alternative 1 and assumes an annual avoidance of 6,422,918 vehicle miles in 2040.				
1. Buildout construction GHG emissions were amortized over 30-years then added to buildout operational GHG emissions. 3,846.39/30 =128.21				

D. Cumulative Impacts

Cumulative air quality impacts associated with Alternative 2 would be similar to the Proposed Project due to the dispersing nature of pollutant emissions and aggregate impacts from surrounding jurisdictions and air management districts. As such, cumulative air quality impacts related to construction and operation of Alternative 2 are considered less than significant. Development and operation of Alternative 2 will not exceed air quality maximum daily thresholds for CO, NO_x and PM₁₀, which are cumulative thresholds by their nature. In addition, Alternative 2 is consistent with regulation requirements of ozone and PM₁₀ in the Salton Sea Air Basin. Therefore impacts related to ozone and PM₁₀ emissions will be less than significant. Alternative 2 will not result in a cumulatively considerable contribution to GHG emissions, but will result in a significant avoidance of long-term GHG emissions.

E. Conclusions

Development of CV Link would not violate State or Federal air quality standards or substantially contribute to an existing air quality violation in the Salton Sea Air Basin. The project will result in a significant net reduction in both criteria pollutants and GHG emissions. The proposed project does not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan or applicable GHG reduction plans. Nor does the project create objectionable odors affecting a substantial number of people. The project is not of local air quality concern and will not result in a CO or PM₁₀ hotspots.

The proposed project will adhere to all regulatory requirements to assure that air pollutant emissions generated by the subject undertaking are minimized. Furthermore, the recommendations set forth in Section V are designed to limit air pollutant emissions resulting from the proposed project. As such, the proposed CV Link project would have a less than significant impact to air quality.

SECTION V. AIR QUALITY RECOMMENDATIONS

The following provides mitigation measures, standard rules, and minimization measures to further reduce impacts to air quality.

A. Mitigation Measures

AQ-1: To reduce particulate matter and NO_x emissions construction equipment shall utilize aqueous diesel fuels, diesel particulate filters and diesel oxidation catalyst with a minimum 30% reduction rating during all construction activities for the Proposed and Alternative 1 projects, and minimum of 35% reduction rating during all construction activities for Alternative 2.

B. Standard Air Quality Regulations

The project will adhere to all established air quality standards and regulations including the following:

1. SCAQMD Rule 403 (403.1 specific to the Coachella Valley): A dust control Plan shall be prepared and implemented during all construction activities, include ground disturbance, grubbing, grading, and soil export. Said plan shall include but not be limited to the following best management practices:
 - Chemically treat soil where activity will cease for at least four consecutive days;
 - All construction grading operations and earth moving operations shall cease when winds exceed 25 miles per hour;
 - Water site and equipment morning and evening and during all earth-moving operations;
 - Operate street-sweepers on paved roads adjacent to site;
 - Establish and strictly enforce limits of grading for each phase of development; and/or
 - Stabilize and re-vegetate areas of temporary disturbance needed to accomplish each phase of development.
 - Wash off trucks as they leave the project site as necessary to control fugitive dust emissions.
 - Cover all transported loads of soils, wet materials prior to transport, provide adequate freeboard (space from the top of the material to the top of the truck) to reduce PM₁₀ and deposition of particulate matter during transportation.
 - Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.

C. Recommended Control Measures

The following control measures are recommended to further limit air quality emissions:

2. To reduce particulate matter and NO_x emissions construction equipment should utilize aqueous diesel fuels, diesel particulate filters and diesel oxidation catalyst during all construction activities.
3. All construction equipment should be properly serviced and maintained in optimal operating condition.
4. Construction equipment should not be left idling for more than five minutes.
5. As feasible, construction waste should be recycling to reroute waste from landfills and minimize the project's contribution to the landfill.
6. The contractor shall notify the applicable jurisdiction of the start and end of grading and construction activities in conformance and within the time frames established in the 2003 PM₁₀ State Implementation Plan.
7. Construction staging and management plans shall be reviewed and conditioned to require the application of all reasonably available methods and technologies to assure the minimal emissions of pollutants from the development. The City Engineer shall review grading plan applications to ensure compliance with the mitigation measures set forth in this document and as otherwise conditioned by the City.
8. Construction equipment and materials shall be sited as far away from residential and park uses as practicable.

D. Residual Impacts

Development and operation of CV Link will not exceed SCAQMD daily thresholds for criteria pollutants under mitigated conditions. Therefore, construction and operational activities associated with the proposed project will not violate air quality standards or conflict with an applicable air quality plan. Best management practices will be applied during construction to further reduce potential criteria air pollutant emissions. It should also be noted that air quality impacts associated with CV Link would be offset by the significant reduction in vehicle miles traveled and associated mobile source emissions.

As described in the Localized Significance Thresholds discussion, above, LST thresholds will not be exceeded and impacts to sensitive receptors will be less than significant. With implementation of standard requirements for dust control (SCAQMD Rule 403) and those minimization measures set forth above, impacts to sensitive receptors resulting from construction and operation of CV Link would be less than significant and result in low residual impacts.

Objectionable odors related to development and operation of CV Link will be limited and less than significant. As previously discussed in the Objectionable Odor section, above, construction related odors are limited and temporary, and will end once construction is complete. Operational odors of the pathway will be negligible. Impacts related to odors are less than significant and will result in low residual impacts.

Construction of CV Link will result in the emission of greenhouse gases; however, emissions will be limited through sustainable construction strategies. CV Link is expected to result in a significant annual reduction of GHG emissions associated with reduced vehicle miles traveled. Conservative analysis indicates that GHG emissions generated from the project will not have a significant impact on the environment or conflict with an applicable GHG reduction plan. Therefore, impacts from the generation of GHG during construction and operation of CV Link would be less than significant and will result in low residual impacts.

DOCUMENTS REFERENCED

1. “Final 2012 Air Quality Management Plan,” prepared by South Coast Air Quality Management District, December 2012.
2. “Draft 2016 Air Quality Management Plan,” prepared by South Coast Air Quality Management District, 2016.
3. “CEQA Air Quality Handbook,” prepared by South Coast Air Quality Management District, April 1993.
4. “Final Localized Significance Threshold Methodology, prepared by the South Coast Air Quality Management District, Revised, July 2008.
5. “South Coast Air Quality Management District Rules and Regulations,” adopted February 4, 1977.
6. “Annual Air Quality Site Monitoring Reports,” prepared by the South Coast Air Quality Management District.
7. “The California Almanac of Emissions and Air Quality, 2006 Edition,” California Air Resources Board, Planning and Technical Support Division, March 2006.
8. “Climate Change 2007: The Physical Science Basis,” Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, edited by S. Solomon, D. Qin, and M. Manning, April 2007.
9. “Working Group III Contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report, Climate Change 2007: Mitigation of Climate Change,” prepared by the Intergovernmental Panel on Climate Change, May 2007.
10. “2003 Coachella Valley PM10 State Implementation Plan,” August 1, 2003.

APPENDIX A

CV Link Air Emission Outputs



Qewdgt '2016

Proposed Project Outputs

CV Link: Proposed Project
Salton Sea Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	209.53	Acre	279.37	9,127,126.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Buildout of the proposed 44 mile CV Link route. Assumes a 4-year buildout, starting in early 2018 to late 2021

Land Use - Assumes that the Proposed Project CV Link path will be 57.62 miles of alignment variations with an average pave width of 30 ft. Total project AC assumes a 40ft width for construction staging and landscape buffers.

Construction Phase - Assumes a 4 year buildout starting early 2018 and operational in 2021. Assumes multiple segments will be constructed simultaneously.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Trips and VMT - Assumes 30 mile trip length for import and export.

On-road Fugitive Dust - Access to the project site will be via existing roadways.

Grading - Material import and export based on Take-Off Raw Data from Alta Group. 90% of total based on total length.

Road Dust - The CV Link will be paved at buildout.

Consumer Products - There will no consumer products associated with the CV Link project.

Area Coating - Architectural coatings are not required for the CV Link.

Energy Use -

Water And Wastewater - Water demands based on landscaping projections 5,650,263 gallons per year (17.34).

Solid Waste - Solid waste generation will be limited to trash bins located along the CV Link.

Construction Off-road Equipment Mitigation - Assumes adherence to standard dust control measures.

Off-road Equipment - Paving equipment for route/pathway paving.

Off-road Equipment - Equipment for construction/placement of overpass bridges.

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstructionPhase	NumDays	465.00	210.00
tblConstructionPhase	NumDays	330.00	600.00
tblConstructionPhase	NumDays	180.00	175.00
tblConstructionPhase	PhaseEndDate	1/13/2023	12/31/2021
tblConstructionPhase	PhaseStartDate	10/9/2021	9/26/2020
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblGrading	AcresOfGrading	630.00	279.00
tblGrading	MaterialExported	0.00	238,000.00
tblGrading	MaterialImported	0.00	135,000.00
tblLandUse	LotAcreage	209.53	279.37

tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
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tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
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tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	0.00	2,875.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	25.00	20.00
tblTripsAndVMT	WorkerTripNumber	35.00	20.00
tblWater	OutdoorWaterUseRate	0.00	5,650,263.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.8125	9.1003	6.8964	0.0145	2.8731	0.3871	3.2602	1.3921	0.3561	1.7483	0.0000	1,294.959 4	1,294.959 4	0.2239	0.0000	1,299.660 5
2019	0.6875	7.8028	6.6699	0.0158	1.8537	0.3297	2.1833	0.8233	0.3033	1.1266	0.0000	1,385.997 6	1,385.997 6	0.1843	0.0000	1,389.868 2
2020	0.2692	2.6461	2.7821	4.5000e-003	0.0650	0.1397	0.2046	0.0165	0.1288	0.1452	0.0000	386.1868	386.1868	0.1185	0.0000	388.6744
2021	0.4359	4.1890	4.5505	7.5300e-003	0.0670	0.2130	0.2801	0.0172	0.1968	0.2140	0.0000	645.7067	645.7067	0.1968	0.0000	649.8389
Total	2.2051	23.7383	20.8990	0.0423	4.8588	1.0695	5.9283	2.2491	0.9849	3.2340	0.0000	3,712.850 5	3,712.850 5	0.7234	0.0000	3,728.042 0

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	10.7428	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7400e-003	3.7400e-003	1.0000e-005	0.0000	3.9500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	583.5990	0.0000	583.5990	34.4897	0.0000	1,307.8830
Water						0.0000	0.0000		0.0000	0.0000	0.0000	17.9640	17.9640	8.3000e-004	1.7000e-004	18.0343
Total	10.7428	2.0000e-005	1.9300e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	583.5990	17.9677	601.5667	34.4906	1.7000e-004	1,325.9212

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	10.7428	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7400e-003	3.7400e-003	1.0000e-005	0.0000	3.9500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	583.5990	0.0000	583.5990	34.4897	0.0000	1,307.8830
Water						0.0000	0.0000		0.0000	0.0000	0.0000	17.9640	17.9640	8.3000e-004	1.7000e-004	18.0343
Total	10.7428	2.0000e-005	1.9300e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	583.5990	17.9677	601.5667	34.4906	1.7000e-004	1,325.9212

	ROG	NOx	CO	SO2	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	1/1/2018	8/31/2018	5	175	
2	Grading	Grading	9/1/2018	6/21/2019	5	210	
3	Route Paving	Paving	6/22/2019	10/8/2021	5	600	
4	Bridge/Overpass	Paving	9/26/2020	12/31/2021	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 279

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Off-Highway Trucks	4	4.00	400	0.38
Site Preparation	Rubber Tired Dozers	4	4.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Route Paving	Paving Equipment	4	4.00	130	0.36
Grading	Excavators	4	4.00	162	0.38
Grading	Graders	4	4.00	174	0.41
Grading	Rubber Tired Dozers	4	4.00	255	0.40
Grading	Scrapers	4	4.00	361	0.48
Grading	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Pavers	4	4.00	125	0.42
Paving	Paving Equipment	4	4.00	130	0.36
Paving	Rollers	4	4.00	80	0.38
Route Paving	Pavers	4	4.00	125	0.42
Bridge/Overpass	Excavators	2	4.00	162	0.38
Bridge/Overpass	Cranes	2	4.00	226	0.29
Bridge/Overpass	Forklifts	2	4.00	89	0.20
Bridge/Overpass	Welders	2	4.00	46	0.45
Bridge/Overpass	Pavers	2	8.00	125	0.42
Bridge/Overpass	Paving Equipment	2	8.00	130	0.36
Route Paving	Rollers	2	8.00	80	0.38
Bridge/Overpass	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	12	30.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Grading	20	50.00	0.00	29,750.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Route Paving	10	20.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Bridge/Overpass	14	20.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0539	0.0000	1.0539	0.5793	0.0000	0.5793	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3695	3.9567	2.7090	4.4000e-003		0.1800	0.1800		0.1656	0.1656	0.0000	401.9736	401.9736	0.1251	0.0000	404.6015
Total	0.3695	3.9567	2.7090	4.4000e-003	1.0539	0.1800	1.2339	0.5793	0.1656	0.7449	0.0000	401.9736	401.9736	0.1251	0.0000	404.6015

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0600e-003	0.0131	0.1235	2.5000e-004	0.0217	1.4000e-004	0.0218	5.7600e-003	1.3000e-004	5.8900e-003	0.0000	17.0844	17.0844	9.9000e-004	0.0000	17.1053
Total	9.0600e-003	0.0131	0.1235	2.5000e-004	0.0217	1.4000e-004	0.0218	5.7600e-003	1.3000e-004	5.8900e-003	0.0000	17.0844	17.0844	9.9000e-004	0.0000	17.1053

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					0.4110	0.0000	0.4110	0.2259	0.0000	0.2259	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3695	2.7697	2.7090	4.4000e-003		0.1800	0.1800		0.1656	0.1656	0.0000	401.9731	401.9731	0.1251	0.0000	404.6010
Total	0.3695	2.7697	2.7090	4.4000e-003	0.4110	0.1800	0.5910	0.2259	0.1656	0.3915	0.0000	401.9731	401.9731	0.1251	0.0000	404.6010

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0600e-003	0.0131	0.1235	2.5000e-004	0.0217	1.4000e-004	0.0218	5.7600e-003	1.3000e-004	5.8900e-003	0.0000	17.0844	17.0844	9.9000e-004	0.0000	17.1053
Total	9.0600e-003	0.0131	0.1235	2.5000e-004	0.0217	1.4000e-004	0.0218	5.7600e-003	1.3000e-004	5.8900e-003	0.0000	17.0844	17.0844	9.9000e-004	0.0000	17.1053

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4497	0.0000	1.4497	0.7168	0.0000	0.7168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3095	3.4202	2.4053	3.3000e-003		0.1632	0.1632		0.1501	0.1501	0.0000	301.7279	301.7279	0.0939	0.0000	303.7004
Total	0.3095	3.4202	2.4053	3.3000e-003	1.4497	0.1632	1.6129	0.7168	0.1501	0.8669	0.0000	301.7279	301.7279	0.0939	0.0000	303.7004

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1171	1.6995	1.5575	6.3200e-003	0.3301	0.0436	0.3737	0.0856	0.0401	0.1257	0.0000	560.1806	560.1806	2.9800e-003	0.0000	560.2433
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4200e-003	0.0107	0.1012	2.1000e-004	0.0178	1.1000e-004	0.0179	4.7200e-003	1.0000e-004	4.8200e-003	0.0000	13.9929	13.9929	8.1000e-004	0.0000	14.0100
Total	0.1245	1.7102	1.6586	6.5300e-003	0.3478	0.0437	0.3916	0.0903	0.0402	0.1306	0.0000	574.1735	574.1735	3.7900e-003	0.0000	574.2533

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					0.5654	0.0000	0.5654	0.2795	0.0000	0.2795	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3095	2.3942	2.4053	3.3000e-003		0.1632	0.1632		0.1501	0.1501	0.0000	301.7275	301.7275	0.0939	0.0000	303.7001
Total	0.3095	2.3942	2.4053	3.3000e-003	0.5654	0.1632	0.7286	0.2795	0.1501	0.4297	0.0000	301.7275	301.7275	0.0939	0.0000	303.7001

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1171	1.6995	1.5575	6.3200e-003	0.3301	0.0436	0.3737	0.0856	0.0401	0.1257	0.0000	560.1806	560.1806	2.9800e-003	0.0000	560.2433
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4200e-003	0.0107	0.1012	2.1000e-004	0.0178	1.1000e-004	0.0179	4.7200e-003	1.0000e-004	4.8200e-003	0.0000	13.9929	13.9929	8.1000e-004	0.0000	14.0100
Total	0.1245	1.7102	1.6586	6.5300e-003	0.3478	0.0437	0.3916	0.0903	0.0402	0.1306	0.0000	574.1735	574.1735	3.7900e-003	0.0000	574.2533

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4497	0.0000	1.4497	0.7168	0.0000	0.7168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4146	4.5146	3.3121	4.7600e-003		0.2131	0.2131		0.1961	0.1961	0.0000	427.9616	427.9616	0.1354	0.0000	430.8050
Total	0.4146	4.5146	3.3121	4.7600e-003	1.4497	0.2131	1.6628	0.7168	0.1961	0.9128	0.0000	427.9616	427.9616	0.1354	0.0000	430.8050

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1620	2.2532	2.1880	9.1000e-003	0.3474	0.0613	0.4087	0.0919	0.0564	0.1483	0.0000	794.0469	794.0469	4.2900e-003	0.0000	794.1369
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	9.8200e-003	0.0143	0.1349	3.0000e-004	0.0256	1.6000e-004	0.0258	6.8000e-003	1.5000e-004	6.9500e-003	0.0000	19.4184	19.4184	1.1100e-003	0.0000	19.4417
Total	0.1718	2.2675	2.3230	9.4000e-003	0.3730	0.0615	0.4345	0.0987	0.0566	0.1552	0.0000	813.4652	813.4652	5.4000e-003	0.0000	813.5785

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					0.5654	0.0000	0.5654	0.2795	0.0000	0.2795	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4146	3.1602	3.3121	4.7600e-003		0.2131	0.2131		0.1961	0.1961	0.0000	427.9611	427.9611	0.1354	0.0000	430.8045
Total	0.4146	3.1602	3.3121	4.7600e-003	0.5654	0.2131	0.7785	0.2795	0.1961	0.4756	0.0000	427.9611	427.9611	0.1354	0.0000	430.8045

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1620	2.2532	2.1880	9.1000e-003	0.3474	0.0613	0.4087	0.0919	0.0564	0.1483	0.0000	794.0469	794.0469	4.2900e-003	0.0000	794.1369
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	9.8200e-003	0.0143	0.1349	3.0000e-004	0.0256	1.6000e-004	0.0258	6.8000e-003	1.5000e-004	6.9500e-003	0.0000	19.4184	19.4184	1.1100e-003	0.0000	19.4417
Total	0.1718	2.2675	2.3230	9.4000e-003	0.3730	0.0615	0.4345	0.0987	0.0566	0.1552	0.0000	813.4652	813.4652	5.4000e-003	0.0000	813.5785

3.4 Route Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0969	1.0144	0.9752	1.5100e-003		0.0550	0.0550		0.0506	0.0506	0.0000	135.9891	135.9891	0.0430	0.0000	136.8927
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0969	1.0144	0.9752	1.5100e-003		0.0550	0.0550		0.0506	0.0506	0.0000	135.9891	135.9891	0.0430	0.0000	136.8927

3.4 Route Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3400e-003	6.3200e-003	0.0596	1.3000e-004	0.0310	7.0000e-005	0.0311	7.8300e-003	7.0000e-005	7.9000e-003	0.0000	8.5817	8.5817	4.9000e-004	0.0000	8.5920
Total	4.3400e-003	6.3200e-003	0.0596	1.3000e-004	0.0310	7.0000e-005	0.0311	7.8300e-003	7.0000e-005	7.9000e-003	0.0000	8.5817	8.5817	4.9000e-004	0.0000	8.5920

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	0.0969	0.7986	0.9752	1.5100e-003		0.0550	0.0550		0.0506	0.0506	0.0000	135.9890	135.9890	0.0430	0.0000	136.8925
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0969	0.7986	0.9752	1.5100e-003		0.0550	0.0550		0.0506	0.0506	0.0000	135.9890	135.9890	0.0430	0.0000	136.8925

3.4 Route Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3400e-003	6.3200e-003	0.0596	1.3000e-004	0.0310	7.0000e-005	0.0311	7.8300e-003	7.0000e-005	7.9000e-003	0.0000	8.5817	8.5817	4.9000e-004	0.0000	8.5920
Total	4.3400e-003	6.3200e-003	0.0596	1.3000e-004	0.0310	7.0000e-005	0.0311	7.8300e-003	7.0000e-005	7.9000e-003	0.0000	8.5817	8.5817	4.9000e-004	0.0000	8.5920

3.4 Route Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1728	1.7905	1.8633	2.9000e-003		0.0961	0.0961		0.0884	0.0884	0.0000	254.3904	254.3904	0.0823	0.0000	256.1182
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1728	1.7905	1.8633	2.9000e-003		0.0961	0.0961		0.0884	0.0884	0.0000	254.3904	254.3904	0.0823	0.0000	256.1182

3.4 Route Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7400e-003	0.0113	0.1066	2.5000e-004	0.0592	1.4000e-004	0.0594	0.0150	1.3000e-004	0.0151	0.0000	15.7454	15.7454	8.9000e-004	0.0000	15.7642
Total	7.7400e-003	0.0113	0.1066	2.5000e-004	0.0592	1.4000e-004	0.0594	0.0150	1.3000e-004	0.0151	0.0000	15.7454	15.7454	8.9000e-004	0.0000	15.7642

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	0.1728	1.4099	1.8633	2.9000e-003		0.0961	0.0961		0.0884	0.0884	0.0000	254.3901	254.3901	0.0823	0.0000	256.1179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1728	1.4099	1.8633	2.9000e-003		0.0961	0.0961		0.0884	0.0884	0.0000	254.3901	254.3901	0.0823	0.0000	256.1179

3.4 Route Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7400e-003	0.0113	0.1066	2.5000e-004	0.0592	1.4000e-004	0.0594	0.0150	1.3000e-004	0.0151	0.0000	15.7454	15.7454	8.9000e-004	0.0000	15.7642
Total	7.7400e-003	0.0113	0.1066	2.5000e-004	0.0592	1.4000e-004	0.0594	0.0150	1.3000e-004	0.0151	0.0000	15.7454	15.7454	8.9000e-004	0.0000	15.7642

3.4 Route 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	0.1227	1.2617	1.4295	2.2200e-003		0.0663	0.0663		0.0610	0.0610	0.0000	195.1167	195.1167	0.0631	0.0000	196.4419
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1227	1.2617	1.4295	2.2200e-003		0.0663	0.0663		0.0610	0.0610	0.0000	195.1167	195.1167	0.0631	0.0000	196.4419

3.4 Route 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	5.6300e-003	8.2400e-003	0.0779	1.9000e-004	0.0455	1.1000e-004	0.0456	0.0115	1.0000e-004	0.0116	0.0000	11.9017	11.9017	6.7000e-004	0.0000	11.9157
Total	5.6300e-003	8.2400e-003	0.0779	1.9000e-004	0.0455	1.1000e-004	0.0456	0.0115	1.0000e-004	0.0116	0.0000	11.9017	11.9017	6.7000e-004	0.0000	11.9157

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	0.1227	0.9937	1.4295	2.2200e-003		0.0663	0.0663		0.0610	0.0610	0.0000	195.1165	195.1165	0.0631	0.0000	196.4417
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1227	0.9937	1.4295	2.2200e-003		0.0663	0.0663		0.0610	0.0610	0.0000	195.1165	195.1165	0.0631	0.0000	196.4417

3.4 Route 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	5.6300e-003	8.2400e-003	0.0779	1.9000e-004	0.0455	1.1000e-004	0.0456	0.0115	1.0000e-004	0.0116	0.0000	11.9017	11.9017	6.7000e-004	0.0000	11.9157
Total	5.6300e-003	8.2400e-003	0.0779	1.9000e-004	0.0455	1.1000e-004	0.0456	0.0115	1.0000e-004	0.0116	0.0000	11.9017	11.9017	6.7000e-004	0.0000	11.9157

3.5 Bridge/Overpass - 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	0.0866	0.8413	0.7841	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9044	111.9044	0.0351	0.0000	112.6405
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0866	0.8413	0.7841	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9044	111.9044	0.0351	0.0000	112.6405

3.5 Bridge/Overpass - 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	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	0.0000
Worker	2.0400e-003	2.9800e-003	0.0281	7.0000e-005	5.7000e-003	4.0000e-005	5.7400e-003	1.5100e-003	3.0000e-005	1.5500e-003	0.0000	4.1467	4.1467	2.4000e-004	0.0000	4.1516	
Total	2.0400e-003	2.9800e-003	0.0281	7.0000e-005	5.7000e-003	4.0000e-005	5.7400e-003	1.5100e-003	3.0000e-005	1.5500e-003	0.0000	4.1467	4.1467	2.4000e-004	0.0000	4.1516	

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	0.0866	0.6304	0.7841	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9042	111.9042	0.0351	0.0000	112.6403
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0866	0.6304	0.7841	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9042	111.9042	0.0351	0.0000	112.6403

3.5 Bridge/Overpass - 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	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	0.0000
Worker	2.0400e-003	2.9800e-003	0.0281	7.0000e-005	5.7000e-003	4.0000e-005	5.7400e-003	1.5100e-003	3.0000e-005	1.5500e-003	0.0000	4.1467	4.1467	2.4000e-004	0.0000	4.1516	
Total	2.0400e-003	2.9800e-003	0.0281	7.0000e-005	5.7000e-003	4.0000e-005	5.7400e-003	1.5100e-003	3.0000e-005	1.5500e-003	0.0000	4.1467	4.1467	2.4000e-004	0.0000	4.1516	

3.5 Bridge/Overpass - 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	0.3003	2.9084	2.9420	4.8700e-003		0.1465	0.1465		0.1355	0.1355	0.0000	423.2339	423.2339	0.1321	0.0000	426.0087
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3003	2.9084	2.9420	4.8700e-003		0.1465	0.1465		0.1355	0.1355	0.0000	423.2339	423.2339	0.1321	0.0000	426.0087

3.5 Bridge/Overpass - 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	7.3100e-003	0.0107	0.1012	2.5000e-004	0.0216	1.4000e-004	0.0217	5.7300e-003	1.3000e-004	5.8600e-003	0.0000	15.4544	15.4544	8.7000e-004	0.0000	15.4726
Total	7.3100e-003	0.0107	0.1012	2.5000e-004	0.0216	1.4000e-004	0.0217	5.7300e-003	1.3000e-004	5.8600e-003	0.0000	15.4544	15.4544	8.7000e-004	0.0000	15.4726

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	0.3003	2.1802	2.9420	4.8700e-003		0.1465	0.1465		0.1355	0.1355	0.0000	423.2334	423.2334	0.1321	0.0000	426.0082
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3003	2.1802	2.9420	4.8700e-003		0.1465	0.1465		0.1355	0.1355	0.0000	423.2334	423.2334	0.1321	0.0000	426.0082

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.469364	0.065576	0.169825	0.159036	0.038089	0.006139	0.011322	0.071493	0.001371	0.001211	0.003602	0.000518	0.002454

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

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						
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	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive 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	10.7428	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7400e-003	3.7400e-003	1.0000e-005	0.0000	3.9500e-003
Unmitigated	10.7428	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7400e-003	3.7400e-003	1.0000e-005	0.0000	3.9500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	10.5761					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1666					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7400e-003	3.7400e-003	1.0000e-005	0.0000	3.9500e-003
Total	10.7428	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7400e-003	3.7400e-003	1.0000e-005	0.0000	3.9500e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Consumer Products	0.1666					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7400e-003	3.7400e-003	1.0000e-005	0.0000	3.9500e-003
Architectural Coating	10.5761					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	10.7428	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7400e-003	3.7400e-003	1.0000e-005	0.0000	3.9500e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.9640	8.3000e-004	1.7000e-004	18.0343
Unmitigated	17.9640	8.3000e-004	1.7000e-004	18.0343

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 5.65026	17.9640	8.3000e-004	1.7000e-004	18.0343
Total		17.9640	8.3000e-004	1.7000e-004	18.0343

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 5.65026	17.9640	8.3000e-004	1.7000e-004	18.0343
Total		17.9640	8.3000e-004	1.7000e-004	18.0343

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	583.5990	34.4897	0.0000	1,307.8830
Unmitigated	583.5990	34.4897	0.0000	1,307.8830

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	2875	583.5990	34.4897	0.0000	1,307.8830
Total		583.5990	34.4897	0.0000	1,307.8830

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	2875	583.5990	34.4897	0.0000	1,307.8830
Total		583.5990	34.4897	0.0000	1,307.8830

9.0 Operational Offroad

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

CV Link: Proposed Project
Salton Sea Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	209.53	Acre	279.37	9,127,126.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Buildout of the proposed 44 mile CV Link route. Assumes a 4-year buildout, starting in early 2018 to late 2021

Land Use - Assumes that the Proposed Project CV Link path will be 57.62 miles of alignment variations with an average pave width of 30 ft. Total project AC assumes a 40ft width for construction staging and landscape buffers.

Construction Phase - Assumes a 4 year buildout starting early 2018 and operational in 2021. Assumes multiple segments will be constructed simultaneously.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Trips and VMT - Assumes 30 mile trip length for import and export.

On-road Fugitive Dust - Access to the project site will be via existing roadways.

Grading - Material import and export based on Take-Off Raw Data from Alta Group. 90% of total based on total length.

Road Dust - The CV Link will be paved at buildout.

Consumer Products - There will no consumer products associated with the CV Link project.

Area Coating - Architectural coatings are not required for the CV Link.

Energy Use -

Water And Wastewater - Water demands based on landscaping projections 5,650,263 gallons per year (17.34).

Solid Waste - Solid waste generation will be limited to trash bins located along the CV Link.

Construction Off-road Equipment Mitigation - Assumes adherence to standard dust control measures.

Off-road Equipment - Paving equipment for route/pathway paving.

Off-road Equipment - Equipment for construction/placement of overpass bridges.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstructionPhase	NumDays	465.00	210.00
tblConstructionPhase	NumDays	330.00	600.00
tblConstructionPhase	NumDays	180.00	175.00
tblConstructionPhase	PhaseEndDate	1/13/2023	12/31/2021
tblConstructionPhase	PhaseStartDate	10/9/2021	9/26/2020
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblGrading	AcresOfGrading	630.00	279.00
tblGrading	MaterialExported	0.00	238,000.00
tblGrading	MaterialImported	0.00	135,000.00
tblLandUse	LotAcreage	209.53	279.37

tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
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tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	0.00	2,875.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	25.00	20.00
tblTripsAndVMT	WorkerTripNumber	35.00	20.00
tblWater	OutdoorWaterUseRate	0.00	5,650,263.00

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					
2018	10.1050	116.7651	93.1202	0.2288	21.9953	4.8118	26.8071	8.9512	4.4268	13.3780	0.0000	22,470.87 73	22,470.87 73	2.5049	0.0000	22,523.47 93
2019	9.4672	107.0476	89.3978	0.2286	19.8928	4.4281	24.3209	8.4352	4.0738	12.5090	0.0000	22,088.21 35	22,088.21 35	2.5028	0.0000	22,140.77 25
2020	3.9750	38.2156	38.7714	0.0633	0.6255	1.9949	2.6205	0.1602	1.8423	2.0025	0.0000	5,986.1171	5,986.1171	1.8273	0.0000	6,024.490 3
2021	3.6592	34.9941	38.4987	0.0633	0.6255	1.7845	2.4100	0.1602	1.6477	1.8078	0.0000	5,981.152 5	5,981.152 5	1.8229	0.0000	6,019.433 5
Total	27.2064	297.0223	259.7881	0.5840	43.1392	13.0193	56.1584	17.7067	11.9905	29.6972	0.0000	56,526.36 05	56,526.36 05	8.6579	0.0000	56,708.17 57

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	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	58.8657	2.0000e-004	0.0214	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004	0.0000	0.0484

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	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	58.8657	2.0000e-004	0.0214	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004	0.0000	0.0484

	ROG	NOx	CO	SO2	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	1/1/2018	8/31/2018	5	175	
2	Grading	Grading	9/1/2018	6/21/2019	5	210	
3	Route Paving	Paving	6/22/2019	10/8/2021	5	600	
4	Bridge/Overpass	Paving	9/26/2020	12/31/2021	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 279

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Off-Highway Trucks	4	4.00	400	0.38
Site Preparation	Rubber Tired Dozers	4	4.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Route Paving	Paving Equipment	4	4.00	130	0.36
Grading	Excavators	4	4.00	162	0.38
Grading	Graders	4	4.00	174	0.41
Grading	Rubber Tired Dozers	4	4.00	255	0.40
Grading	Scrapers	4	4.00	361	0.48
Grading	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Pavers	4	4.00	125	0.42
Paving	Paving Equipment	4	4.00	130	0.36
Paving	Rollers	4	4.00	80	0.38
Route Paving	Pavers	4	4.00	125	0.42
Bridge/Overpass	Excavators	2	4.00	162	0.38
Bridge/Overpass	Cranes	2	4.00	226	0.29
Bridge/Overpass	Forklifts	2	4.00	89	0.20
Bridge/Overpass	Welders	2	4.00	46	0.45
Bridge/Overpass	Pavers	2	8.00	125	0.42
Bridge/Overpass	Paving Equipment	2	8.00	130	0.36
Route Paving	Rollers	2	8.00	80	0.38
Bridge/Overpass	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	12	30.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Grading	20	50.00	0.00	29,750.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Route Paving	10	20.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Bridge/Overpass	14	20.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	4.2230	45.2199	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928		5,064.000 3	5,064.000 3	1.5765		5,097.106 6
Total	4.2230	45.2199	30.9601	0.0503	12.0442	2.0574	14.1016	6.6205	1.8928	8.5133		5,064.000 3	5,064.000 3	1.5765		5,097.106 6

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1283	0.1399	1.5794	2.9300e-003	0.2510	1.5700e-003	0.2526	0.0666	1.4500e-003	0.0680		219.3262	219.3262	0.0125		219.5892
Total	0.1283	0.1399	1.5794	2.9300e-003	0.2510	1.5700e-003	0.2526	0.0666	1.4500e-003	0.0680		219.3262	219.3262	0.0125		219.5892

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					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820			0.0000			0.0000
Off-Road	4.2230	31.6539	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928	0.0000	5,064.0003	5,064.0003	1.5765		5,097.1066
Total	4.2230	31.6539	30.9601	0.0503	4.6972	2.0574	6.7547	2.5820	1.8928	4.4748	0.0000	5,064.0003	5,064.0003	1.5765		5,097.1066

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.1283	0.1399	1.5794	2.9300e-003	0.2510	1.5700e-003	0.2526	0.0666	1.4500e-003	0.0680		219.3262	219.3262	0.0125			219.5892
Total	0.1283	0.1399	1.5794	2.9300e-003	0.2510	1.5700e-003	0.2526	0.0666	1.4500e-003	0.0680		219.3262	219.3262	0.0125			219.5892

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					13.8069	0.0000	13.8069	6.8262	0.0000	6.8262			0.0000				0.0000
Off-Road	7.1976	79.5405	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916		7,734.8376	7,734.8376	2.4080			7,785.4048
Total	7.1976	79.5405	55.9368	0.0768	13.8069	3.7953	17.6021	6.8262	3.4916	10.3178		7,734.8376	7,734.8376	2.4080			7,785.4048

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.6935	36.9913	34.5510	0.1471	7.7701	1.0139	8.7840	2.0141	0.9327	2.9468		14,370.4961	14,370.4961	0.0760		14,372.0925
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	0.2138	0.2332	2.6324	4.8800e-003	0.4183	2.6100e-003	0.4210	0.1110	2.4200e-003	0.1134		365.5436	365.5436	0.0209		365.9820
Total	2.9074	37.2245	37.1834	0.1519	8.1884	1.0165	9.2049	2.1251	0.9351	3.0602		14,736.0397	14,736.0397	0.0969		14,738.0745

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					5.3847	0.0000	5.3847	2.6622	0.0000	2.6622			0.0000			0.0000
Off-Road	7.1976	55.6784	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916	0.0000	7,734.8376	7,734.8376	2.4080		7,785.4048
Total	7.1976	55.6784	55.9368	0.0768	5.3847	3.7953	9.1799	2.6622	3.4916	6.1538	0.0000	7,734.8376	7,734.8376	2.4080		7,785.4048

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.6935	36.9913	34.5510	0.1471	7.7701	1.0139	8.7840	2.0141	0.9327	2.9468		14,370.4961	14,370.4961	0.0760		14,372.0925
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	0.2138	0.2332	2.6324	4.8800e-003	0.4183	2.6100e-003	0.4210	0.1110	2.4200e-003	0.1134		365.5436	365.5436	0.0209		365.9820
Total	2.9074	37.2245	37.1834	0.1519	8.1884	1.0165	9.2049	2.1251	0.9351	3.0602		14,736.0397	14,736.0397	0.0969		14,738.0745

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.8069	0.0000	13.8069	6.8262	0.0000	6.8262			0.0000			0.0000
Off-Road	6.6864	72.8159	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621		7,608.8208	7,608.8208	2.4074		7,659.3752
Total	6.6864	72.8159	53.4214	0.0768	13.8069	3.4371	17.2439	6.8262	3.1621	9.9883		7,608.8208	7,608.8208	2.4074		7,659.3752

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5846	34.0162	33.5426	0.1469	5.6676	0.9884	6.6560	1.4981	0.9092	2.4073		14,127.5471	14,127.5471	0.0757		14,129.1373
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	0.1962	0.2155	2.4338	4.8700e-003	0.4183	2.6200e-003	0.4210	0.1110	2.4300e-003	0.1134		351.8456	351.8456	0.0197		352.2600
Total	2.7808	34.2317	35.9764	0.1518	6.0860	0.9910	7.0770	1.6090	0.9117	2.5207		14,479.3927	14,479.3927	0.0955		14,481.3974

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					5.3847	0.0000	5.3847	2.6622	0.0000	2.6622			0.0000			0.0000
Off-Road	6.6864	50.9711	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621	0.0000	7,608.8208	7,608.8208	2.4074		7,659.3751
Total	6.6864	50.9711	53.4214	0.0768	5.3847	3.4371	8.8218	2.6622	3.1621	5.8243	0.0000	7,608.8208	7,608.8208	2.4074		7,659.3751

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5846	34.0162	33.5426	0.1469	5.6676	0.9884	6.6560	1.4981	0.9092	2.4073		14,127.5471	14,127.5471	0.0757		14,129.1373
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	0.1962	0.2155	2.4338	4.8700e-003	0.4183	2.6200e-003	0.4210	0.1110	2.4300e-003	0.1134		351.8456	351.8456	0.0197		352.2600
Total	2.7808	34.2317	35.9764	0.1518	6.0860	0.9910	7.0770	1.6090	0.9117	2.5207		14,479.3927	14,479.3927	0.0955		14,481.3974

3.4 Route Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4141	14.8090	14.2364	0.0221		0.8032	0.8032		0.7389	0.7389		2,188.3558	2,188.3558	0.6924		2,202.8956
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4141	14.8090	14.2364	0.0221		0.8032	0.8032		0.7389	0.7389		2,188.3558	2,188.3558	0.6924		2,202.8956

3.4 Route Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0785	0.0862	0.9735	1.9500e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		140.7383	140.7383	7.8900e-003			140.9040
Total	0.0785	0.0862	0.9735	1.9500e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		140.7383	140.7383	7.8900e-003			140.9040

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	1.4141	11.6582	14.2364	0.0221		0.8032	0.8032		0.7389	0.7389	0.0000	2,188.3558	2,188.3558	0.6924			2,202.8956
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.4141	11.6582	14.2364	0.0221		0.8032	0.8032		0.7389	0.7389	0.0000	2,188.3558	2,188.3558	0.6924			2,202.8956

3.4 Route Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0785	0.0862	0.9735	1.9500e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		140.7383	140.7383	7.8900e-003			140.9040
Total	0.0785	0.0862	0.9735	1.9500e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		140.7383	140.7383	7.8900e-003			140.9040

3.4 Route Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.3190	13.6679	14.2233	0.0221		0.7333	0.7333		0.6746	0.6746		2,140.5908	2,140.5908	0.6923			2,155.1294
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3190	13.6679	14.2233	0.0221		0.7333	0.7333		0.6746	0.6746		2,140.5908	2,140.5908	0.6923			2,155.1294

3.4 Route Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0730	0.0808	0.9096	1.9500e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		135.0321	135.0321	7.5200e-003		135.1900
Total	0.0730	0.0808	0.9096	1.9500e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		135.0321	135.0321	7.5200e-003		135.1900

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	1.3190	10.7622	14.2233	0.0221		0.7333	0.7333		0.6746	0.6746	0.0000	2,140.5908	2,140.5908	0.6923		2,155.1294
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3190	10.7622	14.2233	0.0221		0.7333	0.7333		0.6746	0.6746	0.0000	2,140.5908	2,140.5908	0.6923		2,155.1294

3.4 Route Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0730	0.0808	0.9096	1.9500e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		135.0321	135.0321	7.5200e-003		135.1900
Total	0.0730	0.0808	0.9096	1.9500e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		135.0321	135.0321	7.5200e-003		135.1900

3.4 Route 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	1.2205	12.5540	14.2235	0.0221		0.6600	0.6600		0.6072	0.6072		2,140.0931	2,140.0931	0.6922		2,154.6282
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2205	12.5540	14.2235	0.0221		0.6600	0.6600		0.6072	0.6072		2,140.0931	2,140.0931	0.6922		2,154.6282

3.4 Route 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	0.0689	0.0766	0.8657	1.9500e-003	0.4582	1.0600e-003	0.4593	0.1158	9.9000e-004	0.1168		133.0375	133.0375	7.3100e-003			133.1910
Total	0.0689	0.0766	0.8657	1.9500e-003	0.4582	1.0600e-003	0.4593	0.1158	9.9000e-004	0.1168		133.0375	133.0375	7.3100e-003			133.1910

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	1.2205	9.8874	14.2235	0.0221		0.6600	0.6600		0.6072	0.6072	0.0000	2,140.093 1	2,140.093 1	0.6922			2,154.628 2
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.2205	9.8874	14.2235	0.0221		0.6600	0.6600		0.6072	0.6072	0.0000	2,140.093 1	2,140.093 1	0.6922			2,154.628 2

3.4 Route 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	0.0689	0.0766	0.8657	1.9500e-003	0.4582	1.0600e-003	0.4593	0.1158	9.9000e-004	0.1168		133.0375	133.0375	7.3100e-003		133.1910
Total	0.0689	0.0766	0.8657	1.9500e-003	0.4582	1.0600e-003	0.4593	0.1158	9.9000e-004	0.1168		133.0375	133.0375	7.3100e-003		133.1910

3.5 Bridge/Overpass - 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	2.5100	24.3862	22.7288	0.0373		1.2595	1.2595		1.1657	1.1657		3,575.4622	3,575.4622	1.1199		3,598.9810
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5100	24.3862	22.7288	0.0373		1.2595	1.2595		1.1657	1.1657		3,575.4622	3,575.4622	1.1199		3,598.9810

3.5 Bridge/Overpass - 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	0.0730	0.0808	0.9096	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		135.0321	135.0321	7.5200e-003			135.1900
Total	0.0730	0.0808	0.9096	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		135.0321	135.0321	7.5200e-003			135.1900

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	2.5100	18.2720	22.7288	0.0373		1.2595	1.2595		1.1657	1.1657	0.0000	3,575.4622	3,575.4622	1.1199			3,598.9810
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.5100	18.2720	22.7288	0.0373		1.2595	1.2595		1.1657	1.1657	0.0000	3,575.4622	3,575.4622	1.1199			3,598.9810

3.5 Bridge/Overpass - 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	0.0730	0.0808	0.9096	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		135.0321	135.0321	7.5200e-003		135.1900
Total	0.0730	0.0808	0.9096	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		135.0321	135.0321	7.5200e-003		135.1900

3.5 Bridge/Overpass - 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	2.3009	22.2869	22.5439	0.0373		1.1224	1.1224		1.0385	1.0385		3,574.9844	3,574.9844	1.1161		3,598.4233
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3009	22.2869	22.5439	0.0373		1.1224	1.1224		1.0385	1.0385		3,574.9844	3,574.9844	1.1161		3,598.4233

3.5 Bridge/Overpass - 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	0.0689	0.0766	0.8657	1.9500e-003	0.1673	1.0600e-003	0.1684	0.0444	9.9000e-004	0.0454		133.0375	133.0375	7.3100e-003		133.1910
Total	0.0689	0.0766	0.8657	1.9500e-003	0.1673	1.0600e-003	0.1684	0.0444	9.9000e-004	0.0454		133.0375	133.0375	7.3100e-003		133.1910

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	2.3009	16.7068	22.5439	0.0373		1.1224	1.1224		1.0385	1.0385	0.0000	3,574.9844	3,574.9844	1.1161		3,598.4233
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3009	16.7068	22.5439	0.0373		1.1224	1.1224		1.0385	1.0385	0.0000	3,574.9844	3,574.9844	1.1161		3,598.4233

3.5 Bridge/Overpass - 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	0.0689	0.0766	0.8657	1.9500e-003	0.1673	1.0600e-003	0.1684	0.0444	9.9000e-004	0.0454		133.0375	133.0375	7.3100e-003		133.1910
Total	0.0689	0.0766	0.8657	1.9500e-003	0.1673	1.0600e-003	0.1684	0.0444	9.9000e-004	0.0454		133.0375	133.0375	7.3100e-003		133.1910

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.469364	0.065576	0.169825	0.159036	0.038089	0.006139	0.011322	0.071493	0.001371	0.001211	0.003602	0.000518	0.002454

5.0 Energy Detail

4.4 Fleet Mix

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
lb/day											lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484
Unmitigated	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484

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					
Consumer Products	0.9127					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9900e-003	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484
Architectural Coating	57.9510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484

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					
Consumer Products	0.9127					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9900e-003	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484
Architectural Coating	57.9510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484

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 Vegetation

CV Link: Proposed Project
Salton Sea Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	209.53	Acre	279.37	9,127,126.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Buildout of the proposed 44 mile CV Link route. Assumes a 4-year buildout, starting in early 2018 to late 2021

Land Use - Assumes that the Proposed Project CV Link path will be 57.62 miles of alignment variations with an average pave width of 30 ft. Total project AC assumes a 40ft width for construction staging and landscape buffers.

Construction Phase - Assumes a 4 year buildout starting early 2018 and operational in 2021. Assumes multiple segments will be constructed simultaneously.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Trips and VMT - Assumes 30 mile trip length for import and export.

On-road Fugitive Dust - Access to the project site will be via existing roadways.

Grading - Material import and export based on Take-Off Raw Data from Alta Group. 90% of total based on total length.

Road Dust - The CV Link will be paved at buildout.

Consumer Products - There will no consumer products associated with the CV Link project.

Area Coating - Architectural coatings are not required for the CV Link.

Energy Use -

Water And Wastewater - Water demands based on landscaping projections 5,650,263 gallons per year (17.34).

Solid Waste - Solid waste generation will be limited to trash bins located along the CV Link.

Construction Off-road Equipment Mitigation - Assumes adherence to standard dust control measures.

Off-road Equipment - Paving equipment for route/pathway paving.

Off-road Equipment - Equipment for construction/placement of overpass bridges.

Table Name	Column Name	Default Value	New Value
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstructionPhase	NumDays	465.00	210.00
tblConstructionPhase	NumDays	330.00	600.00
tblConstructionPhase	NumDays	180.00	175.00
tblConstructionPhase	PhaseEndDate	1/13/2023	12/31/2021
tblConstructionPhase	PhaseStartDate	10/9/2021	9/26/2020
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblGrading	AcresOfGrading	630.00	279.00
tblGrading	MaterialExported	0.00	238,000.00
tblGrading	MaterialImported	0.00	135,000.00
tblLandUse	LotAcreage	209.53	279.37

tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	0.00	2,875.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	25.00	20.00
tblTripsAndVMT	WorkerTripNumber	35.00	20.00
tblWater	OutdoorWaterUseRate	0.00	5,650,263.00

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					
2018	10.2306	119.8438	99.0280	0.2282	21.9953	4.8130	26.8083	8.9512	4.4279	13.3791	0.0000	22,420.04 95	22,420.04 95	2.5060	0.0000	22,472.67 47
2019	9.5816	109.8774	95.4224	0.2281	19.8928	4.4293	24.3221	8.4352	4.0749	12.5101	0.0000	22,038.73 12	22,038.73 12	2.5039	0.0000	22,091.31 39
2020	3.9379	38.2325	38.4461	0.0630	0.6255	1.9949	2.6205	0.1602	1.8423	2.0025	0.0000	5,966.412 1	5,966.412 1	1.8273	0.0000	6,004.785 3
2021	3.6247	35.0100	38.1875	0.0630	0.6255	1.7845	2.4100	0.1602	1.6477	1.8078	0.0000	5,961.740 9	5,961.740 9	1.8229	0.0000	6,000.021 9
Total	27.3748	302.9637	271.0841	0.5824	43.1392	13.0217	56.1608	17.7067	11.9927	29.6995	0.0000	56,386.93 36	56,386.93 36	8.6601	0.0000	56,568.79 58

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	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	58.8657	2.0000e-004	0.0214	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004	0.0000	0.0484

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	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	58.8657	2.0000e-004	0.0214	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004	0.0000	0.0484

	ROG	NOx	CO	SO2	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	1/1/2018	8/31/2018	5	175	
2	Grading	Grading	9/1/2018	6/21/2019	5	210	
3	Route Paving	Paving	6/22/2019	10/8/2021	5	600	
4	Bridge/Overpass	Paving	9/26/2020	12/31/2021	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 279

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Off-Highway Trucks	4	4.00	400	0.38
Site Preparation	Rubber Tired Dozers	4	4.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Route Paving	Paving Equipment	4	4.00	130	0.36
Grading	Excavators	4	4.00	162	0.38
Grading	Graders	4	4.00	174	0.41
Grading	Rubber Tired Dozers	4	4.00	255	0.40
Grading	Scrapers	4	4.00	361	0.48
Grading	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Pavers	4	4.00	125	0.42
Paving	Paving Equipment	4	4.00	130	0.36
Paving	Rollers	4	4.00	80	0.38
Route Paving	Pavers	4	4.00	125	0.42
Bridge/Overpass	Excavators	2	4.00	162	0.38
Bridge/Overpass	Cranes	2	4.00	226	0.29
Bridge/Overpass	Forklifts	2	4.00	89	0.20
Bridge/Overpass	Welders	2	4.00	46	0.45
Bridge/Overpass	Pavers	2	8.00	125	0.42
Bridge/Overpass	Paving Equipment	2	8.00	130	0.36
Route Paving	Rollers	2	8.00	80	0.38
Bridge/Overpass	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	12	30.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Grading	20	50.00	0.00	29,750.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Route Paving	10	20.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Bridge/Overpass	14	20.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	4.2230	45.2199	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928		5,064.000 3	5,064.000 3	1.5765		5,097.106 6
Total	4.2230	45.2199	30.9601	0.0503	12.0442	2.0574	14.1016	6.6205	1.8928	8.5133		5,064.000 3	5,064.000 3	1.5765		5,097.106 6

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0954	0.1549	1.3007	2.7100e-003	0.2510	1.5700e-003	0.2526	0.0666	1.4500e-003	0.0680		203.3778	203.3778	0.0125			203.6408
Total	0.0954	0.1549	1.3007	2.7100e-003	0.2510	1.5700e-003	0.2526	0.0666	1.4500e-003	0.0680		203.3778	203.3778	0.0125			203.6408

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					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820			0.0000				0.0000
Off-Road	4.2230	31.6539	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928	0.0000	5,064.0003	5,064.0003	1.5765			5,097.1066
Total	4.2230	31.6539	30.9601	0.0503	4.6972	2.0574	6.7547	2.5820	1.8928	4.4748	0.0000	5,064.0003	5,064.0003	1.5765			5,097.1066

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0954	0.1549	1.3007	2.7100e-003	0.2510	1.5700e-003	0.2526	0.0666	1.4500e-003	0.0680		203.3778	203.3778	0.0125		203.6408
Total	0.0954	0.1549	1.3007	2.7100e-003	0.2510	1.5700e-003	0.2526	0.0666	1.4500e-003	0.0680		203.3778	203.3778	0.0125		203.6408

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.8069	0.0000	13.8069	6.8262	0.0000	6.8262			0.0000			0.0000
Off-Road	7.1976	79.5405	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916		7,734.8376	7,734.8376	2.4080		7,785.4048
Total	7.1976	79.5405	55.9368	0.0768	13.8069	3.7953	17.6021	6.8262	3.4916	10.3178		7,734.8376	7,734.8376	2.4080		7,785.4048

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.8740	40.0451	40.9234	0.1469	7.7701	1.0151	8.7852	2.0141	0.9338	2.9480		14,346.2488	14,346.2488	0.0771		14,347.8685
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	0.1591	0.2582	2.1678	4.5100e-003	0.4183	2.6100e-003	0.4210	0.1110	2.4200e-003	0.1134		338.9630	338.9630	0.0209		339.4014
Total	3.0330	40.3033	43.0912	0.1514	8.1884	1.0178	9.2062	2.1251	0.9363	3.0613		14,685.2118	14,685.2118	0.0980		14,687.2699

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					5.3847	0.0000	5.3847	2.6622	0.0000	2.6622			0.0000			0.0000
Off-Road	7.1976	55.6784	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916	0.0000	7,734.8376	7,734.8376	2.4080		7,785.4048
Total	7.1976	55.6784	55.9368	0.0768	5.3847	3.7953	9.1799	2.6622	3.4916	6.1538	0.0000	7,734.8376	7,734.8376	2.4080		7,785.4048

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.8740	40.0451	40.9234	0.1469	7.7701	1.0151	8.7852	2.0141	0.9338	2.9480		14,346.2488	14,346.2488	0.0771		14,347.8685
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	0.1591	0.2582	2.1678	4.5100e-003	0.4183	2.6100e-003	0.4210	0.1110	2.4200e-003	0.1134		338.9630	338.9630	0.0209		339.4014
Total	3.0330	40.3033	43.0912	0.1514	8.1884	1.0178	9.2062	2.1251	0.9363	3.0613		14,685.2118	14,685.2118	0.0980		14,687.2699

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.8069	0.0000	13.8069	6.8262	0.0000	6.8262			0.0000			0.0000
Off-Road	6.6864	72.8159	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621		7,608.8208	7,608.8208	2.4074		7,659.3752
Total	6.6864	72.8159	53.4214	0.0768	13.8069	3.4371	17.2439	6.8262	3.1621	9.9883		7,608.8208	7,608.8208	2.4074		7,659.3752

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.7493	36.8232	40.0004	0.1468	5.6676	0.9896	6.6572	1.4981	0.9103	2.4084		14,103.6956	14,103.6956	0.0769		14,105.3097
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	0.1459	0.2383	2.0007	4.5100e-003	0.4183	2.6200e-003	0.4210	0.1110	2.4300e-003	0.1134		326.2147	326.2147	0.0197		326.6291
Total	2.8952	37.0615	42.0011	0.1513	6.0860	0.9922	7.0782	1.6090	0.9128	2.5218		14,429.9103	14,429.9103	0.0966		14,431.9388

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					5.3847	0.0000	5.3847	2.6622	0.0000	2.6622			0.0000			0.0000
Off-Road	6.6864	50.9711	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621	0.0000	7,608.8208	7,608.8208	2.4074		7,659.3751
Total	6.6864	50.9711	53.4214	0.0768	5.3847	3.4371	8.8218	2.6622	3.1621	5.8243	0.0000	7,608.8208	7,608.8208	2.4074		7,659.3751

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.7493	36.8232	40.0004	0.1468	5.6676	0.9896	6.6572	1.4981	0.9103	2.4084		14,103.6956	14,103.6956	0.0769		14,105.3097
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	0.1459	0.2383	2.0007	4.5100e-003	0.4183	2.6200e-003	0.4210	0.1110	2.4300e-003	0.1134		326.2147	326.2147	0.0197		326.6291
Total	2.8952	37.0615	42.0011	0.1513	6.0860	0.9922	7.0782	1.6090	0.9128	2.5218		14,429.9103	14,429.9103	0.0966		14,431.9388

3.4 Route Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4141	14.8090	14.2364	0.0221		0.8032	0.8032		0.7389	0.7389		2,188.3558	2,188.3558	0.6924		2,202.8956
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4141	14.8090	14.2364	0.0221		0.8032	0.8032		0.7389	0.7389		2,188.3558	2,188.3558	0.6924		2,202.8956

3.4 Route Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0584	0.0953	0.8003	1.8000e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		130.4859	130.4859	7.8900e-003			130.6516
Total	0.0584	0.0953	0.8003	1.8000e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		130.4859	130.4859	7.8900e-003			130.6516

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	1.4141	11.6582	14.2364	0.0221		0.8032	0.8032		0.7389	0.7389	0.0000	2,188.3558	2,188.3558	0.6924			2,202.8956
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.4141	11.6582	14.2364	0.0221		0.8032	0.8032		0.7389	0.7389	0.0000	2,188.3558	2,188.3558	0.6924			2,202.8956

3.4 Route Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0584	0.0953	0.8003	1.8000e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		130.4859	130.4859	7.8900e-003			130.6516
Total	0.0584	0.0953	0.8003	1.8000e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		130.4859	130.4859	7.8900e-003			130.6516

3.4 Route Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.3190	13.6679	14.2233	0.0221		0.7333	0.7333		0.6746	0.6746		2,140.5908	2,140.5908	0.6923			2,155.1294
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3190	13.6679	14.2233	0.0221		0.7333	0.7333		0.6746	0.6746		2,140.5908	2,140.5908	0.6923			2,155.1294

3.4 Route Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0545	0.0892	0.7470	1.8000e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		125.1795	125.1795	7.5200e-003			125.3375
Total	0.0545	0.0892	0.7470	1.8000e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		125.1795	125.1795	7.5200e-003			125.3375

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	1.3190	10.7622	14.2233	0.0221		0.7333	0.7333		0.6746	0.6746	0.0000	2,140.5908	2,140.5908	0.6923			2,155.1294
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3190	10.7622	14.2233	0.0221		0.7333	0.7333		0.6746	0.6746	0.0000	2,140.5908	2,140.5908	0.6923			2,155.1294

3.4 Route Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0545	0.0892	0.7470	1.8000e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		125.1795	125.1795	7.5200e-003		125.3375
Total	0.0545	0.0892	0.7470	1.8000e-003	0.4582	1.0500e-003	0.4593	0.1158	9.7000e-004	0.1168		125.1795	125.1795	7.5200e-003		125.3375

3.4 Route 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	1.2205	12.5540	14.2235	0.0221		0.6600	0.6600		0.6072	0.6072		2,140.0931	2,140.0931	0.6922		2,154.6282
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2205	12.5540	14.2235	0.0221		0.6600	0.6600		0.6072	0.6072		2,140.0931	2,140.0931	0.6922		2,154.6282

3.4 Route 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	0.0517	0.0846	0.7101	1.8000e-003	0.4582	1.0600e-003	0.4593	0.1158	9.9000e-004	0.1168		123.3317	123.3317	7.3100e-003			123.4852
Total	0.0517	0.0846	0.7101	1.8000e-003	0.4582	1.0600e-003	0.4593	0.1158	9.9000e-004	0.1168		123.3317	123.3317	7.3100e-003			123.4852

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	1.2205	9.8874	14.2235	0.0221		0.6600	0.6600		0.6072	0.6072	0.0000	2,140.093 1	2,140.093 1	0.6922			2,154.628 2
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.2205	9.8874	14.2235	0.0221		0.6600	0.6600		0.6072	0.6072	0.0000	2,140.093 1	2,140.093 1	0.6922			2,154.628 2

3.4 Route 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	0.0517	0.0846	0.7101	1.8000e-003	0.4582	1.0600e-003	0.4593	0.1158	9.9000e-004	0.1168		123.3317	123.3317	7.3100e-003			123.4852
Total	0.0517	0.0846	0.7101	1.8000e-003	0.4582	1.0600e-003	0.4593	0.1158	9.9000e-004	0.1168		123.3317	123.3317	7.3100e-003			123.4852

3.5 Bridge/Overpass - 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	2.5100	24.3862	22.7288	0.0373		1.2595	1.2595		1.1657	1.1657		3,575.4622	3,575.4622	1.1199			3,598.9810
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.5100	24.3862	22.7288	0.0373		1.2595	1.2595		1.1657	1.1657		3,575.4622	3,575.4622	1.1199			3,598.9810

3.5 Bridge/Overpass - 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	0.0545	0.0892	0.7470	1.8000e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		125.1795	125.1795	7.5200e-003			125.3375
Total	0.0545	0.0892	0.7470	1.8000e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		125.1795	125.1795	7.5200e-003			125.3375

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	2.5100	18.2720	22.7288	0.0373		1.2595	1.2595		1.1657	1.1657	0.0000	3,575.4622	3,575.4622	1.1199			3,598.9810
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.5100	18.2720	22.7288	0.0373		1.2595	1.2595		1.1657	1.1657	0.0000	3,575.4622	3,575.4622	1.1199			3,598.9810

3.5 Bridge/Overpass - 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	0.0545	0.0892	0.7470	1.8000e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		125.1795	125.1795	7.5200e-003			125.3375
Total	0.0545	0.0892	0.7470	1.8000e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		125.1795	125.1795	7.5200e-003			125.3375

3.5 Bridge/Overpass - 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	2.3009	22.2869	22.5439	0.0373		1.1224	1.1224		1.0385	1.0385		3,574.9844	3,574.9844	1.1161			3,598.4233
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.3009	22.2869	22.5439	0.0373		1.1224	1.1224		1.0385	1.0385		3,574.9844	3,574.9844	1.1161			3,598.4233

3.5 Bridge/Overpass - 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	0.0517	0.0846	0.7101	1.8000e-003	0.1673	1.0600e-003	0.1684	0.0444	9.9000e-004	0.0454		123.3317	123.3317	7.3100e-003		123.4852
Total	0.0517	0.0846	0.7101	1.8000e-003	0.1673	1.0600e-003	0.1684	0.0444	9.9000e-004	0.0454		123.3317	123.3317	7.3100e-003		123.4852

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	2.3009	16.7068	22.5439	0.0373		1.1224	1.1224		1.0385	1.0385	0.0000	3,574.9844	3,574.9844	1.1161		3,598.4233
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3009	16.7068	22.5439	0.0373		1.1224	1.1224		1.0385	1.0385	0.0000	3,574.9844	3,574.9844	1.1161		3,598.4233

3.5 Bridge/Overpass - 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	0.0517	0.0846	0.7101	1.8000e-003	0.1673	1.0600e-003	0.1684	0.0444	9.9000e-004	0.0454		123.3317	123.3317	7.3100e-003		123.4852
Total	0.0517	0.0846	0.7101	1.8000e-003	0.1673	1.0600e-003	0.1684	0.0444	9.9000e-004	0.0454		123.3317	123.3317	7.3100e-003		123.4852

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.469364	0.065576	0.169825	0.159036	0.038089	0.006139	0.011322	0.071493	0.001371	0.001211	0.003602	0.000518	0.002454

5.0 Energy Detail

4.4 Fleet Mix

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
lb/day											lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484
Unmitigated	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484

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					
Consumer Products	0.9127					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9900e-003	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484
Architectural Coating	57.9510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484

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					
Consumer Products	0.9127					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9900e-003	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484
Architectural Coating	57.9510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	58.8657	2.0000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0459	0.0459	1.2000e-004		0.0484

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 Vegetation

CV Link: Alternative 1
Salton Sea Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	175.27	Acre	233.69	7,634,761.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Buildout of Alternative 1, 40 mile CV Link route. Assumes 4 year buildout 2018-2021.

Land Use - Assumes Alternative 1 CV Link path will be 40 miles with an average pave width of 30 ft. Total project AC assumes a 40ft width for construction staging and landscape buffers.

Construction Phase - Assumes a 4 year buildout starting early 2018 and operational in 2021. Assumes multiple segments will be constructed simultaneously.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Trips and VMT - Assumes 30 mile trip length for import and export.

On-road Fugitive Dust - Access to the project site will be via existing roadways.

Grading - Material import and export based on Take-Off Raw Data from Alta Group. 75% of total based on path length.

Road Dust - The CV Link will be paved at buildout.

Consumer Products - There will no consumer products associated with the CV Link project.

Area Coating - Architectural coatings are not required for the CV Link.

Energy Use -

Water And Wastewater - Water demands based on landscaping projections.

Solid Waste - Solid waste generation will be limited to trash bins located along the CV Link, however the project will not directly generate waste.

Construction Off-road Equipment Mitigation - Assumes adherence to standard dust control measures.

Off-road Equipment - Route/pathway paving.

Off-road Equipment - Bridge/overpass construction/placement.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstructionPhase	NumDays	465.00	210.00
tblConstructionPhase	NumDays	330.00	600.00
tblConstructionPhase	NumDays	180.00	175.00
tblConstructionPhase	PhaseEndDate	1/13/2023	12/31/2021
tblConstructionPhase	PhaseStartDate	10/9/2021	9/26/2020
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblGrading	AcresOfGrading	630.00	233.00
tblGrading	MaterialExported	0.00	112,500.00
tblGrading	MaterialImported	0.00	198,750.00
tblLandUse	LotAcreage	175.27	233.69

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
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tblOnRoadDust	HaulingPercentPave	50.00	100.00
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tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00

tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	0.00	2,875.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	30.00	18.00
tblTripsAndVMT	WorkerTripNumber	25.00	15.00
tblTripsAndVMT	WorkerTripNumber	35.00	15.00
tblTripsAndVMT	WorkerTripNumber	50.00	20.00
tblWater	OutdoorWaterUseRate	0.00	5,314,636.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.7852	8.8084	6.5295	0.0132	2.7688	0.3798	3.1486	1.3693	0.3494	1.7187	0.0000	1,187.3518	1,187.3518	0.2225	0.0000	1,192.0240
2019	0.6547	7.4297	6.2220	0.0141	1.7280	0.3199	2.0479	0.7949	0.2943	1.0892	0.0000	1,242.5381	1,242.5381	0.1832	0.0000	1,246.3858
2020	0.2682	2.6584	2.7650	4.4500e-003	0.0205	0.1404	0.1609	5.4500e-003	0.1294	0.1349	0.0000	383.6191	383.6191	0.1190	0.0000	386.1171
2021	0.4338	4.1969	4.5175	7.4500e-003	0.0287	0.2135	0.2422	7.6000e-003	0.1972	0.2048	0.0000	640.7384	640.7384	0.1970	0.0000	644.8753
Total	2.1418	23.0933	20.0340	0.0392	4.5460	1.0536	5.5996	2.1773	0.9703	3.1476	0.0000	3,454.2474	3,454.2474	0.7217	0.0000	3,469.4022

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	8.9863	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1300e-003	3.1300e-003	1.0000e-005	0.0000	3.3100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	583.5990	0.0000	583.5990	34.4897	0.0000	1,307.8830
Water						0.0000	0.0000		0.0000	0.0000	0.0000	16.8969	16.8969	7.8000e-004	1.6000e-004	16.9630
Total	8.9863	1.0000e-005	1.6100e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	583.5990	16.9000	600.4991	34.4905	1.6000e-004	1,324.8493

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	8.9863	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1300e-003	3.1300e-003	1.0000e-005	0.0000	3.3100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	583.5990	0.0000	583.5990	34.4897	0.0000	1,307.8830
Water						0.0000	0.0000		0.0000	0.0000	0.0000	16.8969	16.8969	7.8000e-004	1.6000e-004	16.9630
Total	8.9863	1.0000e-005	1.6100e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	583.5990	16.9000	600.4991	34.4905	1.6000e-004	1,324.8493

	ROG	NOx	CO	SO2	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	1/1/2018	8/31/2018	5	175	
2	Grading	Grading	9/1/2018	6/21/2019	5	210	
3	Route Paving	Paving	6/22/2019	10/8/2021	5	600	
4	Bridge/Overpass	Paving	9/26/2020	12/31/2021	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 233

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Pavers	4	4.00	125	0.42
Paving	Paving Equipment	4	4.00	130	0.36
Paving	Rollers	4	4.00	80	0.38
Site Preparation	Off-Highway Trucks	4	4.00	400	0.38
Site Preparation	Rubber Tired Dozers	4	4.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Grading	Excavators	4	4.00	162	0.38
Grading	Graders	4	4.00	174	0.41
Grading	Rubber Tired Dozers	4	4.00	255	0.40
Grading	Scrapers	4	4.00	361	0.48
Grading	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Route Paving	Pavers	4	4.00	125	0.42
Route Paving	Paving Equipment	4	4.00	130	0.36
Bridge/Overpass	Cranes	2	4.00	226	0.29
Bridge/Overpass	Excavators	2	4.00	162	0.38
Bridge/Overpass	Forklifts	2	4.00	89	0.20
Bridge/Overpass	Welders	2	4.00	46	0.45
Bridge/Overpass	Pavers	2	8.00	125	0.42
Bridge/Overpass	Paving Equipment	2	8.00	130	0.36
Route Paving	Rollers	2	8.00	80	0.38
Bridge/Overpass	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	12	18.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Route Paving	10	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Bridge/Overpass	14	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Grading	20	20.00	0.00	24,844.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0539	0.0000	1.0539	0.5793	0.0000	0.5793	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3695	3.9567	2.7090	4.4000e-003		0.1800	0.1800		0.1656	0.1656	0.0000	401.9736	401.9736	0.1251	0.0000	404.6015
Total	0.3695	3.9567	2.7090	4.4000e-003	1.0539	0.1800	1.2339	0.5793	0.1656	0.7449	0.0000	401.9736	401.9736	0.1251	0.0000	404.6015

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4300e-003	7.8600e-003	0.0741	1.5000e-004	0.0130	8.0000e-005	0.0131	3.4600e-003	8.0000e-005	3.5300e-003	0.0000	10.2506	10.2506	6.0000e-004	0.0000	10.2632
Total	5.4300e-003	7.8600e-003	0.0741	1.5000e-004	0.0130	8.0000e-005	0.0131	3.4600e-003	8.0000e-005	3.5300e-003	0.0000	10.2506	10.2506	6.0000e-004	0.0000	10.2632

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					0.4110	0.0000	0.4110	0.2259	0.0000	0.2259	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3695	2.7697	2.7090	4.4000e-003		0.1800	0.1800		0.1656	0.1656	0.0000	401.9731	401.9731	0.1251	0.0000	404.6010
Total	0.3695	2.7697	2.7090	4.4000e-003	0.4110	0.1800	0.5910	0.2259	0.1656	0.3915	0.0000	401.9731	401.9731	0.1251	0.0000	404.6010

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4300e-003	7.8600e-003	0.0741	1.5000e-004	0.0130	8.0000e-005	0.0131	3.4600e-003	8.0000e-005	3.5300e-003	0.0000	10.2506	10.2506	6.0000e-004	0.0000	10.2632
Total	5.4300e-003	7.8600e-003	0.0741	1.5000e-004	0.0130	8.0000e-005	0.0131	3.4600e-003	8.0000e-005	3.5300e-003	0.0000	10.2506	10.2506	6.0000e-004	0.0000	10.2632

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4192	0.0000	1.4192	0.7132	0.0000	0.7132	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3095	3.4202	2.4053	3.3000e-003		0.1632	0.1632		0.1501	0.1501	0.0000	301.7279	301.7279	0.0939	0.0000	303.7004
Total	0.3095	3.4202	2.4053	3.3000e-003	1.4192	0.1632	1.5824	0.7132	0.1501	0.8633	0.0000	301.7279	301.7279	0.0939	0.0000	303.7004

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0978	1.4193	1.3007	5.2800e-003	0.2756	0.0364	0.3121	0.0715	0.0335	0.1050	0.0000	467.8026	467.8026	2.4900e-003	0.0000	467.8549
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	2.9700e-003	4.2900e-003	0.0405	8.0000e-005	7.1100e-003	4.0000e-005	7.1500e-003	1.8900e-003	4.0000e-005	1.9300e-003	0.0000	5.5972	5.5972	3.3000e-004	0.0000	5.6040
Total	0.1007	1.4235	1.3411	5.3600e-003	0.2828	0.0365	0.3192	0.0734	0.0336	0.1069	0.0000	473.3998	473.3998	2.8200e-003	0.0000	473.4589

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					0.5535	0.0000	0.5535	0.2781	0.0000	0.2781	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3095	2.3942	2.4053	3.3000e-003		0.1632	0.1632		0.1501	0.1501	0.0000	301.7275	301.7275	0.0939	0.0000	303.7001
Total	0.3095	2.3942	2.4053	3.3000e-003	0.5535	0.1632	0.7167	0.2781	0.1501	0.4283	0.0000	301.7275	301.7275	0.0939	0.0000	303.7001

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0978	1.4193	1.3007	5.2800e-003	0.2756	0.0364	0.3121	0.0715	0.0335	0.1050	0.0000	467.8026	467.8026	2.4900e-003	0.0000	467.8549
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	2.9700e-003	4.2900e-003	0.0405	8.0000e-005	7.1100e-003	4.0000e-005	7.1500e-003	1.8900e-003	4.0000e-005	1.9300e-003	0.0000	5.5972	5.5972	3.3000e-004	0.0000	5.6040
Total	0.1007	1.4235	1.3411	5.3600e-003	0.2828	0.0365	0.3192	0.0734	0.0336	0.1069	0.0000	473.3998	473.3998	2.8200e-003	0.0000	473.4589

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4192	0.0000	1.4192	0.7132	0.0000	0.7132	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4146	4.5146	3.3121	4.7600e-003		0.2131	0.2131		0.1961	0.1961	0.0000	427.9616	427.9616	0.1354	0.0000	430.8050
Total	0.4146	4.5146	3.3121	4.7600e-003	1.4192	0.2131	1.6323	0.7132	0.1961	0.9092	0.0000	427.9616	427.9616	0.1354	0.0000	430.8050

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1353	1.8816	1.8272	7.6000e-003	0.2901	0.0512	0.3413	0.0767	0.0471	0.1238	0.0000	663.1025	663.1025	3.5800e-003	0.0000	663.1777
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9300e-003	5.7200e-003	0.0540	1.2000e-004	0.0103	6.0000e-005	0.0103	2.7200e-003	6.0000e-005	2.7800e-003	0.0000	7.7674	7.7674	4.4000e-004	0.0000	7.7767
Total	0.1392	1.8873	1.8812	7.7200e-003	0.3003	0.0513	0.3516	0.0795	0.0472	0.1266	0.0000	670.8699	670.8699	4.0200e-003	0.0000	670.9544

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					0.5535	0.0000	0.5535	0.2781	0.0000	0.2781	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4146	3.1602	3.3121	4.7600e-003		0.2131	0.2131		0.1961	0.1961	0.0000	427.9611	427.9611	0.1354	0.0000	430.8045
Total	0.4146	3.1602	3.3121	4.7600e-003	0.5535	0.2131	0.7666	0.2781	0.1961	0.4742	0.0000	427.9611	427.9611	0.1354	0.0000	430.8045

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1353	1.8816	1.8272	7.6000e-003	0.2901	0.0512	0.3413	0.0767	0.0471	0.1238	0.0000	663.1025	663.1025	3.5800e-003	0.0000	663.1777
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9300e-003	5.7200e-003	0.0540	1.2000e-004	0.0103	6.0000e-005	0.0103	2.7200e-003	6.0000e-005	2.7800e-003	0.0000	7.7674	7.7674	4.4000e-004	0.0000	7.7767
Total	0.1392	1.8873	1.8812	7.7200e-003	0.3003	0.0513	0.3516	0.0795	0.0472	0.1266	0.0000	670.8699	670.8699	4.0200e-003	0.0000	670.9544

3.4 Route Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0977	1.0231	0.9840	1.5300e-003		0.0555	0.0555		0.0510	0.0510	0.0000	137.2704	137.2704	0.0434	0.0000	138.1824
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0977	1.0231	0.9840	1.5300e-003		0.0555	0.0555		0.0510	0.0510	0.0000	137.2704	137.2704	0.0434	0.0000	138.1824

3.4 Route Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2500e-003	4.7400e-003	0.0447	1.0000e-004	8.4900e-003	5.0000e-005	8.5500e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	6.4363	6.4363	3.7000e-004	0.0000	6.4440
Total	3.2500e-003	4.7400e-003	0.0447	1.0000e-004	8.4900e-003	5.0000e-005	8.5500e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	6.4363	6.4363	3.7000e-004	0.0000	6.4440

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	0.0977	0.8052	0.9840	1.5300e-003		0.0555	0.0555		0.0510	0.0510	0.0000	137.2702	137.2702	0.0434	0.0000	138.1822
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0977	0.8052	0.9840	1.5300e-003		0.0555	0.0555		0.0510	0.0510	0.0000	137.2702	137.2702	0.0434	0.0000	138.1822

3.4 Route Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2500e-003	4.7400e-003	0.0447	1.0000e-004	8.4900e-003	5.0000e-005	8.5500e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	6.4363	6.4363	3.7000e-004	0.0000	6.4440
Total	3.2500e-003	4.7400e-003	0.0447	1.0000e-004	8.4900e-003	5.0000e-005	8.5500e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	6.4363	6.4363	3.7000e-004	0.0000	6.4440

3.4 Route Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1742	1.8058	1.8802	2.9200e-003		0.0968	0.0968		0.0891	0.0891	0.0000	256.7870	256.7870	0.0831	0.0000	258.5310
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1742	1.8058	1.8802	2.9200e-003		0.0968	0.0968		0.0891	0.0891	0.0000	256.7870	256.7870	0.0831	0.0000	258.5310

3.4 Route Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-003	8.4900e-003	0.0800	1.9000e-004	0.0162	1.0000e-004	0.0164	4.3100e-003	1.0000e-004	4.4100e-003	0.0000	11.8090	11.8090	6.7000e-004	0.0000	11.8231
Total	5.8000e-003	8.4900e-003	0.0800	1.9000e-004	0.0162	1.0000e-004	0.0164	4.3100e-003	1.0000e-004	4.4100e-003	0.0000	11.8090	11.8090	6.7000e-004	0.0000	11.8231

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	0.1742	1.4215	1.8802	2.9200e-003		0.0968	0.0968		0.0891	0.0891	0.0000	256.7867	256.7867	0.0831	0.0000	258.5307
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1742	1.4215	1.8802	2.9200e-003		0.0968	0.0968		0.0891	0.0891	0.0000	256.7867	256.7867	0.0831	0.0000	258.5307

3.4 Route Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-003	8.4900e-003	0.0800	1.9000e-004	0.0162	1.0000e-004	0.0164	4.3100e-003	1.0000e-004	4.4100e-003	0.0000	11.8090	11.8090	6.7000e-004	0.0000	11.8231
Total	5.8000e-003	8.4900e-003	0.0800	1.9000e-004	0.0162	1.0000e-004	0.0164	4.3100e-003	1.0000e-004	4.4100e-003	0.0000	11.8090	11.8090	6.7000e-004	0.0000	11.8231

3.4 Route 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	0.1237	1.2724	1.4425	2.2400e-003		0.0669	0.0669		0.0615	0.0615	0.0000	196.9547	196.9547	0.0637	0.0000	198.2924
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1237	1.2724	1.4425	2.2400e-003		0.0669	0.0669		0.0615	0.0615	0.0000	196.9547	196.9547	0.0637	0.0000	198.2924

3.4 Route 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	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	0.0000
Worker	4.2200e-003	6.1800e-003	0.0584	1.4000e-004	0.0125	8.0000e-005	0.0125	3.3100e-003	7.0000e-005	3.3800e-003	0.0000	8.9263	8.9263	5.0000e-004	0.0000	8.9368	
Total	4.2200e-003	6.1800e-003	0.0584	1.4000e-004	0.0125	8.0000e-005	0.0125	3.3100e-003	7.0000e-005	3.3800e-003	0.0000	8.9263	8.9263	5.0000e-004	0.0000	8.9368	

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	0.1237	1.0018	1.4425	2.2400e-003		0.0669	0.0669		0.0615	0.0615	0.0000	196.9545	196.9545	0.0637	0.0000	198.2922
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1237	1.0018	1.4425	2.2400e-003		0.0669	0.0669		0.0615	0.0615	0.0000	196.9545	196.9545	0.0637	0.0000	198.2922

3.4 Route 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	4.2200e-003	6.1800e-003	0.0584	1.4000e-004	0.0125	8.0000e-005	0.0125	3.3100e-003	7.0000e-005	3.3800e-003	0.0000	8.9263	8.9263	5.0000e-004	0.0000	8.9368
Total	4.2200e-003	6.1800e-003	0.0584	1.4000e-004	0.0125	8.0000e-005	0.0125	3.3100e-003	7.0000e-005	3.3800e-003	0.0000	8.9263	8.9263	5.0000e-004	0.0000	8.9368

3.5 Bridge/Overpass - 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	0.0866	0.8419	0.7838	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9131	111.9131	0.0351	0.0000	112.6492
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0866	0.8419	0.7838	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9131	111.9131	0.0351	0.0000	112.6492

3.5 Bridge/Overpass - 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	1.5300e-003	2.2400e-003	0.0211	5.0000e-005	4.2800e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1600e-003	0.0000	3.1100	3.1100	1.8000e-004	0.0000	3.1137
Total	1.5300e-003	2.2400e-003	0.0211	5.0000e-005	4.2800e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1600e-003	0.0000	3.1100	3.1100	1.8000e-004	0.0000	3.1137

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	0.0866	0.6308	0.7838	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9129	111.9129	0.0351	0.0000	112.6491
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0866	0.6308	0.7838	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9129	111.9129	0.0351	0.0000	112.6491

3.5 Bridge/Overpass - 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	1.5300e-003	2.2400e-003	0.0211	5.0000e-005	4.2800e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1600e-003	0.0000	3.1100	3.1100	1.8000e-004	0.0000	3.1137
Total	1.5300e-003	2.2400e-003	0.0211	5.0000e-005	4.2800e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1600e-003	0.0000	3.1100	3.1100	1.8000e-004	0.0000	3.1137

3.5 Bridge/Overpass - 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	0.3004	2.9103	2.9407	4.8700e-003		0.1465	0.1465		0.1356	0.1356	0.0000	423.2667	423.2667	0.1322	0.0000	426.0418
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3004	2.9103	2.9407	4.8700e-003		0.1465	0.1465		0.1356	0.1356	0.0000	423.2667	423.2667	0.1322	0.0000	426.0418

3.5 Bridge/Overpass - 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	5.4800e-003	8.0200e-003	0.0759	1.9000e-004	0.0162	1.0000e-004	0.0163	4.3000e-003	1.0000e-004	4.3900e-003	0.0000	11.5908	11.5908	6.5000e-004	0.0000	11.6044
Total	5.4800e-003	8.0200e-003	0.0759	1.9000e-004	0.0162	1.0000e-004	0.0163	4.3000e-003	1.0000e-004	4.3900e-003	0.0000	11.5908	11.5908	6.5000e-004	0.0000	11.6044

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	0.3004	2.1815	2.9407	4.8700e-003		0.1465	0.1465		0.1356	0.1356	0.0000	423.2662	423.2662	0.1322	0.0000	426.0412
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3004	2.1815	2.9407	4.8700e-003		0.1465	0.1465		0.1356	0.1356	0.0000	423.2662	423.2662	0.1322	0.0000	426.0412

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.469364	0.065576	0.169825	0.159036	0.038089	0.006139	0.011322	0.071493	0.001371	0.001211	0.003602	0.000518	0.002454

5.0 Energy Detail

~~4.4 Fleet Mix~~

Historical Energy Use: N

5.1 Mitigation Measures Energy

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive 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	8.9863	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1300e-003	3.1300e-003	1.0000e-005	0.0000	3.3100e-003
Unmitigated	8.9863	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1300e-003	3.1300e-003	1.0000e-005	0.0000	3.3100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.8468					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1393					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1300e-003	3.1300e-003	1.0000e-005	0.0000	3.3100e-003
Total	8.9863	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1300e-003	3.1300e-003	1.0000e-005	0.0000	3.3100e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Consumer Products	0.1393					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1300e-003	3.1300e-003	1.0000e-005	0.0000	3.3100e-003
Architectural Coating	8.8468					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.9863	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1300e-003	3.1300e-003	1.0000e-005	0.0000	3.3100e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.8969	7.8000e-004	1.6000e-004	16.9630
Unmitigated	16.8969	7.8000e-004	1.6000e-004	16.9630

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 5.31464	16.8969	7.8000e-004	1.6000e-004	16.9630
Total		16.8969	7.8000e-004	1.6000e-004	16.9630

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 5.31464	16.8969	7.8000e-004	1.6000e-004	16.9630
Total		16.8969	7.8000e-004	1.6000e-004	16.9630

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	583.5990	34.4897	0.0000	1,307.8830
Unmitigated	583.5990	34.4897	0.0000	1,307.8830

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	2875	583.5990	34.4897	0.0000	1,307.8830
Total		583.5990	34.4897	0.0000	1,307.8830

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	2875	583.5990	34.4897	0.0000	1,307.8830
Total		583.5990	34.4897	0.0000	1,307.8830

9.0 Operational Offroad

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

CV Link: Alternative 1
Salton Sea Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	175.27	Acre	233.69	7,634,761.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Buildout of Alternative 1, 40 mile CV Link route. Assumes 4 year buildout 2018-2021.

Land Use - Assumes Alternative 1 CV Link path will be 40 miles with an average pave width of 30 ft. Total project AC assumes a 40ft width for construction staging and landscape buffers.

Construction Phase - Assumes a 4 year buildout starting early 2018 and operational in 2021. Assumes multiple segments will be constructed simultaneously.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Trips and VMT - Assumes 30 mile trip length for import and export.

On-road Fugitive Dust - Access to the project site will be via existing roadways.

Grading - Material import and export based on Take-Off Raw Data from Alta Group. 75% of total based on path length.

Road Dust - The CV Link will be paved at buildout.

Consumer Products - There will no consumer products associated with the CV Link project.

Area Coating - Architectural coatings are not required for the CV Link.

Energy Use -

Water And Wastewater - Water demands based on landscaping projections.

Solid Waste - Solid waste generation will be limited to trash bins located along the CV Link, however the project will not directly generate waste.

Construction Off-road Equipment Mitigation - Assumes adherence to standard dust control measures.

Off-road Equipment - Route/pathway paving.

Off-road Equipment - Bridge/overpass construction/placement.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstructionPhase	NumDays	465.00	210.00
tblConstructionPhase	NumDays	330.00	600.00
tblConstructionPhase	NumDays	180.00	175.00
tblConstructionPhase	PhaseEndDate	1/13/2023	12/31/2021
tblConstructionPhase	PhaseStartDate	10/9/2021	9/26/2020
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblGrading	AcresOfGrading	630.00	233.00
tblGrading	MaterialExported	0.00	112,500.00
tblGrading	MaterialImported	0.00	198,750.00
tblLandUse	LotAcreage	175.27	233.69

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00

tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	0.00	2,875.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	30.00	18.00
tblTripsAndVMT	WorkerTripNumber	25.00	15.00
tblTripsAndVMT	WorkerTripNumber	35.00	15.00
tblTripsAndVMT	WorkerTripNumber	50.00	20.00
tblWater	OutdoorWaterUseRate	0.00	5,314,636.00

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					
2018	9.5325	110.5250	85.8431	0.2016	20.1721	4.6430	24.8151	8.5186	4.2715	12.7901	0.0000	19,881.74 77	19,881.74 77	2.4798	0.0000	19,933.82 34
2019	8.9233	101.3087	82.4061	0.2015	18.4163	4.2635	22.6799	8.0876	3.9224	12.0100	0.0000	19,547.36 68	19,547.36 68	2.4785	0.0000	19,599.41 49
2020	3.9505	38.3075	38.4365	0.0626	0.2510	2.0005	2.2515	0.0666	1.8474	1.9140	0.0000	5,939.045 1	5,939.045 1	1.8302	0.0000	5,977.478 2
2021	3.6359	35.0766	38.1853	0.0626	0.2510	1.7895	2.0405	0.0666	1.6522	1.7188	0.0000	5,935.070 7	5,935.070 7	1.8259	0.0000	5,973.413 7
Total	26.0422	285.2178	244.8709	0.5282	39.0904	12.6965	51.7869	16.7393	11.6935	28.4329	0.0000	51,303.23 03	51,303.23 03	8.6143	0.0000	51,484.13 02

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	49.2406	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	49.2406	1.6000e-004	0.0179	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004	0.0000	0.0405

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	49.2406	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	49.2406	1.6000e-004	0.0179	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004	0.0000	0.0405

	ROG	NOx	CO	SO2	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	1/1/2018	8/31/2018	5	175	
2	Grading	Grading	9/1/2018	6/21/2019	5	210	
3	Route Paving	Paving	6/22/2019	10/8/2021	5	600	
4	Bridge/Overpass	Paving	9/26/2020	12/31/2021	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 233

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Pavers	4	4.00	125	0.42
Paving	Paving Equipment	4	4.00	130	0.36
Paving	Rollers	4	4.00	80	0.38
Site Preparation	Off-Highway Trucks	4	4.00	400	0.38
Site Preparation	Rubber Tired Dozers	4	4.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Grading	Excavators	4	4.00	162	0.38
Grading	Graders	4	4.00	174	0.41
Grading	Rubber Tired Dozers	4	4.00	255	0.40
Grading	Scrapers	4	4.00	361	0.48
Grading	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Route Paving	Pavers	4	4.00	125	0.42
Route Paving	Paving Equipment	4	4.00	130	0.36
Bridge/Overpass	Cranes	2	4.00	226	0.29
Bridge/Overpass	Excavators	2	4.00	162	0.38
Bridge/Overpass	Forklifts	2	4.00	89	0.20
Bridge/Overpass	Welders	2	4.00	46	0.45
Bridge/Overpass	Pavers	2	8.00	125	0.42
Bridge/Overpass	Paving Equipment	2	8.00	130	0.36
Route Paving	Rollers	2	8.00	80	0.38
Bridge/Overpass	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	12	18.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Route Paving	10	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Bridge/Overpass	14	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Grading	20	20.00	0.00	24,844.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	4.2230	45.2199	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928		5,064.0003	5,064.0003	1.5765		5,097.1066
Total	4.2230	45.2199	30.9601	0.0503	12.0442	2.0574	14.1016	6.6205	1.8928	8.5133		5,064.0003	5,064.0003	1.5765		5,097.1066

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003		131.7535
Total	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003		131.7535

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					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820			0.0000			0.0000
Off-Road	4.2230	31.6539	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928	0.0000	5,064.0003	5,064.0003	1.5765		5,097.1066
Total	4.2230	31.6539	30.9601	0.0503	4.6972	2.0574	6.7547	2.5820	1.8928	4.4748	0.0000	5,064.0003	5,064.0003	1.5765		5,097.1066

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003		131.7535
Total	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003		131.7535

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.5160	0.0000	13.5160	6.7922	0.0000	6.7922			0.0000			0.0000
Off-Road	7.1976	79.5405	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916		7,734.8376	7,734.8376	2.4080		7,785.4048
Total	7.1976	79.5405	55.9368	0.0768	13.5160	3.7953	17.3113	6.7922	3.4916	10.2838		7,734.8376	7,734.8376	2.4080		7,785.4048

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2494	30.8912	28.8533	0.1228	6.4887	0.8467	7.3354	1.6820	0.7789	2.4609		12,000.6926	12,000.6926	0.0635		12,002.0257
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	0.0855	0.0933	1.0530	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		146.2174	146.2174	8.3500e-003		146.3928
Total	2.3349	30.9845	29.9063	0.1248	6.6561	0.8478	7.5038	1.7264	0.7799	2.5062		12,146.9100	12,146.9100	0.0718		12,148.4186

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					5.2712	0.0000	5.2712	2.6490	0.0000	2.6490			0.0000			0.0000
Off-Road	7.1976	55.6784	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916	0.0000	7,734.8376	7,734.8376	2.4080		7,785.4048
Total	7.1976	55.6784	55.9368	0.0768	5.2712	3.7953	9.0665	2.6490	3.4916	6.1406	0.0000	7,734.8376	7,734.8376	2.4080		7,785.4048

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2494	30.8912	28.8533	0.1228	6.4887	0.8467	7.3354	1.6820	0.7789	2.4609		12,000.6926	12,000.6926	0.0635		12,002.0257
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	0.0855	0.0933	1.0530	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		146.2174	146.2174	8.3500e-003		146.3928
Total	2.3349	30.9845	29.9063	0.1248	6.6561	0.8478	7.5038	1.7264	0.7799	2.5062		12,146.9100	12,146.9100	0.0718		12,148.4186

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.5160	0.0000	13.5160	6.7922	0.0000	6.7922			0.0000			0.0000
Off-Road	6.6864	72.8159	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621		7,608.8208	7,608.8208	2.4074		7,659.3752
Total	6.6864	72.8159	53.4214	0.0768	13.5160	3.4371	16.9531	6.7922	3.1621	9.9543		7,608.8208	7,608.8208	2.4074		7,659.3752

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1584	28.4066	28.0111	0.1227	4.7330	0.8254	5.5584	1.2510	0.7593	2.0103		11,797.8077	11,797.8077	0.0632		11,799.1357
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	0.0785	0.0862	0.9735	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		140.7383	140.7383	7.8900e-003		140.9040
Total	2.2368	28.4929	28.9847	0.1246	4.9003	0.8264	5.7268	1.2954	0.7603	2.0557		11,938.5460	11,938.5460	0.0711		11,940.0397

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					5.2712	0.0000	5.2712	2.6490	0.0000	2.6490			0.0000			0.0000
Off-Road	6.6864	50.9711	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621	0.0000	7,608.8208	7,608.8208	2.4074		7,659.3751
Total	6.6864	50.9711	53.4214	0.0768	5.2712	3.4371	8.7083	2.6490	3.1621	5.8111	0.0000	7,608.8208	7,608.8208	2.4074		7,659.3751

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1584	28.4066	28.0111	0.1227	4.7330	0.8254	5.5584	1.2510	0.7593	2.0103		11,797.8077	11,797.8077	0.0632		11,799.1357
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	0.0785	0.0862	0.9735	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		140.7383	140.7383	7.8900e-003		140.9040
Total	2.2368	28.4929	28.9847	0.1246	4.9003	0.8264	5.7268	1.2954	0.7603	2.0557		11,938.5460	11,938.5460	0.0711		11,940.0397

3.4 Route Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989		2,223.6499

3.4 Route Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0589	0.0647	0.7301	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		105.5537	105.5537	5.9200e-003			105.6780
Total	0.0589	0.0647	0.7301	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		105.5537	105.5537	5.9200e-003			105.6780

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	1.4259	11.7542	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447	0.0000	2,208.9731	2,208.9731	0.6989			2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.4259	11.7542	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447	0.0000	2,208.9731	2,208.9731	0.6989			2,223.6499

3.4 Route Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0589	0.0647	0.7301	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		105.5537	105.5537	5.9200e-003			105.6780
Total	0.0589	0.0647	0.7301	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		105.5537	105.5537	5.9200e-003			105.6780

3.4 Route Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988			2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988			2,175.4326

3.4 Route Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003		101.3925
Total	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003		101.3925

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	1.3301	10.8508	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3301	10.8508	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326

3.4 Route Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003		101.3925
Total	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003		101.3925

3.4 Route 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	1.2308	12.6607	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120		2,160.2530	2,160.2530	0.6987		2,174.9250
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2308	12.6607	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120		2,160.2530	2,160.2530	0.6987		2,174.9250

3.4 Route 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	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933
Total	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933

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	1.2308	9.9685	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120	0.0000	2,160.2530	2,160.2530	0.6987		2,174.9250
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2308	9.9685	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120	0.0000	2,160.2530	2,160.2530	0.6987		2,174.9250

3.4 Route 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	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933
Total	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933

3.5 Bridge/Overpass - 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	2.5109	24.4019	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660		3,575.7399	3,575.7399	1.1200		3,599.2606
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5109	24.4019	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660		3,575.7399	3,575.7399	1.1200		3,599.2606

3.5 Bridge/Overpass - 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	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003		101.3925
Total	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003		101.3925

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	2.5109	18.2830	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660	0.0000	3,575.7399	3,575.7399	1.1200		3,599.2606
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5109	18.2830	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660	0.0000	3,575.7399	3,575.7399	1.1200		3,599.2606

3.5 Bridge/Overpass - 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	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003			101.3925
Total	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003			101.3925

3.5 Bridge/Overpass - 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	2.3017	22.3010	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388		3,575.2615	3,575.2615	1.1162			3,598.7022
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.3017	22.3010	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388		3,575.2615	3,575.2615	1.1162			3,598.7022

3.5 Bridge/Overpass - 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	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003			99.8933
Total	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003			99.8933

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	2.3017	16.7167	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388	0.0000	3,575.2615	3,575.2615	1.1162			3,598.7022
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.3017	16.7167	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388	0.0000	3,575.2615	3,575.2615	1.1162			3,598.7022

3.5 Bridge/Overpass - 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	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933
Total	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.469364	0.065576	0.169825	0.159036	0.038089	0.006139	0.011322	0.071493	0.001371	0.001211	0.003602	0.000518	0.002454

5.0 Energy Detail

4.4 Fleet Mix

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
lb/day											lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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						
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	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						
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	49.2406	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405
Unmitigated	49.2406	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405

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					
Consumer Products	0.7635					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6700e-003	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405
Architectural Coating	48.4755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	49.2407	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405

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					
Consumer Products	0.7635					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6700e-003	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405
Architectural Coating	48.4755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	49.2407	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405

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 Vegetation

CV Link: Alternative 1
Salton Sea Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	175.27	Acre	233.69	7,634,761.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Buildout of Alternative 1, 40 mile CV Link route. Assumes 4 year buildout 2018-2021.

Land Use - Assumes Alternative 1 CV Link path will be 40 miles with an average pave width of 30 ft. Total project AC assumes a 40ft width for construction staging and landscape buffers.

Construction Phase - Assumes a 4 year buildout starting early 2018 and operational in 2021. Assumes multiple segments will be constructed simultaneously.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Trips and VMT - Assumes 30 mile trip length for import and export.

On-road Fugitive Dust - Access to the project site will be via existing roadways.

Grading - Material import and export based on Take-Off Raw Data from Alta Group. 75% of total based on path length.

Road Dust - The CV Link will be paved at buildout.

Consumer Products - There will no consumer products associated with the CV Link project.

Area Coating - Architectural coatings are not required for the CV Link.

Energy Use -

Water And Wastewater - Water demands based on landscaping projections.

Solid Waste - Solid waste generation will be limited to trash bins located along the CV Link, however the project will not directly generate waste.

Construction Off-road Equipment Mitigation - Assumes adherence to standard dust control measures.

Off-road Equipment - Route/pathway paving.

Off-road Equipment - Bridge/overpass construction/placement.

Table Name	Column Name	Default Value	New Value
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	30.00
tblConstructionPhase	NumDays	465.00	210.00
tblConstructionPhase	NumDays	330.00	600.00
tblConstructionPhase	NumDays	180.00	175.00
tblConstructionPhase	PhaseEndDate	1/13/2023	12/31/2021
tblConstructionPhase	PhaseStartDate	10/9/2021	9/26/2020
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblGrading	AcresOfGrading	630.00	233.00
tblGrading	MaterialExported	0.00	112,500.00
tblGrading	MaterialImported	0.00	198,750.00
tblLandUse	LotAcreage	175.27	233.69

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
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tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00

tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	0.00	2,875.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	30.00	18.00
tblTripsAndVMT	WorkerTripNumber	25.00	15.00
tblTripsAndVMT	WorkerTripNumber	35.00	15.00
tblTripsAndVMT	WorkerTripNumber	50.00	20.00
tblWater	OutdoorWaterUseRate	0.00	5,314,636.00

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					
2018	9.6612	113.0852	90.9788	0.2013	20.1721	4.6440	24.8161	8.5186	4.2724	12.7910	0.0000	19,850.8667	19,850.8667	2.4807	0.0000	19,902.9618
2019	9.0407	103.6619	87.6257	0.2012	18.4163	4.2645	22.6809	8.0876	3.9233	12.0109	0.0000	19,517.1963	19,517.1963	2.4794	0.0000	19,569.2642
2020	3.9227	38.3202	38.1925	0.0624	0.2510	2.0005	2.2515	0.0666	1.8474	1.9140	0.0000	5,924.2663	5,924.2663	1.8302	0.0000	5,962.6994
2021	3.6100	35.0886	37.9519	0.0624	0.2510	1.7895	2.0405	0.0666	1.6522	1.7188	0.0000	5,920.5120	5,920.5120	1.8259	0.0000	5,958.8550
Total	26.2346	290.1559	254.7488	0.5272	39.0904	12.6985	51.7889	16.7393	11.6954	28.4347	0.0000	51,212.8413	51,212.8413	8.6162	0.0000	51,393.7805

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	49.2406	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	49.2406	1.6000e-004	0.0179	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004	0.0000	0.0405

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	49.2406	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	49.2406	1.6000e-004	0.0179	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004	0.0000	0.0405

	ROG	NOx	CO	SO2	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	1/1/2018	8/31/2018	5	175	
2	Grading	Grading	9/1/2018	6/21/2019	5	210	
3	Route Paving	Paving	6/22/2019	10/8/2021	5	600	
4	Bridge/Overpass	Paving	9/26/2020	12/31/2021	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 233

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Pavers	4	4.00	125	0.42
Paving	Paving Equipment	4	4.00	130	0.36
Paving	Rollers	4	4.00	80	0.38
Site Preparation	Off-Highway Trucks	4	4.00	400	0.38
Site Preparation	Rubber Tired Dozers	4	4.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Grading	Excavators	4	4.00	162	0.38
Grading	Graders	4	4.00	174	0.41
Grading	Rubber Tired Dozers	4	4.00	255	0.40
Grading	Scrapers	4	4.00	361	0.48
Grading	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Route Paving	Pavers	4	4.00	125	0.42
Route Paving	Paving Equipment	4	4.00	130	0.36
Bridge/Overpass	Cranes	2	4.00	226	0.29
Bridge/Overpass	Excavators	2	4.00	162	0.38
Bridge/Overpass	Forklifts	2	4.00	89	0.20
Bridge/Overpass	Welders	2	4.00	46	0.45
Bridge/Overpass	Pavers	2	8.00	125	0.42
Bridge/Overpass	Paving Equipment	2	8.00	130	0.36
Route Paving	Rollers	2	8.00	80	0.38
Bridge/Overpass	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	12	18.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Route Paving	10	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Bridge/Overpass	14	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Grading	20	20.00	0.00	24,844.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	4.2230	45.2199	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928		5,064.0003	5,064.0003	1.5765		5,097.1066
Total	4.2230	45.2199	30.9601	0.0503	12.0442	2.0574	14.1016	6.6205	1.8928	8.5133		5,064.0003	5,064.0003	1.5765		5,097.1066

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003			122.1845
Total	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003			122.1845

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					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820			0.0000			0.0000	
Off-Road	4.2230	31.6539	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928	0.0000	5,064.0003	5,064.0003	1.5765			5,097.1066
Total	4.2230	31.6539	30.9601	0.0503	4.6972	2.0574	6.7547	2.5820	1.8928	4.4748	0.0000	5,064.0003	5,064.0003	1.5765			5,097.1066

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003			122.1845
Total	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003			122.1845

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					13.5160	0.0000	13.5160	6.7922	0.0000	6.7922			0.0000				0.0000
Off-Road	7.1976	79.5405	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916		7,734.8376	7,734.8376	2.4080			7,785.4048
Total	7.1976	79.5405	55.9368	0.0768	13.5160	3.7953	17.3113	6.7922	3.4916	10.2838		7,734.8376	7,734.8376	2.4080			7,785.4048

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4000	33.4414	34.1748	0.1227	6.4887	0.8477	7.3365	1.6820	0.7798	2.4618		11,980.4439	11,980.4439	0.0644		11,981.7965
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	0.0636	0.1033	0.8671	1.8100e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		135.5852	135.5852	8.3500e-003		135.7606
Total	2.4637	33.5446	35.0419	0.1245	6.6561	0.8488	7.5048	1.7264	0.7808	2.5072		12,116.0291	12,116.0291	0.0728		12,117.5570

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					5.2712	0.0000	5.2712	2.6490	0.0000	2.6490			0.0000			0.0000
Off-Road	7.1976	55.6784	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916	0.0000	7,734.8376	7,734.8376	2.4080		7,785.4048
Total	7.1976	55.6784	55.9368	0.0768	5.2712	3.7953	9.0665	2.6490	3.4916	6.1406	0.0000	7,734.8376	7,734.8376	2.4080		7,785.4048

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4000	33.4414	34.1748	0.1227	6.4887	0.8477	7.3365	1.6820	0.7798	2.4618		11,980.4439	11,980.4439	0.0644		11,981.7965
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	0.0636	0.1033	0.8671	1.8100e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		135.5852	135.5852	8.3500e-003		135.7606
Total	2.4637	33.5446	35.0419	0.1245	6.6561	0.8488	7.5048	1.7264	0.7808	2.5072		12,116.0291	12,116.0291	0.0728		12,117.5570

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.5160	0.0000	13.5160	6.7922	0.0000	6.7922			0.0000			0.0000
Off-Road	6.6864	72.8159	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621		7,608.8208	7,608.8208	2.4074		7,659.3752
Total	6.6864	72.8159	53.4214	0.0768	13.5160	3.4371	16.9531	6.7922	3.1621	9.9543		7,608.8208	7,608.8208	2.4074		7,659.3752

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2959	30.7508	33.4040	0.1226	4.7330	0.8264	5.5594	1.2510	0.7602	2.0112		11,777.8896	11,777.8896	0.0642		11,779.2375
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	0.0584	0.0953	0.8003	1.8000e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		130.4859	130.4859	7.8900e-003		130.6516
Total	2.3543	30.8461	34.2043	0.1244	4.9003	0.8274	5.7278	1.2954	0.7612	2.0566		11,908.3755	11,908.3755	0.0721		11,909.8891

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					5.2712	0.0000	5.2712	2.6490	0.0000	2.6490			0.0000			0.0000
Off-Road	6.6864	50.9711	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621	0.0000	7,608.8208	7,608.8208	2.4074		7,659.3751
Total	6.6864	50.9711	53.4214	0.0768	5.2712	3.4371	8.7083	2.6490	3.1621	5.8111	0.0000	7,608.8208	7,608.8208	2.4074		7,659.3751

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2959	30.7508	33.4040	0.1226	4.7330	0.8264	5.5594	1.2510	0.7602	2.0112		11,777.8896	11,777.8896	0.0642		11,779.2375
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	0.0584	0.0953	0.8003	1.8000e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		130.4859	130.4859	7.8900e-003		130.6516
Total	2.3543	30.8461	34.2043	0.1244	4.9003	0.8274	5.7278	1.2954	0.7612	2.0566		11,908.3755	11,908.3755	0.0721		11,909.8891

3.4 Route Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989		2,223.6499

3.4 Route Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0438	0.0715	0.6002	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		97.8644	97.8644	5.9200e-003		97.9887
Total	0.0438	0.0715	0.6002	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		97.8644	97.8644	5.9200e-003		97.9887

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	1.4259	11.7542	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447	0.0000	2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4259	11.7542	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447	0.0000	2,208.9731	2,208.9731	0.6989		2,223.6499

3.4 Route Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0438	0.0715	0.6002	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		97.8644	97.8644	5.9200e-003		97.9887
Total	0.0438	0.0715	0.6002	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		97.8644	97.8644	5.9200e-003		97.9887

3.4 Route Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326

3.4 Route Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031
Total	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031

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	1.3301	10.8508	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988			2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3301	10.8508	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988			2,175.4326

3.4 Route Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031
Total	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031

3.4 Route 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	1.2308	12.6607	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120		2,160.2530	2,160.2530	0.6987			2,174.9250
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.2308	12.6607	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120		2,160.2530	2,160.2530	0.6987			2,174.9250

3.4 Route 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	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003			92.6139
Total	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003			92.6139

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	1.2308	9.9685	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120	0.0000	2,160.2530	2,160.2530	0.6987			2,174.9250
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.2308	9.9685	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120	0.0000	2,160.2530	2,160.2530	0.6987			2,174.9250

3.4 Route 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	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003		92.6139
Total	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003		92.6139

3.5 Bridge/Overpass - 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	2.5109	24.4019	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660		3,575.7399	3,575.7399	1.1200		3,599.2606
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5109	24.4019	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660		3,575.7399	3,575.7399	1.1200		3,599.2606

3.5 Bridge/Overpass - 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	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031
Total	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031

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	2.5109	18.2830	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660	0.0000	3,575.7399	3,575.7399	1.1200			3,599.2606
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.5109	18.2830	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660	0.0000	3,575.7399	3,575.7399	1.1200			3,599.2606

3.5 Bridge/Overpass - 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	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031
Total	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031

3.5 Bridge/Overpass - 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	2.3017	22.3010	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388		3,575.2615	3,575.2615	1.1162			3,598.7022
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.3017	22.3010	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388		3,575.2615	3,575.2615	1.1162			3,598.7022

3.5 Bridge/Overpass - 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	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003			92.6139
Total	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003			92.6139

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	2.3017	16.7167	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388	0.0000	3,575.2615	3,575.2615	1.1162			3,598.7022
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.3017	16.7167	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388	0.0000	3,575.2615	3,575.2615	1.1162			3,598.7022

3.5 Bridge/Overpass - 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	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003		92.6139
Total	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003		92.6139

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.469364	0.065576	0.169825	0.159036	0.038089	0.006139	0.011322	0.071493	0.001371	0.001211	0.003602	0.000518	0.002454

5.0 Energy Detail

4.4 Fleet Mix

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
lb/day											lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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	49.2406	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405
Unmitigated	49.2406	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405

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					
Consumer Products	0.7635					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6700e-003	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405
Architectural Coating	48.4755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	49.2407	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405

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					
Consumer Products	0.7635					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6700e-003	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405
Architectural Coating	48.4755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	49.2407	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0384	0.0384	1.0000e-004		0.0405

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 Vegetation

CV Link: Alternative 2
Salton Sea Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	233.96	Acre	311.95	10,191,297.60	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Buildout of Alternative 2, 49 mile CV Link.

Land Use - Assumes Alternative 1 CV Link path will be 44 miles with an average pave width of 30 ft. Total project AC assumes a 40ft width for construction staging and landscape buffers.

Construction Phase - Assumes a 4 year buildout starting early 2018 and operational in 2021. Assumes multiple segments will be constructed simultaneously.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Trips and VMT - Assumes 30 mile trip length for import and export.

On-road Fugitive Dust - Access to the project site will be via existing roadways.

Grading - Material import and export based on Take-Off Raw Data from Alta Group. 100% of total based on path length.

Road Dust - The CV Link will be paved at buildout.

Consumer Products - There will no consumer products associated with the CV Link project.

Area Coating - Architectural coatings are not required for the CV Link.

Energy Use -

Water And Wastewater - Water demands based on landscaping projections.

Solid Waste - Solid waste generation will be limited to trash bins located along the CV Link.

Construction Off-road Equipment Mitigation - Assumes adherence to standard dust control measures.

Off-road Equipment - Pathway paving.

Off-road Equipment - Bridge/overpass construction/placement.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstructionPhase	NumDays	620.00	210.00
tblConstructionPhase	NumDays	440.00	600.00
tblConstructionPhase	NumDays	440.00	330.00
tblConstructionPhase	NumDays	240.00	175.00
tblConstructionPhase	PhaseEndDate	1/13/2023	12/31/2021
tblConstructionPhase	PhaseStartDate	10/9/2021	9/26/2020
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblGrading	AcresOfGrading	630.00	311.00
tblGrading	MaterialExported	0.00	150,000.00
tblGrading	MaterialImported	0.00	265,000.00

tblLandUse	LotAcreage	233.96	311.95
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00

tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	0.00	2,875.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	30.00	18.00
tblTripsAndVMT	WorkerTripNumber	50.00	20.00
tblTripsAndVMT	WorkerTripNumber	25.00	15.00
tblTripsAndVMT	WorkerTripNumber	35.00	15.00
tblWater	OutdoorWaterUseRate	0.00	6,119,489.00

2.0 Emissions Summary

2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.8177	9.2815	6.9630	0.0150	2.9124	0.3919	3.3043	1.3992	0.3606	1.7597	0.0000	1,343.279 8	1,343.279 8	0.2233	0.0000	1,347.969 4
2019	0.6998	8.0569	6.8311	0.0166	1.8764	0.3369	2.2133	0.8265	0.3100	1.1365	0.0000	1,463.563 3	1,463.563 3	0.1844	0.0000	1,467.436 1
2020	0.2682	2.6584	2.7650	4.4500e-003	0.0205	0.1404	0.1609	5.4500e-003	0.1294	0.1349	0.0000	383.6191	383.6191	0.1190	0.0000	386.1171
2021	0.4338	4.1969	4.5175	7.4500e-003	0.0287	0.2135	0.2422	7.6000e-003	0.1972	0.2048	0.0000	640.7384	640.7384	0.1970	0.0000	644.8753
Total	2.2195	24.1936	21.0766	0.0435	4.8379	1.0828	5.9207	2.2387	0.9972	3.2359	0.0000	3,831.200 6	3,831.200 6	0.7237	0.0000	3,846.397 9

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	11.9954	2.0000e-005	2.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.1800e-003	4.1800e-003	1.0000e-005	0.0000	4.4100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	583.5990	0.0000	583.5990	34.4897	0.0000	1,307.8830
Water						0.0000	0.0000		0.0000	0.0000	0.0000	19.4558	19.4558	8.9000e-004	1.9000e-004	19.5319
Total	11.9954	2.0000e-005	2.1500e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	583.5990	19.4600	603.0590	34.4906	1.9000e-004	1,327.4193

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	11.9954	2.0000e-005	2.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.1800e-003	4.1800e-003	1.0000e-005	0.0000	4.4100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	583.5990	0.0000	583.5990	34.4897	0.0000	1,307.8830
Water						0.0000	0.0000		0.0000	0.0000	0.0000	19.4558	19.4558	8.9000e-004	1.9000e-004	19.5319
Total	11.9954	2.0000e-005	2.1500e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	583.5990	19.4600	603.0590	34.4906	1.9000e-004	1,327.4193

	ROG	NOx	CO	SO2	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	1/1/2018	8/31/2018	5	175	
2	Grading	Grading	9/1/2018	6/21/2019	5	210	
3	Route Paving	Paving	6/22/2019	10/8/2021	5	600	
4	Bridge/Overpass	Paving	9/26/2020	12/31/2021	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 311

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Pavers	4	4.00	125	0.42
Paving	Paving Equipment	4	4.00	130	0.36
Paving	Rollers	4	4.00	80	0.38
Site Preparation	Off-Highway Trucks	4	4.00	400	0.38
Site Preparation	Rubber Tired Dozers	4	4.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Grading	Excavators	4	4.00	162	0.38
Grading	Graders	4	4.00	174	0.41
Grading	Rubber Tired Dozers	4	4.00	255	0.40
Grading	Scrapers	4	4.00	361	0.48
Grading	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Route Paving	Pavers	4	4.00	125	0.42
Route Paving	Paving Equipment	4	4.00	130	0.36
Bridge/Overpass	Cranes	2	4.00	226	0.29
Bridge/Overpass	Excavators	2	4.00	162	0.38
Bridge/Overpass	Forklifts	2	4.00	89	0.20
Bridge/Overpass	Welders	2	4.00	46	0.45
Bridge/Overpass	Pavers	2	8.00	125	0.42
Bridge/Overpass	Paving Equipment	2	8.00	130	0.36
Route Paving	Rollers	2	8.00	80	0.38
Bridge/Overpass	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	12	18.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Grading	20	20.00	0.00	33,125.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Route Paving	10	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Bridge/Overpass	14	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0539	0.0000	1.0539	0.5793	0.0000	0.5793	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3695	3.9567	2.7090	4.4000e-003		0.1800	0.1800		0.1656	0.1656	0.0000	401.9736	401.9736	0.1251	0.0000	404.6015
Total	0.3695	3.9567	2.7090	4.4000e-003	1.0539	0.1800	1.2339	0.5793	0.1656	0.7449	0.0000	401.9736	401.9736	0.1251	0.0000	404.6015

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0000
Worker	5.4300e-003	7.8600e-003	0.0741	1.5000e-004	0.0130	8.0000e-005	0.0131	3.4600e-003	8.0000e-005	3.5300e-003	0.0000	10.2506	10.2506	6.0000e-004	0.0000	10.2632	10.2632
Total	5.4300e-003	7.8600e-003	0.0741	1.5000e-004	0.0130	8.0000e-005	0.0131	3.4600e-003	8.0000e-005	3.5300e-003	0.0000	10.2506	10.2506	6.0000e-004	0.0000	10.2632	10.2632

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					0.4110	0.0000	0.4110	0.2259	0.0000	0.2259	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3695	2.5719	2.7090	4.4000e-003		0.1800	0.1800		0.1656	0.1656	0.0000	401.9731	401.9731	0.1251	0.0000	404.6010
Total	0.3695	2.5719	2.7090	4.4000e-003	0.4110	0.1800	0.5910	0.2259	0.1656	0.3915	0.0000	401.9731	401.9731	0.1251	0.0000	404.6010

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4300e-003	7.8600e-003	0.0741	1.5000e-004	0.0130	8.0000e-005	0.0131	3.4600e-003	8.0000e-005	3.5300e-003	0.0000	10.2506	10.2506	6.0000e-004	0.0000	10.2632
Total	5.4300e-003	7.8600e-003	0.0741	1.5000e-004	0.0130	8.0000e-005	0.0131	3.4600e-003	8.0000e-005	3.5300e-003	0.0000	10.2506	10.2506	6.0000e-004	0.0000	10.2632

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4709	0.0000	1.4709	0.7192	0.0000	0.7192	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3095	3.4202	2.4053	3.3000e-003		0.1632	0.1632		0.1501	0.1501	0.0000	301.7279	301.7279	0.0939	0.0000	303.7004
Total	0.3095	3.4202	2.4053	3.3000e-003	1.4709	0.1632	1.6341	0.7192	0.1501	0.8694	0.0000	301.7279	301.7279	0.0939	0.0000	303.7004

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1303	1.8923	1.7342	7.0400e-003	0.3675	0.0486	0.4161	0.0953	0.0447	0.1400	0.0000	623.7305	623.7305	3.3200e-003	0.0000	623.8003
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	2.9700e-003	4.2900e-003	0.0405	8.0000e-005	7.1100e-003	4.0000e-005	7.1500e-003	1.8900e-003	4.0000e-005	1.9300e-003	0.0000	5.5972	5.5972	3.3000e-004	0.0000	5.6040
Total	0.1333	1.8966	1.7746	7.1200e-003	0.3746	0.0486	0.4232	0.0972	0.0447	0.1419	0.0000	629.3277	629.3277	3.6500e-003	0.0000	629.4043

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					0.5736	0.0000	0.5736	0.2805	0.0000	0.2805	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3095	2.2232	2.4053	3.3000e-003		0.1632	0.1632		0.1501	0.1501	0.0000	301.7275	301.7275	0.0939	0.0000	303.7001
Total	0.3095	2.2232	2.4053	3.3000e-003	0.5736	0.1632	0.7368	0.2805	0.1501	0.4306	0.0000	301.7275	301.7275	0.0939	0.0000	303.7001

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1303	1.8923	1.7342	7.0400e-003	0.3675	0.0486	0.4161	0.0953	0.0447	0.1400	0.0000	623.7305	623.7305	3.3200e-003	0.0000	623.8003
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	2.9700e-003	4.2900e-003	0.0405	8.0000e-005	7.1100e-003	4.0000e-005	7.1500e-003	1.8900e-003	4.0000e-005	1.9300e-003	0.0000	5.5972	5.5972	3.3000e-004	0.0000	5.6040
Total	0.1333	1.8966	1.7746	7.1200e-003	0.3746	0.0486	0.4232	0.0972	0.0447	0.1419	0.0000	629.3277	629.3277	3.6500e-003	0.0000	629.4043

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4709	0.0000	1.4709	0.7192	0.0000	0.7192	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4146	4.5146	3.3121	4.7600e-003		0.2131	0.2131		0.1961	0.1961	0.0000	427.9616	427.9616	0.1354	0.0000	430.8050
Total	0.4146	4.5146	3.3121	4.7600e-003	1.4709	0.2131	1.6840	0.7192	0.1961	0.9153	0.0000	427.9616	427.9616	0.1354	0.0000	430.8050

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1803	2.5088	2.4362	0.0101	0.3868	0.0683	0.4550	0.1023	0.0628	0.1651	0.0000	884.1278	884.1278	4.7700e-003	0.0000	884.2280
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9300e-003	5.7200e-003	0.0540	1.2000e-004	0.0103	6.0000e-005	0.0103	2.7200e-003	6.0000e-005	2.7800e-003	0.0000	7.7674	7.7674	4.4000e-004	0.0000	7.7767
Total	0.1843	2.5145	2.4902	0.0103	0.3970	0.0683	0.4653	0.1050	0.0629	0.1679	0.0000	891.8952	891.8952	5.2100e-003	0.0000	892.0047

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					0.5736	0.0000	0.5736	0.2805	0.0000	0.2805	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4146	2.9345	3.3121	4.7600e-003		0.2131	0.2131		0.1961	0.1961	0.0000	427.9611	427.9611	0.1354	0.0000	430.8045
Total	0.4146	2.9345	3.3121	4.7600e-003	0.5736	0.2131	0.7867	0.2805	0.1961	0.4765	0.0000	427.9611	427.9611	0.1354	0.0000	430.8045

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1803	2.5088	2.4362	0.0101	0.3868	0.0683	0.4550	0.1023	0.0628	0.1651	0.0000	884.1278	884.1278	4.7700e-003	0.0000	884.2280
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9300e-003	5.7200e-003	0.0540	1.2000e-004	0.0103	6.0000e-005	0.0103	2.7200e-003	6.0000e-005	2.7800e-003	0.0000	7.7674	7.7674	4.4000e-004	0.0000	7.7767
Total	0.1843	2.5145	2.4902	0.0103	0.3970	0.0683	0.4653	0.1050	0.0629	0.1679	0.0000	891.8952	891.8952	5.2100e-003	0.0000	892.0047

3.4 Route Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0977	1.0231	0.9840	1.5300e-003		0.0555	0.0555		0.0510	0.0510	0.0000	137.2704	137.2704	0.0434	0.0000	138.1824
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0977	1.0231	0.9840	1.5300e-003		0.0555	0.0555		0.0510	0.0510	0.0000	137.2704	137.2704	0.0434	0.0000	138.1824

3.4 Route Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0000
Worker	3.2500e-003	4.7400e-003	0.0447	1.0000e-004	8.4900e-003	5.0000e-005	8.5500e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	6.4363	6.4363	3.7000e-004	0.0000	6.4440	
Total	3.2500e-003	4.7400e-003	0.0447	1.0000e-004	8.4900e-003	5.0000e-005	8.5500e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	6.4363	6.4363	3.7000e-004	0.0000	6.4440	

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	0.0977	0.7688	0.9840	1.5300e-003		0.0555	0.0555		0.0510	0.0510	0.0000	137.2702	137.2702	0.0434	0.0000	138.1822
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0977	0.7688	0.9840	1.5300e-003		0.0555	0.0555		0.0510	0.0510	0.0000	137.2702	137.2702	0.0434	0.0000	138.1822

3.4 Route Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2500e-003	4.7400e-003	0.0447	1.0000e-004	8.4900e-003	5.0000e-005	8.5500e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	6.4363	6.4363	3.7000e-004	0.0000	6.4440
Total	3.2500e-003	4.7400e-003	0.0447	1.0000e-004	8.4900e-003	5.0000e-005	8.5500e-003	2.2600e-003	5.0000e-005	2.3000e-003	0.0000	6.4363	6.4363	3.7000e-004	0.0000	6.4440

3.4 Route Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1742	1.8058	1.8802	2.9200e-003		0.0968	0.0968		0.0891	0.0891	0.0000	256.7870	256.7870	0.0831	0.0000	258.5310
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1742	1.8058	1.8802	2.9200e-003		0.0968	0.0968		0.0891	0.0891	0.0000	256.7870	256.7870	0.0831	0.0000	258.5310

3.4 Route Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0000
Worker	5.8000e-003	8.4900e-003	0.0800	1.9000e-004	0.0162	1.0000e-004	0.0164	4.3100e-003	1.0000e-004	4.4100e-003	0.0000	11.8090	11.8090	6.7000e-004	0.0000	11.8231	
Total	5.8000e-003	8.4900e-003	0.0800	1.9000e-004	0.0162	1.0000e-004	0.0164	4.3100e-003	1.0000e-004	4.4100e-003	0.0000	11.8090	11.8090	6.7000e-004	0.0000	11.8231	

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	0.1742	1.3574	1.8802	2.9200e-003		0.0968	0.0968		0.0891	0.0891	0.0000	256.7867	256.7867	0.0831	0.0000	258.5307
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1742	1.3574	1.8802	2.9200e-003		0.0968	0.0968		0.0891	0.0891	0.0000	256.7867	256.7867	0.0831	0.0000	258.5307

3.4 Route Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-003	8.4900e-003	0.0800	1.9000e-004	0.0162	1.0000e-004	0.0164	4.3100e-003	1.0000e-004	4.4100e-003	0.0000	11.8090	11.8090	6.7000e-004	0.0000	11.8231
Total	5.8000e-003	8.4900e-003	0.0800	1.9000e-004	0.0162	1.0000e-004	0.0164	4.3100e-003	1.0000e-004	4.4100e-003	0.0000	11.8090	11.8090	6.7000e-004	0.0000	11.8231

3.4 Route 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	0.1237	1.2724	1.4425	2.2400e-003		0.0669	0.0669		0.0615	0.0615	0.0000	196.9547	196.9547	0.0637	0.0000	198.2924
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1237	1.2724	1.4425	2.2400e-003		0.0669	0.0669		0.0615	0.0615	0.0000	196.9547	196.9547	0.0637	0.0000	198.2924

3.4 Route 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	4.2200e-003	6.1800e-003	0.0584	1.4000e-004	0.0125	8.0000e-005	0.0125	3.3100e-003	7.0000e-005	3.3800e-003	0.0000	8.9263	8.9263	5.0000e-004	0.0000	8.9368
Total	4.2200e-003	6.1800e-003	0.0584	1.4000e-004	0.0125	8.0000e-005	0.0125	3.3100e-003	7.0000e-005	3.3800e-003	0.0000	8.9263	8.9263	5.0000e-004	0.0000	8.9368

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	0.1237	0.9567	1.4425	2.2400e-003		0.0669	0.0669		0.0615	0.0615	0.0000	196.9545	196.9545	0.0637	0.0000	198.2922
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1237	0.9567	1.4425	2.2400e-003		0.0669	0.0669		0.0615	0.0615	0.0000	196.9545	196.9545	0.0637	0.0000	198.2922

3.4 Route 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	4.2200e-003	6.1800e-003	0.0584	1.4000e-004	0.0125	8.0000e-005	0.0125	3.3100e-003	7.0000e-005	3.3800e-003	0.0000	8.9263	8.9263	5.0000e-004	0.0000	8.9368
Total	4.2200e-003	6.1800e-003	0.0584	1.4000e-004	0.0125	8.0000e-005	0.0125	3.3100e-003	7.0000e-005	3.3800e-003	0.0000	8.9263	8.9263	5.0000e-004	0.0000	8.9368

3.5 Bridge/Overpass - 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	0.0866	0.8419	0.7838	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9131	111.9131	0.0351	0.0000	112.6492
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0866	0.8419	0.7838	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9131	111.9131	0.0351	0.0000	112.6492

3.5 Bridge/Overpass - 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	1.5300e-003	2.2400e-003	0.0211	5.0000e-005	4.2800e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1600e-003	0.0000	3.1100	3.1100	1.8000e-004	0.0000	3.1137
Total	1.5300e-003	2.2400e-003	0.0211	5.0000e-005	4.2800e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1600e-003	0.0000	3.1100	3.1100	1.8000e-004	0.0000	3.1137

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	0.0866	0.5956	0.7838	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9129	111.9129	0.0351	0.0000	112.6491
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0866	0.5956	0.7838	1.2900e-003		0.0435	0.0435		0.0402	0.0402	0.0000	111.9129	111.9129	0.0351	0.0000	112.6491

3.5 Bridge/Overpass - 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	1.5300e-003	2.2400e-003	0.0211	5.0000e-005	4.2800e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1600e-003	0.0000	3.1100	3.1100	1.8000e-004	0.0000	3.1137
Total	1.5300e-003	2.2400e-003	0.0211	5.0000e-005	4.2800e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1600e-003	0.0000	3.1100	3.1100	1.8000e-004	0.0000	3.1137

3.5 Bridge/Overpass - 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	0.3004	2.9103	2.9407	4.8700e-003		0.1465	0.1465		0.1356	0.1356	0.0000	423.2667	423.2667	0.1322	0.0000	426.0418
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3004	2.9103	2.9407	4.8700e-003		0.1465	0.1465		0.1356	0.1356	0.0000	423.2667	423.2667	0.1322	0.0000	426.0418

3.5 Bridge/Overpass - 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	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	0.0000
Worker	5.4800e-003	8.0200e-003	0.0759	1.9000e-004	0.0162	1.0000e-004	0.0163	4.3000e-003	1.0000e-004	4.3900e-003	0.0000	11.5908	11.5908	6.5000e-004	0.0000	11.6044	11.6044
Total	5.4800e-003	8.0200e-003	0.0759	1.9000e-004	0.0162	1.0000e-004	0.0163	4.3000e-003	1.0000e-004	4.3900e-003	0.0000	11.5908	11.5908	6.5000e-004	0.0000	11.6044	11.6044

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	0.3004	2.0601	2.9407	4.8700e-003		0.1465	0.1465		0.1356	0.1356	0.0000	423.2662	423.2662	0.1322	0.0000	426.0412
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3004	2.0601	2.9407	4.8700e-003		0.1465	0.1465		0.1356	0.1356	0.0000	423.2662	423.2662	0.1322	0.0000	426.0412

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.469364	0.065576	0.169825	0.159036	0.038089	0.006139	0.011322	0.071493	0.001371	0.001211	0.003602	0.000518	0.002454

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive 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	11.9954	2.0000e-005	2.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.1800e-003	4.1800e-003	1.0000e-005	0.0000	4.4100e-003
Unmitigated	11.9954	2.0000e-005	2.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.1800e-003	4.1800e-003	1.0000e-005	0.0000	4.4100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	11.8092					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1860					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-004	2.0000e-005	2.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.1800e-003	4.1800e-003	1.0000e-005	0.0000	4.4100e-003
Total	11.9954	2.0000e-005	2.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.1800e-003	4.1800e-003	1.0000e-005	0.0000	4.4100e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Consumer Products	0.1860					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-004	2.0000e-005	2.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.1800e-003	4.1800e-003	1.0000e-005	0.0000	4.4100e-003
Architectural Coating	11.8092					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	11.9954	2.0000e-005	2.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.1800e-003	4.1800e-003	1.0000e-005	0.0000	4.4100e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	19.4558	8.9000e-004	1.9000e-004	19.5319
Unmitigated	19.4558	8.9000e-004	1.9000e-004	19.5319

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 6.11949	19.4558	8.9000e-004	1.9000e-004	19.5319
Total		19.4558	8.9000e-004	1.9000e-004	19.5319

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 6.11949	19.4558	8.9000e-004	1.9000e-004	19.5319
Total		19.4558	8.9000e-004	1.9000e-004	19.5319

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	583.5990	34.4897	0.0000	1,307.8830
Unmitigated	583.5990	34.4897	0.0000	1,307.8830

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	2875	583.5990	34.4897	0.0000	1,307.8830
Total		583.5990	34.4897	0.0000	1,307.8830

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	2875	583.5990	34.4897	0.0000	1,307.8830
Total		583.5990	34.4897	0.0000	1,307.8830

9.0 Operational Offroad

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

CV Link: Alternative 2
Salton Sea Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	233.96	Acre	311.95	10,191,297.60	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Buildout of Alternative 2, 49 mile CV Link.

Land Use - Assumes Alternative 1 CV Link path will be 44 miles with an average pave width of 30 ft. Total project AC assumes a 40ft width for construction staging and landscape buffers.

Construction Phase - Assumes a 4 year buildout starting early 2018 and operational in 2021. Assumes multiple segments will be constructed simultaneously.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Trips and VMT - Assumes 30 mile trip length for import and export.

On-road Fugitive Dust - Access to the project site will be via existing roadways.

Grading - Material import and export based on Take-Off Raw Data from Alta Group. 100% of total based on path length.

Road Dust - The CV Link will be paved at buildout.

Consumer Products - There will no consumer products associated with the CV Link project.

Area Coating - Architectural coatings are not required for the CV Link.

Energy Use -

Water And Wastewater - Water demands based on landscaping projections.

Solid Waste - Solid waste generation will be limited to trash bins located along the CV Link.

Construction Off-road Equipment Mitigation - Assumes adherence to standard dust control measures.

Off-road Equipment - Pathway paving.

Off-road Equipment - Bridge/overpass construction/placement.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstructionPhase	NumDays	620.00	210.00
tblConstructionPhase	NumDays	440.00	600.00
tblConstructionPhase	NumDays	440.00	330.00
tblConstructionPhase	NumDays	240.00	175.00
tblConstructionPhase	PhaseEndDate	1/13/2023	12/31/2021
tblConstructionPhase	PhaseStartDate	10/9/2021	9/26/2020
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblGrading	AcresOfGrading	630.00	311.00
tblGrading	MaterialExported	0.00	150,000.00
tblGrading	MaterialImported	0.00	265,000.00

tblLandUse	LotAcreage	233.96	311.95
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00

tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	0.00	2,875.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	30.00	18.00
tblTripsAndVMT	WorkerTripNumber	50.00	20.00
tblTripsAndVMT	WorkerTripNumber	25.00	15.00
tblTripsAndVMT	WorkerTripNumber	35.00	15.00
tblWater	OutdoorWaterUseRate	0.00	6,119,489.00

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					
2018	10.2822	120.8216	95.4605	0.2425	22.8272	4.9252	27.7524	9.1366	4.5311	13.6678	0.0000	23,881.81 75	23,881.81 75	2.5010	0.0000	23,934.33 76
2019	9.6427	110.7772	91.7427	0.2423	20.4862	4.5386	25.0249	8.5620	4.1755	12.7375	0.0000	23,479.81 11	23,479.81 11	2.4996	0.0000	23,532.30 18
2020	3.9505	38.3075	38.4365	0.0626	0.2510	2.0005	2.2515	0.0666	1.8474	1.9140	0.0000	5,939.045 1	5,939.045 1	1.8302	0.0000	5,977.478 2
2021	3.6359	35.0766	38.1853	0.0626	0.2510	1.7895	2.0405	0.0666	1.6522	1.7188	0.0000	5,935.070 7	5,935.070 7	1.8259	0.0000	5,973.413 7
Total	27.5113	304.9829	263.8249	0.6100	43.8154	13.2538	57.0692	17.8318	12.2062	30.0381	0.0000	59,235.74 44	59,235.74 44	8.6565	0.0000	59,417.53 13

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	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	65.7291	2.2000e-004	0.0239	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004	0.0000	0.0540

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	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	65.7291	2.2000e-004	0.0239	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004	0.0000	0.0540

	ROG	NOx	CO	SO2	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	1/1/2018	8/31/2018	5	175	
2	Grading	Grading	9/1/2018	6/21/2019	5	210	
3	Route Paving	Paving	6/22/2019	10/8/2021	5	600	
4	Bridge/Overpass	Paving	9/26/2020	12/31/2021	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 311

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Pavers	4	4.00	125	0.42
Paving	Paving Equipment	4	4.00	130	0.36
Paving	Rollers	4	4.00	80	0.38
Site Preparation	Off-Highway Trucks	4	4.00	400	0.38
Site Preparation	Rubber Tired Dozers	4	4.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Grading	Excavators	4	4.00	162	0.38
Grading	Graders	4	4.00	174	0.41
Grading	Rubber Tired Dozers	4	4.00	255	0.40
Grading	Scrapers	4	4.00	361	0.48
Grading	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Route Paving	Pavers	4	4.00	125	0.42
Route Paving	Paving Equipment	4	4.00	130	0.36
Bridge/Overpass	Cranes	2	4.00	226	0.29
Bridge/Overpass	Excavators	2	4.00	162	0.38
Bridge/Overpass	Forklifts	2	4.00	89	0.20
Bridge/Overpass	Welders	2	4.00	46	0.45
Bridge/Overpass	Pavers	2	8.00	125	0.42
Bridge/Overpass	Paving Equipment	2	8.00	130	0.36
Route Paving	Rollers	2	8.00	80	0.38
Bridge/Overpass	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	12	18.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Grading	20	20.00	0.00	33,125.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Route Paving	10	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Bridge/Overpass	14	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	4.2230	45.2199	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928		5,064.0003	5,064.0003	1.5765		5,097.1066
Total	4.2230	45.2199	30.9601	0.0503	12.0442	2.0574	14.1016	6.6205	1.8928	8.5133		5,064.0003	5,064.0003	1.5765		5,097.1066

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003			131.7535
Total	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003			131.7535

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					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820			0.0000			0.0000	
Off-Road	4.2230	29.3929	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928	0.0000	5,064.0003	5,064.0003	1.5765			5,097.1066
Total	4.2230	29.3929	30.9601	0.0503	4.6972	2.0574	6.7547	2.5820	1.8928	4.4748	0.0000	5,064.0003	5,064.0003	1.5765			5,097.1066

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003		131.7535
Total	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003		131.7535

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					14.0083	0.0000	14.0083	6.8496	0.0000	6.8496			0.0000			0.0000
Off-Road	7.1976	79.5405	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916		7,734.8376	7,734.8376	2.4080		7,785.4048
Total	7.1976	79.5405	55.9368	0.0768	14.0083	3.7953	17.8036	6.8496	3.4916	10.3413		7,734.8376	7,734.8376	2.4080		7,785.4048

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.9991	41.1878	38.4707	0.1638	8.6515	1.1289	9.7805	2.2426	1.0385	3.2811		16,000.7625	16,000.7625	0.0846		16,002.5400
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	0.0855	0.0933	1.0530	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		146.2174	146.2174	8.3500e-003		146.3928
Total	3.0846	41.2811	39.5236	0.1657	8.8189	1.1300	9.9489	2.2870	1.0395	3.3265		16,146.9799	16,146.9799	0.0930		16,148.9328

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					5.4632	0.0000	5.4632	2.6714	0.0000	2.6714			0.0000			0.0000
Off-Road	7.1976	51.7014	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916	0.0000	7,734.8376	7,734.8376	2.4080		7,785.4048
Total	7.1976	51.7014	55.9368	0.0768	5.4632	3.7953	9.2585	2.6714	3.4916	6.1630	0.0000	7,734.8376	7,734.8376	2.4080		7,785.4048

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.9991	41.1878	38.4707	0.1638	8.6515	1.1289	9.7805	2.2426	1.0385	3.2811		16,000.7625	16,000.7625	0.0846		16,002.5400
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	0.0855	0.0933	1.0530	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		146.2174	146.2174	8.3500e-003		146.3928
Total	3.0846	41.2811	39.5236	0.1657	8.8189	1.1300	9.9489	2.2870	1.0395	3.3265		16,146.9799	16,146.9799	0.0930		16,148.9328

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					14.0083	0.0000	14.0083	6.8496	0.0000	6.8496			0.0000			0.0000
Off-Road	6.6864	72.8159	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621		7,608.8208	7,608.8208	2.4074		7,659.3752
Total	6.6864	72.8159	53.4214	0.0768	14.0083	3.4371	17.4454	6.8496	3.1621	10.0118		7,608.8208	7,608.8208	2.4074		7,659.3752

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.8778	37.8751	37.3478	0.1636	6.3106	1.1005	7.4111	1.6680	1.0124	2.6804		15,730.25 20	15,730.25 20	0.0843		15,732.02 27
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	0.0785	0.0862	0.9735	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		140.7383	140.7383	7.8900e-003		140.9040
Total	2.9563	37.9614	38.3213	0.1655	6.4779	1.1016	7.5795	1.7124	1.0134	2.7257		15,870.99 03	15,870.99 03	0.0922		15,872.92 67

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					5.4632	0.0000	5.4632	2.6714	0.0000	2.6714			0.0000			0.0000
Off-Road	6.6864	47.3303	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621	0.0000	7,608.820 8	7,608.820 8	2.4074		7,659.375 1
Total	6.6864	47.3303	53.4214	0.0768	5.4632	3.4371	8.9003	2.6714	3.1621	5.8335	0.0000	7,608.820 8	7,608.820 8	2.4074		7,659.375 1

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.8778	37.8751	37.3478	0.1636	6.3106	1.1005	7.4111	1.6680	1.0124	2.6804		15,730.25 20	15,730.25 20	0.0843		15,732.02 27
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	0.0785	0.0862	0.9735	1.9500e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		140.7383	140.7383	7.8900e-003		140.9040
Total	2.9563	37.9614	38.3213	0.1655	6.4779	1.1016	7.5795	1.7124	1.0134	2.7257		15,870.99 03	15,870.99 03	0.0922		15,872.92 67

3.4 Route Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.973 1	2,208.973 1	0.6989		2,223.649 9
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.973 1	2,208.973 1	0.6989		2,223.649 9

3.4 Route Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0589	0.0647	0.7301	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		105.5537	105.5537	5.9200e-003			105.6780
Total	0.0589	0.0647	0.7301	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		105.5537	105.5537	5.9200e-003			105.6780

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	1.4259	11.2240	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447	0.0000	2,208.9731	2,208.9731	0.6989			2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.4259	11.2240	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447	0.0000	2,208.9731	2,208.9731	0.6989			2,223.6499

3.4 Route Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0589	0.0647	0.7301	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		105.5537	105.5537	5.9200e-003		105.6780
Total	0.0589	0.0647	0.7301	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		105.5537	105.5537	5.9200e-003		105.6780

3.4 Route Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326

3.4 Route Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003		101.3925
Total	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003		101.3925

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	1.3301	10.3619	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3301	10.3619	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326

3.4 Route Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003			101.3925
Total	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003			101.3925

3.4 Route 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	1.2308	12.6607	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120		2,160.2530	2,160.2530	0.6987			2,174.9250
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.2308	12.6607	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120		2,160.2530	2,160.2530	0.6987			2,174.9250

3.4 Route 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	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003			99.8933
Total	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003			99.8933

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	1.2308	9.5198	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120	0.0000	2,160.2530	2,160.2530	0.6987			2,174.9250
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.2308	9.5198	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120	0.0000	2,160.2530	2,160.2530	0.6987			2,174.9250

3.4 Route 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	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933
Total	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933

3.5 Bridge/Overpass - 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	2.5109	24.4019	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660		3,575.7399	3,575.7399	1.1200		3,599.2606
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5109	24.4019	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660		3,575.7399	3,575.7399	1.1200		3,599.2606

3.5 Bridge/Overpass - 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	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003			101.3925
Total	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003			101.3925

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	2.5109	17.2632	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660	0.0000	3,575.7399	3,575.7399	1.1200			3,599.2606
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.5109	17.2632	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660	0.0000	3,575.7399	3,575.7399	1.1200			3,599.2606

3.5 Bridge/Overpass - 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	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003		101.3925
Total	0.0548	0.0606	0.6822	1.4600e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		101.2740	101.2740	5.6400e-003		101.3925

3.5 Bridge/Overpass - 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	2.3017	22.3010	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388		3,575.2615	3,575.2615	1.1162		3,598.7022
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3017	22.3010	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388		3,575.2615	3,575.2615	1.1162		3,598.7022

3.5 Bridge/Overpass - 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	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933
Total	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933

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	2.3017	15.7860	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388	0.0000	3,575.2615	3,575.2615	1.1162		3,598.7022
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3017	15.7860	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388	0.0000	3,575.2615	3,575.2615	1.1162		3,598.7022

3.5 Bridge/Overpass - 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	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933
Total	0.0517	0.0575	0.6492	1.4600e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		99.7781	99.7781	5.4800e-003		99.8933

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.469364	0.065576	0.169825	0.159036	0.038089	0.006139	0.011322	0.071493	0.001371	0.001211	0.003602	0.000518	0.002454

5.0 Energy Detail

4.4 Fleet Mix

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
lb/day											lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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						
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	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						
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540
Unmitigated	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540

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					
Consumer Products	1.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2300e-003	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540
Architectural Coating	64.7078					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540

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					
Consumer Products	1.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2300e-003	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540
Architectural Coating	64.7078					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540

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 Vegetation

CV Link: Alternative 2
Salton Sea Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	233.96	Acre	311.95	10,191,297.60	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Buildout of Alternative 2, 49 mile CV Link.

Land Use - Assumes Alternative 1 CV Link path will be 44 miles with an average pave width of 30 ft. Total project AC assumes a 40ft width for construction staging and landscape buffers.

Construction Phase - Assumes a 4 year buildout starting early 2018 and operational in 2021. Assumes multiple segments will be constructed simultaneously.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of equipment was increased.

Off-road Equipment - Assumes multiple segments may be constructed simultaneously, therefore number of construction equipment was increased.

Trips and VMT - Assumes 30 mile trip length for import and export.

On-road Fugitive Dust - Access to the project site will be via existing roadways.

Grading - Material import and export based on Take-Off Raw Data from Alta Group. 100% of total based on path length.

Road Dust - The CV Link will be paved at buildout.

Consumer Products - There will no consumer products associated with the CV Link project.

Area Coating - Architectural coatings are not required for the CV Link.

Energy Use -

Water And Wastewater - Water demands based on landscaping projections.

Solid Waste - Solid waste generation will be limited to trash bins located along the CV Link.

Construction Off-road Equipment Mitigation - Assumes adherence to standard dust control measures.

Off-road Equipment - Pathway paving.

Off-road Equipment - Bridge/overpass construction/placement.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstEquipMitigation	OxidationCatalyst	0.00	35.00
tblConstructionPhase	NumDays	620.00	210.00
tblConstructionPhase	NumDays	440.00	600.00
tblConstructionPhase	NumDays	440.00	330.00
tblConstructionPhase	NumDays	240.00	175.00
tblConstructionPhase	PhaseEndDate	1/13/2023	12/31/2021
tblConstructionPhase	PhaseStartDate	10/9/2021	9/26/2020
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblGrading	AcresOfGrading	630.00	311.00
tblGrading	MaterialExported	0.00	150,000.00
tblGrading	MaterialImported	0.00	265,000.00

tblLandUse	LotAcreage	233.96	311.95
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00

tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	0.00	2,875.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	30.00	18.00
tblTripsAndVMT	WorkerTripNumber	50.00	20.00
tblTripsAndVMT	WorkerTripNumber	25.00	15.00
tblTripsAndVMT	WorkerTripNumber	35.00	15.00
tblWater	OutdoorWaterUseRate	0.00	6,119,489.00

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					
2018	10.4612	124.2318	102.3699	0.2422	22.8272	4.9266	27.7538	9.1366	4.5324	13.6690	0.0000	23,844.1873	23,844.1873	2.5022	0.0000	23,896.7332
2019	9.8060	113.9118	98.7599	0.2420	20.4862	4.5400	25.0262	8.5620	4.1767	12.7387	0.0000	23,443.0014	23,443.0014	2.5008	0.0000	23,495.5187
2020	3.9227	38.3202	38.1925	0.0624	0.2510	2.0005	2.2515	0.0666	1.8474	1.9140	0.0000	5,924.2663	5,924.2663	1.8302	0.0000	5,962.6994
2021	3.6100	35.0886	37.9519	0.0624	0.2510	1.7895	2.0405	0.0666	1.6522	1.7188	0.0000	5,920.5120	5,920.5120	1.8259	0.0000	5,958.8550
Total	27.7999	311.5524	277.2742	0.6089	43.8154	13.2565	57.0719	17.8318	12.2087	30.0405	0.0000	59,131.9670	59,131.9670	8.6590	0.0000	59,313.8064

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	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	65.7291	2.2000e-004	0.0239	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004	0.0000	0.0540

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	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	65.7291	2.2000e-004	0.0239	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004	0.0000	0.0540

	ROG	NOx	CO	SO2	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	1/1/2018	8/31/2018	5	175	
2	Grading	Grading	9/1/2018	6/21/2019	5	210	
3	Route Paving	Paving	6/22/2019	10/8/2021	5	600	
4	Bridge/Overpass	Paving	9/26/2020	12/31/2021	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 311

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Pavers	4	4.00	125	0.42
Paving	Paving Equipment	4	4.00	130	0.36
Paving	Rollers	4	4.00	80	0.38
Site Preparation	Off-Highway Trucks	4	4.00	400	0.38
Site Preparation	Rubber Tired Dozers	4	4.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Grading	Excavators	4	4.00	162	0.38
Grading	Graders	4	4.00	174	0.41
Grading	Rubber Tired Dozers	4	4.00	255	0.40
Grading	Scrapers	4	4.00	361	0.48
Grading	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Route Paving	Pavers	4	4.00	125	0.42
Route Paving	Paving Equipment	4	4.00	130	0.36
Bridge/Overpass	Cranes	2	4.00	226	0.29
Bridge/Overpass	Excavators	2	4.00	162	0.38
Bridge/Overpass	Forklifts	2	4.00	89	0.20
Bridge/Overpass	Welders	2	4.00	46	0.45
Bridge/Overpass	Pavers	2	8.00	125	0.42
Bridge/Overpass	Paving Equipment	2	8.00	130	0.36
Route Paving	Rollers	2	8.00	80	0.38
Bridge/Overpass	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	12	18.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Grading	20	20.00	0.00	33,125.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Route Paving	10	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Bridge/Overpass	14	15.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	4.2230	45.2199	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928		5,064.000 3	5,064.000 3	1.5765		5,097.106 6
Total	4.2230	45.2199	30.9601	0.0503	12.0442	2.0574	14.1016	6.6205	1.8928	8.5133		5,064.000 3	5,064.000 3	1.5765		5,097.106 6

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003		122.1845
Total	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003		122.1845

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					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820			0.0000			0.0000
Off-Road	4.2230	29.3929	30.9601	0.0503		2.0574	2.0574		1.8928	1.8928	0.0000	5,064.0003	5,064.0003	1.5765		5,097.1066
Total	4.2230	29.3929	30.9601	0.0503	4.6972	2.0574	6.7547	2.5820	1.8928	4.4748	0.0000	5,064.0003	5,064.0003	1.5765		5,097.1066

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003		122.1845
Total	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003		122.1845

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					14.0083	0.0000	14.0083	6.8496	0.0000	6.8496			0.0000			0.0000
Off-Road	7.1976	79.5405	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916		7,734.8376	7,734.8376	2.4080		7,785.4048
Total	7.1976	79.5405	55.9368	0.0768	14.0083	3.7953	17.8036	6.8496	3.4916	10.3413		7,734.8376	7,734.8376	2.4080		7,785.4048

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.2000	44.5880	45.5659	0.1636	8.6515	1.1303	9.7818	2.2426	1.0398	3.2824		15,973.76 45	15,973.76 45	0.0859		15,975.56 79
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	0.0636	0.1033	0.8671	1.8100e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		135.5852	135.5852	8.3500e-003		135.7606
Total	3.2637	44.6913	46.4331	0.1654	8.8189	1.1314	9.9502	2.2870	1.0407	3.3277		16,109.34 97	16,109.34 97	0.0942		16,111.328 4

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					5.4632	0.0000	5.4632	2.6714	0.0000	2.6714			0.0000			0.0000
Off-Road	7.1976	51.7014	55.9368	0.0768		3.7953	3.7953		3.4916	3.4916	0.0000	7,734.837 6	7,734.837 6	2.4080		7,785.404 8
Total	7.1976	51.7014	55.9368	0.0768	5.4632	3.7953	9.2585	2.6714	3.4916	6.1630	0.0000	7,734.837 6	7,734.837 6	2.4080		7,785.404 8

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.2000	44.5880	45.5659	0.1636	8.6515	1.1303	9.7818	2.2426	1.0398	3.2824		15,973.76 45	15,973.76 45	0.0859		15,975.56 79
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	0.0636	0.1033	0.8671	1.8100e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		135.5852	135.5852	8.3500e-003		135.7606
Total	3.2637	44.6913	46.4331	0.1654	8.8189	1.1314	9.9502	2.2870	1.0407	3.3277		16,109.34 97	16,109.34 97	0.0942		16,111.328 4

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					14.0083	0.0000	14.0083	6.8496	0.0000	6.8496			0.0000			0.0000
Off-Road	6.6864	72.8159	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621		7,608.820 8	7,608.820 8	2.4074		7,659.375 2
Total	6.6864	72.8159	53.4214	0.0768	14.0083	3.4371	17.4454	6.8496	3.1621	10.0118		7,608.820 8	7,608.820 8	2.4074		7,659.375 2

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0612	41.0006	44.5383	0.1634	6.3106	1.1018	7.4124	1.6680	1.0136	2.6816		15,703.6947	15,703.6947	0.0856		15,705.4919
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	0.0584	0.0953	0.8003	1.8000e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		130.4859	130.4859	7.8900e-003		130.6516
Total	3.1196	41.0959	45.3385	0.1652	6.4779	1.1029	7.5808	1.7124	1.0146	2.7270		15,834.1806	15,834.1806	0.0935		15,836.1435

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					5.4632	0.0000	5.4632	2.6714	0.0000	2.6714			0.0000			0.0000
Off-Road	6.6864	47.3303	53.4214	0.0768		3.4371	3.4371		3.1621	3.1621	0.0000	7,608.8208	7,608.8208	2.4074		7,659.3751
Total	6.6864	47.3303	53.4214	0.0768	5.4632	3.4371	8.9003	2.6714	3.1621	5.8335	0.0000	7,608.8208	7,608.8208	2.4074		7,659.3751

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0612	41.0006	44.5383	0.1634	6.3106	1.1018	7.4124	1.6680	1.0136	2.6816		15,703.69 47	15,703.69 47	0.0856		15,705.49 19
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	0.0584	0.0953	0.8003	1.8000e-003	0.1673	1.0500e-003	0.1684	0.0444	9.7000e-004	0.0454		130.4859	130.4859	7.8900e-003		130.6516
Total	3.1196	41.0959	45.3385	0.1652	6.4779	1.1029	7.5808	1.7124	1.0146	2.7270		15,834.18 06	15,834.18 06	0.0935		15,836.14 35

3.4 Route Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.973 1	2,208.973 1	0.6989		2,223.649 9
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.973 1	2,208.973 1	0.6989		2,223.649 9

3.4 Route Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0438	0.0715	0.6002	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		97.8644	97.8644	5.9200e-003			97.9887
Total	0.0438	0.0715	0.6002	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		97.8644	97.8644	5.9200e-003			97.9887

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	1.4259	11.2240	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447	0.0000	2,208.9731	2,208.9731	0.6989			2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.4259	11.2240	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447	0.0000	2,208.9731	2,208.9731	0.6989			2,223.6499

3.4 Route Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0438	0.0715	0.6002	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		97.8644	97.8644	5.9200e-003		97.9887
Total	0.0438	0.0715	0.6002	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		97.8644	97.8644	5.9200e-003		97.9887

3.4 Route Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326

3.4 Route Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031
Total	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031

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	1.3301	10.3619	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988			2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3301	10.3619	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988			2,175.4326

3.4 Route Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003		94.0031
Total	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003		94.0031

3.4 Route 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	1.2308	12.6607	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120		2,160.2530	2,160.2530	0.6987		2,174.9250
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2308	12.6607	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120		2,160.2530	2,160.2530	0.6987		2,174.9250

3.4 Route 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	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003			92.6139
Total	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003			92.6139

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	1.2308	9.5198	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120	0.0000	2,160.2530	2,160.2530	0.6987			2,174.9250
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.2308	9.5198	14.3528	0.0223		0.6652	0.6652		0.6120	0.6120	0.0000	2,160.2530	2,160.2530	0.6987			2,174.9250

3.4 Route 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	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003			92.6139
Total	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003			92.6139

3.5 Bridge/Overpass - 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	2.5109	24.4019	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660		3,575.7399	3,575.7399	1.1200			3,599.2606
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.5109	24.4019	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660		3,575.7399	3,575.7399	1.1200			3,599.2606

3.5 Bridge/Overpass - 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	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031
Total	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003			94.0031

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	2.5109	17.2632	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660	0.0000	3,575.7399	3,575.7399	1.1200			3,599.2606
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.5109	17.2632	22.7197	0.0373		1.2599	1.2599		1.1660	1.1660	0.0000	3,575.7399	3,575.7399	1.1200			3,599.2606

3.5 Bridge/Overpass - 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	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003		94.0031
Total	0.0408	0.0669	0.5602	1.3500e-003	0.1255	7.9000e-004	0.1263	0.0333	7.3000e-004	0.0340		93.8847	93.8847	5.6400e-003		94.0031

3.5 Bridge/Overpass - 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	2.3017	22.3010	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388		3,575.2615	3,575.2615	1.1162		3,598.7022
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3017	22.3010	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388		3,575.2615	3,575.2615	1.1162		3,598.7022

3.5 Bridge/Overpass - 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	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003		92.6139
Total	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003		92.6139

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	2.3017	15.7860	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388	0.0000	3,575.2615	3,575.2615	1.1162		3,598.7022
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3017	15.7860	22.5340	0.0373		1.1227	1.1227		1.0388	1.0388	0.0000	3,575.2615	3,575.2615	1.1162		3,598.7022

3.5 Bridge/Overpass - 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	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003		92.6139
Total	0.0388	0.0634	0.5325	1.3500e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		92.4988	92.4988	5.4800e-003		92.6139

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.469364	0.065576	0.169825	0.159036	0.038089	0.006139	0.011322	0.071493	0.001371	0.001211	0.003602	0.000518	0.002454

5.0 Energy Detail

4.4 Fleet Mix

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
lb/day											lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540
Unmitigated	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540

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					
Consumer Products	1.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2300e-003	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540
Architectural Coating	64.7078					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540

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					
Consumer Products	1.0191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2300e-003	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540
Architectural Coating	64.7078					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	65.7291	2.2000e-004	0.0239	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0512	0.0512	1.4000e-004		0.0540

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 Vegetation

CV Link: Operational Energy Emissions Salton Sea Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	100.00	1000sqft	2.30	100,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only refer to Operational Energy emissions.

Land Use - A general assumption of 100,000 SF is used for analysis purposes. Only operational emissions associated with energy use will be analyzed.

Energy Use - Assumes annual energy consumption of 819,527 kWh/year and 735,840 kWh/yr of production (solar) resulting in 83,687 kWh/yr.

Table Name	Column Name	Default Value	New Value
tblEnergyUse	NT24E	0.00	0.84
tblProjectCharacteristics	OperationalYear	2014	2024

2.0 Emissions Summary

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	0.5065	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.8800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	23.9493	23.9493	1.1000e-003	2.3000e-004	24.0430
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.5065	1.0000e-005	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	23.9511	23.9511	1.1000e-003	2.3000e-004	24.0449

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	0.5065	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.8800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	23.9493	23.9493	1.1000e-003	2.3000e-004	24.0430
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.5065	1.0000e-005	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	23.9511	23.9511	1.1000e-003	2.3000e-004	24.0449

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/1/2017	5	3	
3	Grading	Grading	2/2/2017	2/9/2017	5	6	
4	Building Construction	Building Construction	2/10/2017	12/14/2017	5	220	
5	Paving	Paving	12/15/2017	12/28/2017	5	10	
6	Architectural Coating	Architectural Coating	12/29/2017	1/11/2018	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Scrapers	1	8.00	361	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	42.00	16.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	8.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4126
Total	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4126

3.2 Demolition - 2017

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	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	0.0000
Worker	5.0000e-004	7.1000e-004	6.7200e-003	1.0000e-005	0.9953	1.0000e-005	0.9953	0.0994	1.0000e-005	0.0994	0.0000	0.8801	0.8801	5.0000e-005	0.0000	0.8812	
Total	5.0000e-004	7.1000e-004	6.7200e-003	1.0000e-005	0.9953	1.0000e-005	0.9953	0.0994	1.0000e-005	0.0994	0.0000	0.8801	0.8801	5.0000e-005	0.0000	0.8812	

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	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4125
Total	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4125

3.2 Demolition - 2017

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	5.0000e-004	7.1000e-004	6.7200e-003	1.0000e-005	6.1000e-004	1.0000e-005	6.2000e-004	1.7000e-004	1.0000e-005	1.8000e-004	0.0000	0.8801	0.8801	5.0000e-005	0.0000	0.8812
Total	5.0000e-004	7.1000e-004	6.7200e-003	1.0000e-005	6.1000e-004	1.0000e-005	6.2000e-004	1.7000e-004	1.0000e-005	1.8000e-004	0.0000	0.8801	0.8801	5.0000e-005	0.0000	0.8812

3.3 Site Preparation - 2017

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					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7900e-003	0.0429	0.0257	4.0000e-005		2.1000e-003	2.1000e-003		1.9300e-003	1.9300e-003	0.0000	3.3195	3.3195	1.0200e-003	0.0000	3.3409
Total	3.7900e-003	0.0429	0.0257	4.0000e-005	2.3900e-003	2.1000e-003	4.4900e-003	2.6000e-004	1.9300e-003	2.1900e-003	0.0000	3.3195	3.3195	1.0200e-003	0.0000	3.3409

3.3 Site Preparation - 2017

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	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	0.0000
Worker	5.0000e-005	7.0000e-005	6.2000e-004	0.0000	0.0919	0.0000	0.0919	9.1800e-003	0.0000	9.1800e-003	0.0000	0.0812	0.0812	0.0000	0.0000	0.0813	0.0813
Total	5.0000e-005	7.0000e-005	6.2000e-004	0.0000	0.0919	0.0000	0.0919	9.1800e-003	0.0000	9.1800e-003	0.0000	0.0812	0.0812	0.0000	0.0000	0.0813	0.0813

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					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7900e-003	0.0429	0.0257	4.0000e-005		2.1000e-003	2.1000e-003		1.9300e-003	1.9300e-003	0.0000	3.3195	3.3195	1.0200e-003	0.0000	3.3409
Total	3.7900e-003	0.0429	0.0257	4.0000e-005	2.3900e-003	2.1000e-003	4.4900e-003	2.6000e-004	1.9300e-003	2.1900e-003	0.0000	3.3195	3.3195	1.0200e-003	0.0000	3.3409

3.3 Site Preparation - 2017

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	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	0.0000
Worker	5.0000e-005	7.0000e-005	6.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0812	0.0812	0.0000	0.0000	0.0813	0.0813
Total	5.0000e-005	7.0000e-005	6.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0812	0.0812	0.0000	0.0000	0.0813	0.0813

3.4 Grading - 2017

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					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0900e-003	0.0845	0.0569	6.0000e-005		4.6700e-003	4.6700e-003		4.2900e-003	4.2900e-003	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646
Total	8.0900e-003	0.0845	0.0569	6.0000e-005	0.0197	4.6700e-003	0.0243	0.0101	4.2900e-003	0.0144	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646

3.4 Grading - 2017

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	1.1000e-004	1.6000e-004	1.5500e-003	0.0000	0.2297	0.0000	0.2297	0.0229	0.0000	0.0229	0.0000	0.2031	0.2031	1.0000e-005	0.0000	0.2034
Total	1.1000e-004	1.6000e-004	1.5500e-003	0.0000	0.2297	0.0000	0.2297	0.0229	0.0000	0.0229	0.0000	0.2031	0.2031	1.0000e-005	0.0000	0.2034

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					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0900e-003	0.0845	0.0569	6.0000e-005		4.6700e-003	4.6700e-003		4.2900e-003	4.2900e-003	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646
Total	8.0900e-003	0.0845	0.0569	6.0000e-005	0.0197	4.6700e-003	0.0243	0.0101	4.2900e-003	0.0144	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646

3.4 Grading - 2017

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	1.1000e-004	1.6000e-004	1.5500e-003	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.2031	0.2031	1.0000e-005	0.0000	0.2034
Total	1.1000e-004	1.6000e-004	1.5500e-003	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.2031	0.2031	1.0000e-005	0.0000	0.2034

3.5 Building Construction - 2017

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	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9955	232.9955	0.0518	0.0000	234.0829
Total	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9955	232.9955	0.0518	0.0000	234.0829

3.5 Building Construction - 2017

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	0.0163	0.1151	0.2185	2.9000e-004	6.6161	2.2700e-003	6.6183	0.6613	2.0900e-003	0.6633	0.0000	25.5996	25.5996	1.7000e-004	0.0000	25.6031
Worker	0.0177	0.0252	0.2390	4.4000e-004	35.3706	2.5000e-004	35.3708	3.5332	2.3000e-004	3.5334	0.0000	31.2759	31.2759	1.8800e-003	0.0000	31.3152
Total	0.0339	0.1403	0.4575	7.3000e-004	41.9866	2.5200e-003	41.9891	4.1944	2.3200e-003	4.1968	0.0000	56.8754	56.8754	2.0500e-003	0.0000	56.9183

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	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9952	232.9952	0.0518	0.0000	234.0827
Total	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9952	232.9952	0.0518	0.0000	234.0827

3.5 Building Construction - 2017

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	0.0163	0.1151	0.2185	2.9000e-004	5.3600e-003	2.2700e-003	7.6300e-003	1.6400e-003	2.0900e-003	3.7300e-003	0.0000	25.5996	25.5996	1.7000e-004	0.0000	25.6031
Worker	0.0177	0.0252	0.2390	4.4000e-004	0.0216	2.5000e-004	0.0219	6.0700e-003	2.3000e-004	6.3000e-003	0.0000	31.2759	31.2759	1.8800e-003	0.0000	31.3152
Total	0.0339	0.1403	0.4575	7.3000e-004	0.0270	2.5200e-003	0.0295	7.7100e-003	2.3200e-003	0.0100	0.0000	56.8754	56.8754	2.0500e-003	0.0000	56.9183

3.6 Paving - 2017

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	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134

3.6 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	4.1000e-004	3.8800e-003	1.0000e-005	0.5742	0.0000	0.5742	0.0574	0.0000	0.0574	0.0000	0.5077	0.5077	3.0000e-005	0.0000	0.5084
Total	2.9000e-004	4.1000e-004	3.8800e-003	1.0000e-005	0.5742	0.0000	0.5742	0.0574	0.0000	0.0574	0.0000	0.5077	0.5077	3.0000e-005	0.0000	0.5084

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	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134

3.6 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	4.1000e-004	3.8800e-003	1.0000e-005	3.5000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.5077	0.5077	3.0000e-005	0.0000	0.5084
Total	2.9000e-004	4.1000e-004	3.8800e-003	1.0000e-005	3.5000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.5077	0.5077	3.0000e-005	0.0000	0.5084

3.7 Architectural Coating - 2017

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	0.1159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-004	1.0900e-003	9.3000e-004	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1280
Total	0.1161	1.0900e-003	9.3000e-004	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1280

3.7 Architectural Coating - 2017

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	2.0000e-005	2.0000e-005	2.1000e-004	0.0000	0.0306	0.0000	0.0306	3.0600e-003	0.0000	3.0600e-003	0.0000	0.0271	0.0271	0.0000	0.0000	0.0271
Total	2.0000e-005	2.0000e-005	2.1000e-004	0.0000	0.0306	0.0000	0.0306	3.0600e-003	0.0000	3.0600e-003	0.0000	0.0271	0.0271	0.0000	0.0000	0.0271

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	0.1159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-004	1.0900e-003	9.3000e-004	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1280
Total	0.1161	1.0900e-003	9.3000e-004	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1280

3.7 Architectural Coating - 2017

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	2.0000e-005	2.0000e-005	2.1000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0271	0.0271	0.0000	0.0000	0.0271
Total	2.0000e-005	2.0000e-005	2.1000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0271	0.0271	0.0000	0.0000	0.0271

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3400e-003	9.0300e-003	8.3400e-003	1.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	1.1490	1.1490	1.1000e-004	0.0000	1.1513
Total	1.0442	9.0300e-003	8.3400e-003	1.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	1.1490	1.1490	1.1000e-004	0.0000	1.1513

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.8000e-004	1.6900e-003	0.0000	0.2756	0.0000	0.2756	0.0275	0.0000	0.0275	0.0000	0.2343	0.2343	1.0000e-005	0.0000	0.2346
Total	1.2000e-004	1.8000e-004	1.6900e-003	0.0000	0.2756	0.0000	0.2756	0.0275	0.0000	0.0275	0.0000	0.2343	0.2343	1.0000e-005	0.0000	0.2346

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	1.0429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3400e-003	9.0300e-003	8.3400e-003	1.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	1.1490	1.1490	1.1000e-004	0.0000	1.1513
Total	1.0442	9.0300e-003	8.3400e-003	1.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	1.1490	1.1490	1.1000e-004	0.0000	1.1513

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.468274	0.065853	0.171566	0.160721	0.037144	0.005993	0.010932	0.070408	0.001346	0.001223	0.003501	0.000506	0.002534

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	83690	23.9493	1.1000e-003	2.3000e-004	24.0430
Total		23.9493	1.1000e-003	2.3000e-004	24.0430

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	83690	23.9493	1.1000e-003	2.3000e-004	24.0430
Total		23.9493	1.1000e-003	2.3000e-004	24.0430

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5065	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.8800e-003
Unmitigated	0.5065	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.8800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3906					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.8800e-003
Total	0.5065	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.8800e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3906					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.8800e-003
Total	0.5065	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.8800e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

**CV Link LST: 1 mile Path
Salton Sea Air Basin, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	158.40	1000sqft	4.84	158,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	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 - Assumes buildout of a 1-mile stretch of Link pathway. 30ft width paved pave, extra 10ft width buffer for temporary disturbance during construction.

Construction Phase - Assumes a 2-month buildout for a 1-mile stretch of path.

Off-road Equipment - Assumes only 1 mile of path will be graded.

Off-road Equipment - Assumes 1 mile of path will be paved.

Grading - For conservative analysis, it is assumed that 1,000 CY of debris will be imported and exported form the site.

Trips and VMT - Assumes 30 mile haul length

On-road Fugitive Dust - All roadways in project area are paved.

Construction Off-road Equipment Mitigation - Standard dust control measures.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstructionPhase	NumDays	8.00	15.00
tblConstructionPhase	NumDays	18.00	27.00
tblGrading	AcresOfGrading	3.75	4.00
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LotAcreage	3.64	4.84
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	6.00	4.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00

2.0 Emissions Summary

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	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	4.3970	1.5000e-004	0.0163	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005	0.0000	0.0366

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	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	4.3970	1.5000e-004	0.0163	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005	0.0000	0.0366

	ROG	NOx	CO	SO2	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	Grading	Grading	1/1/2018	1/19/2018	5	15	
2	Paving	Paving	1/20/2018	2/27/2018	5	27	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	2	4.00	9	0.56
Grading	Excavators	1	4.00	162	0.38
Paving	Pavers	1	4.00	125	0.42
Paving	Rollers	1	4.00	80	0.38
Grading	Rubber Tired Dozers	1	4.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Grading	Graders	1	4.00	174	0.41
Paving	Paving Equipment	2	4.00	130	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	5	13.00	0.00	125.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3204	0.0000	3.3204	1.6897	0.0000	1.6897			0.0000			0.0000
Off-Road	1.3684	14.2202	10.8310	0.0133		0.7669	0.7669		0.7055	0.7055		1,340.1623	1,340.1623	0.4172		1,348.9237
Total	1.3684	14.2202	10.8310	0.0133	3.3204	0.7669	4.0873	1.6897	0.7055	2.3952		1,340.1623	1,340.1623	0.4172		1,348.9237

3.2 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1584	2.1760	2.0324	8.6500e-003	0.2188	0.0596	0.2784	0.0600	0.0549	0.1149		845.3233	845.3233	4.4700e-003		845.4172
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	0.0556	0.0606	0.6844	1.2700e-003	0.1088	6.8000e-004	0.1095	0.0289	6.3000e-004	0.0295		95.0413	95.0413	5.4300e-003		95.1553
Total	0.2140	2.2366	2.7168	9.9200e-003	0.3275	0.0603	0.3879	0.0888	0.0555	0.1443		940.3646	940.3646	9.9000e-003		940.5725

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2950	0.0000	1.2950	0.6590	0.0000	0.6590			0.0000			0.0000
Off-Road	1.3684	12.9485	10.8310	0.0133		0.7669	0.7669		0.7055	0.7055	0.0000	1,340.1623	1,340.1623	0.4172		1,348.9237
Total	1.3684	12.9485	10.8310	0.0133	1.2950	0.7669	2.0618	0.6590	0.7055	1.3645	0.0000	1,340.1623	1,340.1623	0.4172		1,348.9237

3.2 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1584	2.1760	2.0324	8.6500e-003	0.2188	0.0596	0.2784	0.0600	0.0549	0.1149		845.3233	845.3233	4.4700e-003		845.4172
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	0.0556	0.0606	0.6844	1.2700e-003	0.1088	6.8000e-004	0.1095	0.0289	6.3000e-004	0.0295		95.0413	95.0413	5.4300e-003		95.1553
Total	0.2140	2.2366	2.7168	9.9200e-003	0.3275	0.0603	0.3879	0.0888	0.0555	0.1443		940.3646	940.3646	9.9000e-003		940.5725

3.3 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7117	7.2829	6.3492	9.8500e-003		0.4064	0.4064		0.3750	0.3750		970.1181	970.1181	0.2915		976.2402
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7117	7.2829	6.3492	9.8500e-003		0.4064	0.4064		0.3750	0.3750		970.1181	970.1181	0.2915		976.2402

3.3 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	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	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003			131.7535
Total	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003			131.7535

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	0.7117	6.8986	6.3492	9.8500e-003		0.4064	0.4064		0.3750	0.3750	0.0000	970.1181	970.1181	0.2915			976.2402
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.7117	6.8986	6.3492	9.8500e-003		0.4064	0.4064		0.3750	0.3750	0.0000	970.1181	970.1181	0.2915			976.2402

3.3 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003		131.7535
Total	0.0770	0.0840	0.9477	1.7600e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		131.5957	131.5957	7.5200e-003		131.7535

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.470808	0.065208	0.167521	0.156577	0.039284	0.006365	0.011828	0.073190	0.001405	0.001202	0.003716	0.000539	0.002359

5.0 Energy Detail

4.4 Fleet Mix

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
lb/day											lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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						
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	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						
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366
Unmitigated	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366

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	1.0057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3898					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5500e-003	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366
Total	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366

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	1.0057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3898					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5500e-003	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366
Total	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366

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 Vegetation

**CV Link LST: 1 mile Path
Salton Sea Air Basin, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	158.40	1000sqft	4.84	158,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	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 - Assumes buildout of a 1-mile stretch of Link pathway. 30ft width paved pave, extra 10ft width buffer for temporary disturbance during construction.

Construction Phase - Assumes a 2-month buildout for a 1-mile stretch of path.

Off-road Equipment - Assumes only 1 mile of path will be graded.

Off-road Equipment - Assumes 1 mile of path will be paved.

Grading - For conservative analysis, it is assumed that 1,000 CY of debris will be imported and exported form the site.

Trips and VMT - Assumes 30 mile haul length

On-road Fugitive Dust - All roadways in project area are paved.

Construction Off-road Equipment Mitigation - Standard dust control measures.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstructionPhase	NumDays	8.00	15.00
tblConstructionPhase	NumDays	18.00	27.00
tblGrading	AcresOfGrading	3.75	4.00
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LotAcreage	3.64	4.84
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	6.00	4.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00

2.0 Emissions Summary

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	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	4.3970	1.5000e-004	0.0163	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005	0.0000	0.0366

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	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	4.3970	1.5000e-004	0.0163	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005	0.0000	0.0366

	ROG	NOx	CO	SO2	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	Grading	Grading	1/1/2018	1/19/2018	5	15	
2	Paving	Paving	1/20/2018	2/27/2018	5	27	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	2	4.00	9	0.56
Grading	Excavators	1	4.00	162	0.38
Paving	Pavers	1	4.00	125	0.42
Paving	Rollers	1	4.00	80	0.38
Grading	Rubber Tired Dozers	1	4.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Grading	Graders	1	4.00	174	0.41
Paving	Paving Equipment	2	4.00	130	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	5	13.00	0.00	125.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	11.00	5.40	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3204	0.0000	3.3204	1.6897	0.0000	1.6897			0.0000			0.0000
Off-Road	1.3684	14.2202	10.8310	0.0133		0.7669	0.7669		0.7055	0.7055		1,340.1623	1,340.1623	0.4172		1,348.9237
Total	1.3684	14.2202	10.8310	0.0133	3.3204	0.7669	4.0873	1.6897	0.7055	2.3952		1,340.1623	1,340.1623	0.4172		1,348.9237

3.2 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1691	2.3556	2.4073	8.6400e-003	0.2188	0.0597	0.2785	0.0600	0.0549	0.1149		843.8970	843.8970	4.5400e-003		843.9923
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	0.0414	0.0671	0.5636	1.1700e-003	0.1088	6.8000e-004	0.1095	0.0289	6.3000e-004	0.0295		88.1304	88.1304	5.4300e-003		88.2444
Total	0.2104	2.4227	2.9709	9.8100e-003	0.3275	0.0604	0.3879	0.0888	0.0556	0.1444		932.0274	932.0274	9.9700e-003		932.2366

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2950	0.0000	1.2950	0.6590	0.0000	0.6590			0.0000			0.0000
Off-Road	1.3684	12.9485	10.8310	0.0133		0.7669	0.7669		0.7055	0.7055	0.0000	1,340.1623	1,340.1623	0.4172		1,348.9237
Total	1.3684	12.9485	10.8310	0.0133	1.2950	0.7669	2.0618	0.6590	0.7055	1.3645	0.0000	1,340.1623	1,340.1623	0.4172		1,348.9237

3.2 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1691	2.3556	2.4073	8.6400e-003	0.2188	0.0597	0.2785	0.0600	0.0549	0.1149		843.8970	843.8970	4.5400e-003		843.9923
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	0.0414	0.0671	0.5636	1.1700e-003	0.1088	6.8000e-004	0.1095	0.0289	6.3000e-004	0.0295		88.1304	88.1304	5.4300e-003		88.2444
Total	0.2104	2.4227	2.9709	9.8100e-003	0.3275	0.0604	0.3879	0.0888	0.0556	0.1444		932.0274	932.0274	9.9700e-003		932.2366

3.3 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7117	7.2829	6.3492	9.8500e-003		0.4064	0.4064		0.3750	0.3750		970.1181	970.1181	0.2915		976.2402
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7117	7.2829	6.3492	9.8500e-003		0.4064	0.4064		0.3750	0.3750		970.1181	970.1181	0.2915		976.2402

3.3 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003		122.1845
Total	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003		122.1845

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	0.7117	6.8986	6.3492	9.8500e-003		0.4064	0.4064		0.3750	0.3750	0.0000	970.1181	970.1181	0.2915		976.2402
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7117	6.8986	6.3492	9.8500e-003		0.4064	0.4064		0.3750	0.3750	0.0000	970.1181	970.1181	0.2915		976.2402

3.3 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003		122.1845
Total	0.0573	0.0930	0.7804	1.6200e-003	0.1506	9.4000e-004	0.1515	0.0400	8.7000e-004	0.0408		122.0267	122.0267	7.5200e-003		122.1845

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.470808	0.065208	0.167521	0.156577	0.039284	0.006365	0.011828	0.073190	0.001405	0.001202	0.003716	0.000539	0.002359

5.0 Energy Detail

4.4 Fleet Mix

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
lb/day											lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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						
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	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						
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366
Unmitigated	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366

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	1.0057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3898					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5500e-003	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366
Total	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366

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	1.0057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3898					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5500e-003	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366
Total	4.3970	1.5000e-004	0.0163	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0347	0.0347	9.0000e-005		0.0366

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 Vegetation

APPENDIX B

Four Seasons Weather Monitoring



2016

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: JANUARY - 2016				
1/1	62.4	13.0	15.0	
1/2	65.1	7.0	10.0	
1/3	67.1	8.0	10.0	
1/4	61.0	9.0	12.0	
1/5	52.7	13.0	17.0	Rain (1.1")
1/6	60.6	19.0	22.0	Rain (.92")
1/7	59.0	33.0	37.0	Severe high winds and Rain (.24")
1/8	61.2	31.0	35.0	Severe high winds
1/9	63.3	11.0	15.0	
1/10	61.5	24.0	28.0	Excessive Wind
1/11	65.8	10.0	12.0	
1/12	66.6	10.0	12.0	
1/13	64.0	12.0	15.0	
1/14	68.5	36.0	40.0	Severe high winds
1/15	67.6	54.0	62.0	Severe high winds
1/16	67.8	28.0	30.0	Extreme high winds
1/17	71.8	9.0	12.0	
1/18	70.9	37.0	42.0	Severe high winds
1/19	72.0	37.0	40.0	Severe high winds
1/20	75.6	37.0	45.0	Severe high winds
1/21	73.2	11.0	15.0	
1/22	70.9	8.0	10.0	
1/23	72.7	35.0	42.0	Severe high winds
1/24	71.2	36.0	40.0	Severe high winds
1/25	70.9	23.0	28.0	Excessive Wind
1/26	73.4	27.0	32.0	Extreme high winds
1/27	71.1	8.0	10.0	
1/28	73.4	10.0	12.0	
1/29	75.9	10.0	12.0	
1/30	74.1	38.0	45.0	Severe high winds
1/31	64.2	55.0	68.0	Severe high winds and Rain (.15")
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: JANUARY - 2016				
1/1	13	15	12	17
1/2	7	10	10	16
1/3	8	10	9	11
1/4	9	12	10	15
1/5	13	17	9	11
1/6	19	22	12	15
1/7	33	37	13	16
1/8	31	35	13	15
1/9	11	15	10	12
1/10	24	28	10	13
1/11	10	12	10	12
1/12	10	12	9	12
1/13	12	15	9	11
1/14	36	40	9	13
1/15	54	62	36	41
1/16	28	30	7	10
1/17	9	12	10	13
1/18	37	42	10	13
1/19	37	40	8	10
1/20	37	45	8	10
1/21	11	15	12	14
1/22	8	10	10	11
1/23	35	42	10	12
1/24	36	40	7	9
1/25	23	28	22	26
1/26	27	32	17	20
1/27	8	10	9	11
1/28	10	12	10	12
1/29	10	12	10	12
1/30	38	45	14	19
1/31	55	68	20	23

Coachella Valley Wind Comparison

	North Palm Springs		Cathedral City		Coachella	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	Red - N. Palm Springs wind speed was at, or above, 50 mph.					
MONTH: JANUARY - 2016						
1/1	13	15	6	7	5	9
1/2	7	10	4	5	5	10
1/3	8	10	5	7	7	9
1/4	9	12	6	7	7	12
1/5	13	17	6	7	13	19
1/6	19	22	13	17	11	19
1/7	33	37	9	12	9	15
1/8	31	35	6	7	4	8
1/9	11	15	8	10	6	10
1/10	24	28	6	10	3	7
1/11	10	12	6	10	5	17
1/12	10	12	7	10	5	9
1/13	12	15	4	5	3	6
1/14	36	40	8	10	4	9
1/15	54	62	22	30	16	26
1/16	28	30	4	7	5	9
1/17	9	12	7	10	6	10
1/18	37	42	8	10	3	7
1/19	37	40	7	7	4	9
1/20	37	45	5	7	8	14
1/21	11	15	9	12	7	13
1/22	8	10	6	7	4	7
1/23	35	42	7	10	5	9
1/24	36	40	7	12	11	14
1/25	23	28	12	15	10	17
1/26	27	32	12	17	12	18
1/27	8	10	5	7	5	7
1/28	10	12	7	10	4	7
1/29	10	12	7	10	4	7
1/30	38	45	10	12	14	21
1/31	55	68	24	30	30	49

The Four Seasons – Temperature and Wind Speed

January - 2016 (# of days: 31)

Temperature

of days at/over **95°**: 0 days **0% of the month had excessive heat**

Wind Speed

of days at/over **20 mph**: 15 days **48% of the month had excessive wind**

Wind Gusts

of days with *gusts* at/over **25 mph**: 15 days **48% of the days of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of **25-29 mph**: 2

of days with gusts of **30-34 mph**: 2

of days with gusts of **35-44 mph**: 7

of days with gusts of **45-54 mph**: 2

of days with gusts over **55 mph**: 2

Strongest gust of the month: **68 mph**

SUMMARY

This was the windiest January in five years. Almost half of the days were windy and gusty. While rain isn't included in the “non-usable days” statistics, it is being indicated on the record and should be considered as additional days that the CV Link would probably not be used. As usual, on especially windy days, the wind speeds recorded at the Four Seasons was at least double that recorded at the Palm Springs International Airport.

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to **wind**: 15
Number of **additional** unusable days due just to **heat**: 0
TOTAL: 15 unusable days

Number of usable days in January, 2016: **16 day(s)** (31 minus 15)

Number of usable days **year-to-date**: 16 / 31 (52%)

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: DECEMBER - 2015				
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		
12/1/15	71.1	10.0	12.0	
12/2/15	72.7	9.0	12.0	
12/3/15	73.9	11.0	12.0	
12/4/15	68.0	10.0	15.0	
12/5/15	74.1	12.0	15.0	
12/6/15	75.7	10.0	12.0	
12/7/15	77.9	9.0	12.0	
12/8/15	79.0	10.0	12.0	
12/9/15	77.2	10.0	12.0	
12/10/15	72.9	30.0	35.0	extreme high winds
12/11/15	67.6	57.0	62.0	severe high winds and rain
12/12/15	67.8	33.0	37.0	severe high winds
12/13/15	68.4	52.0	58.0	severe high winds
12/14/15	60.4	51.0	55.0	severe high winds
12/15/15	62.6	28.0	32.0	extreme high winds
12/16/15	63.1	13.0	20.0	
12/17/15	63.5	8.0	12.0	
12/18/15	67.1	11.0	15.0	
12/19/15	68.2	18.0	20.0	
12/20/15	63.9	35.0	42.0	severe high winds
12/21/15	66.4	28.0	32.0	extreme high winds
12/22/15	65.5	26.0	32.0	extreme high winds
12/23/15	71.8	42.0	50.0	severe high winds
12/24/15	67.5	53.0	62.0	severe high winds
12/25/15	60.8	58.0	62.0	severe high winds
12/26/15	58.6	42.0	55.0	severe high winds
12/27/15	59.2	24.0	30.0	excessive wind
12/28/15	61.0	29.0	35.0	extreme high winds
12/29/15	63.1	13.0	15.0	
12/30/15	61.2	11.0	12.0	
12/31/15	63.3	15.0	20.0	

The Four Seasons – Temperature and Wind Speed

December - 2015 (# of days: 31)

Temperature

of days at/over 95°: 0 days **0% of the month had excessive heat**

Wind Speed

of days at/over 20 mph: 15 days **48% of the month had excessive wind**

Wind Gusts

of days with *gusts* at/over 25 mph: 15 days **48% of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of 25-29 mph: 0

of days with gusts of 30-34 mph: 4

of days with gusts of 35-44 mph: 4

of days with gusts of 45-54 mph: 1

of days with gusts over 55 mph: 6

Strongest gust of the month: **62 mph**

SUMMARY

December winds came-in like a lamb, then whooped-up mid-month with sustained winds over 50 mph and gusts past 60 mph. After a brief respite, those same high winds returned at a velocity that would have swept Santa right out of his sleigh ... this time accompanied by low temps that made the wind cut like a cold knife.

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to wind: 15
Number of additional unusable days due just to heat: 0
TOTAL: 15 unusable days

Number of usable days in December, 2015: **16 day(s)** (31 minus 15)

Number of usable days year-to-date: 91 / 365

For 2015: 91/365 days 25% Usable CV Link days
 274/365 days 75% UNusable CV Link days

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: FEBRUARY - 2015				
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		
2/1/15	80.1	11.9	12.3	
2/2/15	79.5	6.7	9.8	
2/3/15	82.0	8.9	9.8	
2/4/15	83.1	9.2	9.8	
2/5/15	82.8	9.2	12.3	
2/6/15	81.3	9.6	12.3	
2/7/15	82.2	40.0	45.0	severe high winds
2/8/15	86.9	33.3	34.9	extreme high winds
2/9/15	84.6	30.6	34.9	extreme high winds
2/10/15	83.1	30.2	32.4	extreme high winds
2/11/15	80.4	19.7	22.4	
2/12/15	82.9	9.8	12.3	
2/13/15	87.8	10.7	12.3	
2/14/15	87.8	18.6	19.9	
2/15/15	81.7	16.8	19.9	
2/16/15	78.6	14.5	15.0	
2/17/15	80.2	11.2	12.3	
2/18/15	83.3	8.7	9.8	
2/19/15	85.3	25.5	27.5	extreme high winds
2/20/15	85.6	30.2	32.4	extreme high winds
2/21/15	76.3	51.2	65.1	severe high winds
2/22/15	68.7	44.7	47.4	severe high winds
2/23/15	66.4	30.2	32.4	severe high winds
2/24/15	75.2	22.1	24.8	excessive wind
2/25/15	80.4	23.7	27.5	excessive wind
2/26/15	77.9	38.9	42.5	severe high winds
2/27/15	71.8	52.1	57.5	severe high winds
2/28/15	69.3	35.3	42.5	severe high winds

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: FEBRUARY - 2016				
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		
2/1	58.5	59.0	68.0	Severe high winds
2/2	62.4	17.0	20.0	
2/3	64.2	10.0	15.0	
2/4	69.4	20.0	22.0	Excessive Wind
2/5	72.5	15.0	20.0	
2/6	76.1	11.0	15.0	
2/7	81.1	21.0	22.0	Excessive Wind
2/8	82.4	20.0	22.0	Excessive Wind
2/9	88.3	12.0	12.0	
2/10	85.6	11.0	12.0	
2/11	85.6	9.0	12.0	
2/12	85.8	10.0	12.0	
2/13	86.4	9.0	12.0	
2/14	88.3	25.0	30.0	Extreme high winds
2/15	87.1	23.0	30.0	Excessive Wind
2/16	89.4	11.0	12.0	
2/17	81.5	51.0	58.0	Severe high winds
2/18	76.5	64.0	70.0	Severe high winds
2/19	76.6	32.0	37.0	Severe high winds
2/20	85.3	36.0	42.0	Severe high winds
2/21	87.6	33.0	37.0	Severe high winds
2/22	84.2	33.0	42.0	Severe high winds
2/23	78.1	16.0	17.0	
2/24	77.2	11.0	15.0	
2/25	83.5	11.0	15.0	
2/26	86.4	23.0	25.0	Excessive Wind
<i>Primary weather station stopped recording late on 2/26; data from secondary (interior) station was used for the following days:</i>				
2/27	88.3	11.0	17.0	
2/28	90.3	9.0	14.0	
2/29	90.5	6.0	10.0	

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: FEBRUARY - 2015				
2/1	59.0	68.0	32	45
2/2	17.0	20.0	10	17
2/3	10.0	15.0	8	10
2/4	20.0	22.0	9	10
2/5	15.0	20.0	14	17
2/6	11.0	15.0	12	18
2/7	21.0	22.0	16	19
2/8	20.0	22.0	17	20
2/9	12.0	12.0	9	11
2/10	11.0	12.0	10	13
2/11	9.0	12.0	10	12
2/12	10.0	12.0	12	14
2/13	9.0	12.0	13	15
2/14	25.0	30.0	20	24
2/15	23.0	30.0	20	25
2/16	11.0	12.0	12	13
2/17	51.0	58.0	14	22
2/18	64.0	70.0	30	39
2/19	32.0	37.0	16	21
2/20	36.0	42.0	8	10
2/21	33.0	37.0	9	12
2/22	33.0	42.0	26	33
2/23	16.0	17.0	16	20
2/24	11.0	15.0	10	15
2/25	11.0	15.0	10	12
2/26	23.0	25.0	12	16
2/27	11.0	17.0	13	15
2/28	9.0	14.0	12	14
2/29	6.0	10.0	12	14

Coachella Valley Wind Comparison

	North Palm Springs		Cathedral City		Coachella	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	Red - N. Palm Springs wind speed was at, or above, 50 mph.					
MONTH: FEBRUARY - 2016						
2/1	59.0	68.0	21	28	24	34
2/2	17.0	20.0	11	15	9	14
2/3	10.0	15.0	7	7	5	12
2/4	20.0	22.0	6	7	6	10
2/5	15.0	20.0	10	12	8	14
2/6	11.0	15.0	6	7	8	10
2/7	21.0	22.0	11	15	11	18
2/8	20.0	22.0	10	12	11	15
2/9	12.0	12.0	6	7	7	10
2/10	11.0	12.0	9	10	6	10
2/11	9.0	12.0	7	10	5	9
2/12	10.0	12.0	6	7	7	12
2/13	9.0	12.0	7	10	5	11
2/14	25.0	30.0	14	20	11	23
2/15	23.0	30.0	11	15	not reporting	
2/16	11.0	12.0	9	12	8	10
2/17	51.0	58.0	13	17	14	29
2/18	64.0	70.0	17	20	17	28
2/19	32.0	37.0	7	10	9	14
2/20	36.0	42.0	6	7	6	9
2/21	33.0	37.0	8	12	7	10
2/22	33.0	42.0	14	20	15	26
2/23	16.0	17.0	8	10	10	16
2/24	11.0	15.0	8	10	4	6
2/25	11.0	15.0	7	10	5	8
2/26	23.0	25.0	7	12	7	12
2/27	11.0	17.0	6	10	5	11
2/28	9.0	14.0	9	10	7	13
2/29	6.0	10.0	8	12	8	13

The Four Seasons – Temperature and Wind Speed

February - 2015 (# of days: 28)

Temperature

of days at/over **95°**: 0 days **0% of the month had excessive heat**

Wind Speed

of days at/over **20 mph**: 14 days **50% of the month had excessive wind**

Wind Gusts

of days with *gusts* at/over **25 mph**: 13 days **46% of the days of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of **25-29 mph**: 2

of days with gusts of **30-34 mph**: 5

of days with gusts of **35-44 mph**: 3

of days with gusts of **45-54 mph**: 2

of days with gusts over **55 mph**: 2

Strongest gust of the month: **65.1 mph**

SUMMARY

February featured beautiful temperatures and brutal winds. The wind blew excessively for half of the month. A full week’s worth of days exhibited wind reaching to gale levels. Another four days had even higher wind speeds, with one of those days reaching “storm” level (capable of structural damage according to the Beaufort Scale).

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to **wind**: 14
Number of **additional** unusable days due just to **heat**: 0
TOTAL: 14 unusable days

Number of usable days in February, 2015: **14 day(s)** (28 minus 14)

Number of usable days **year-to-date**: 42 / 59

The Four Seasons – Temperature and Wind Speed

February - 2016 (# of days: 29)

Temperature

of days at/over **95°**: 0 days **0% of the month had excessive heat**

Wind Speed

of days at/over **20 mph**: 13 days **45% of the month had excessive wind**

Wind Gusts

of days with *gusts* at/over **25 mph**: 10 days **34% of the days of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of **25-29 mph**: 1

of days with gusts of **30-34 mph**: 2

of days with gusts of **35-44 mph**: 4

of days with gusts of **45-54 mph**: 0

of days with gusts over **55 mph**: 3

Strongest gust of the month: **70 mph**

SUMMARY

February was HOT, unusually HOT, record-breaking kind of HOT. The whole Coachella Valley dealt with that heat. However, it was the Palm Springs-end of the Valley that, once again, was windy --- for almost half of the month. After a year of being subjected to the incredibly windy conditions on the levee at the northern end of Palm Springs, our primary weather station bit-the-dust (pun intended!) A coincidence? We think not! That station will be repaired. Until then, we will use data from our secondary weather station, located on the interior of our community where it is less windy, and less representative of the CV Link route.

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to wind :	13
Number of additional unusable days due just to heat :	0
TOTAL:	13 unusable days

Number of usable days in February, 2016 : **16 day(s)** (29 minus 13)

Number of usable days **year-to-date**: 32 / 60 (53%)

Weather - The Four Seasons at the Whitewater Wash

*Temperature and wind-speed information collected between
Hwy. 111 and Gene Autry Trail, where a section of the CV Link is proposed to be built.*

YEARLY TOTALS: May, 2011 through 2015

- **May, 2011:** A weather station was installed by new residents at their home located on the perimeter of the FOUR SEASONS.
- **January, 2014:** Owners and their weather station moved to an interior home at the FOUR SEASONS, **further away from the levee and the wash.**
- **January 1, 2015:** A NEW (additional) weather station was installed immediately adjacent to the wash and the proposed CV Link route.
- The "# of days in the year" column indicates the # of days that data was collected per year at a Four Seasons weather station.

MO/YEAR	# of days at/over 95°	# of days with Wind +15/20 mph	# of days with Gusts +20/25 mph		# of days in the year	# of USABLE Days	Unusable Days	COMMENTS
May-Dec, 2011	133	191	190		244	46	198	<i>Partial year</i>
2012	160	279	277		361	73	288	
2013	149	237	233		355	102	253	
2014	144	197	205		340	104	236	<i>Weather station moved to its new location in Jan, 2014</i>
								<i>NOTE: A NEW weather station was erected immediately adjacent to the wash on January, 1, 2015. Because the readings are more accurate at this location, the "windy day" value was increased to 20 mph, and the "gusty day" value was increased to 25 mph beginning in 2015.</i>
2015	124	263	261		365	91	274	<i>New weather station location resulted in more accurate readings.</i>
2016								
2017								
2018								
2019								
2020								
	710 HOT DAYS	1167 Very WINDY DAYS	1166 GUSTY DAYS		1665 Days of Data Collection	416 USABLE DAYS	1249 Days NOT Usable	75% of May 2011 - 2015: This section of the CV Link would NOT have been useable due to excessive WIND or heat.
	43%	70%	70%			25%		

Weather - The Four Seasons at the Whitewater Wash

Temperature and wind-speed information collected between Hwy. 111 and Gene Autry Trail, where a section of the CV Link is proposed to be built.

2015

- **January 1, 2015:** A NEW (additional) weather station was installed immediately adjacent to the wash and the proposed CV Link route.
- The "# of days in the year" column indicates the # of days that data was collected per year at the Four Seasons weather station.

NOTE: *Because of the more accurate location of the new weather station, wind thresholds were increased in 2015 to more objectively reflect the wind speeds at the new location. Each wind threshold value was increased by 5 mph.*

MONTH	# of days at/over 95°	# of days with Wind +20 mph	# of days with Gusts +25 mph	Max gust of the month	# of days in the month	# of USABLE Days	Unusable Days	COMMENTS
January	0	3	3	30 mph	31	28	3	Nice month but still with 3 uncomfortably windy days and 4 additional days of rain.
February	0	14	13	65 mph	28	14	14	February featured beautiful temperatures and brutal winds signaling the beginning of the windy spring months.
March	4	21	18	57 mph	31	9	22	More than 2/3 of the days were excessively wind. Which is typical for March.
April	3	28	30	65 mph	30	0	30	April had the best temperatures of the year, and the worst winds. Making outdoor activity difficult the entire month.
May	5	30	30	70 mph	31	0	31	May winds were brutal - some of the worst winds experienced in this area. When the wind died-down, the heat kicked-in.
June	24	30	30	65 mph	30	0	30	High heat and incredibly strong winds combined to make it miserable to be outside on any day this month.
July	26	31	31	68 mph	31	0	31	Stronger than usual winds, high temps, plus high humidity for most of the month. Air quality was also an issue this month.
August	31	31	31	72 mph	31	0	31	Incredibly HOT and windy every day ...even worse than July. 40, 50 and 60 mph wind was common - 72mph was the winner.
September	24	26	26	60 mph	30	0	30	Add high dew points and humidity levels to the ever-present heat and wind and the result is a miserable month.
October	7	22	22	53 mph	31	6	25	Temps cooled a bit, but the wind continued to blow. Air quality at the end of the month went into RED, then PURPLE levels.
November	0	12	12	65 mph	30	18	12	Moderate temperatures accompanied by periods of extremely strong winds up to 55 mph with 65 mph gusts.
December	0	15	15	62 mph	31	16	15	This month had alternating periods of calm and then high winds over 50 mph, with accompanying cold temps. Br-r-r-r-r.
	124 HOT days in 2015	263 Very WINDY days in 2015	261 GUSTY days in 2015		365 Days of Data Collection	91 Usable Days in 2015	274 Days NOT Usable	75% of 2015: This section of the CV Link would NOT have been useable due to excessive WIND or heat.
	34%	72%	72%			25%		

Weather - The Four Seasons at the Whitewater Wash

Temperature and wind-speed information collected between Hwy. 111 and Gene Autry Trail, where a section of the CV Link is proposed to be built.

2016

- **January 1, 2015:** A NEW (additional) weather station was installed immediately adjacent to the wash and the proposed CV Link route.
- The "# of days in the year" column indicates the # of days that data was collected per year at the Four Seasons weather station.

NOTE: Because of the more accurate location of the new weather station, wind thresholds were increased in 2015 to more objectively reflect the wind speeds at the new location. Each wind threshold value was increased by 5 mph.

MONTH	# of days at/over 95°	# of days with Wind +20 mph	# of days with Gusts +25 mph	Max gust of the month	# of days in the month	# of USABLE Days	Unusable Days	COMMENTS
January	0	15	15	68 mph	31	16	15	This was the windiest January in the past 5 years, with rain added in for good measure!
February	0	13	10	70 mph	29	16	13	It was unusually hot, but typically windy at the north end of Palm Springs. Only about 1/2 of the month was acceptable.
March	0	29	29	72 mph	31	2	29	Winds howled all month. On 16 days, gusts exceeded 45 mph, with a maximum gust of 72 mph. On 9 days, temps exceeded 90
April	3	29	29	70 mph	30	1	29	Roller coaster temperatures with high winds all month. On cool days the wind blew on hot days the wind blew.
May	7	31	31	70 mph	31	0	31	It was a miserable, windy month. The few days with nice temperature were ruined by the incessant wind.
June	24	29	29	70 mph	30	0	30	Record breaking heat, wind gusts up to 70 mph and a record 19 air quality advisories issued this month
July								
August								
September								
October								
November								
December								
	34 HOT days to date in 2016	146 Very WINDY days to date in 2016	143 GUSTY days to date in 2016		182 Days of Data Collection	35 Usable Days to date in 2016	147 Days NOT Usable	of 2016 (to date): This section of the CV Link would NOT have been useable due to excessive WIND or heat.
	19%	80%	79%			19%		

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: MARCH - 2016				
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		
3/1	90.9	7	10	Primary station down; secondary (interior) used
3/2	90.5	20	24	Primary station down; secondary (interior) used
3/3	90.9	20	26	Excessive Wind; secondary (interior) used
3/4	87.7	27	35	Extreme Wind ; secondary (interior) used
3/5	77	38	45	Severe high winds
3/6	73.4	66	72	Severe high winds
3/7	61.3	50	55	Severe high winds
3/8	74.8	39	45	Severe high winds
3/9	85.1	34	37	Severe high winds
3/10	89.4	32	37	Severe high winds
3/11	78.3	64	70	Severe high winds
3/12	68.9	49	55	Severe high winds
3/13	75.9	58	65	Severe high winds
3/14	74.7	58	65	Severe high winds
3/15	86.9	31	35	Severe high winds
3/16	88.7	17	25	Excessive Wind
3/17	91	37	42	Severe high winds
3/18	92.1	34	37	Severe high winds
3/19	90.5	32	37	Severe high winds
3/20	91.2	44	53	Severe high winds
3/21	82.9	49	53	Severe high winds
3/22	75.4	53	60	Severe high winds
3/23	77.5	25	28	Extreme high winds
3/24	86.9	31	35	Severe high winds
3/25	90.1	36	42	Severe high winds
3/26	85.6	43	47	Severe high winds
3/27	83.8	38	45	Severe high winds
3/28	75.6	54	60	Severe high winds
3/29	68.4	50	58	Severe high winds
3/30	69.1	40	42	Severe high winds
3/31	78.3	43	50	Severe high winds

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: MARCH - 2016				
3/1	7	10	12	15
3/2	20	24	14	23
3/3	20	26	8	17
3/4	27	35	17	23
3/5	38	45	15	20
3/6	66	72	30	37
3/7	50	55	23	34
3/8	39	45	17	23
3/9	34	37	9	14
3/10	32	37	10	14
3/11	64	70	24	34
3/12	49	55	25	29
3/13	58	65	16	22
3/14	58	65	23	30
3/15	31	35	12	14
3/16	17	25	12	26
3/17	37	42	18	22
3/18	34	37	17	24
3/19	32	37	16	18
3/20	44	53	21	24
3/21	49	53	28	35
3/22	53	60	28	35
3/23	25	28	16	25
3/24	31	35	13	15
3/25	36	42	13	17
3/26	43	47	20	27
3/27	38	45	12	18
3/28	54	60	28	35
3/29	50	58	29	35
3/30	40	42	28	32
3/31	43	50	17	25

Coachella Valley Wind Comparison

	North Palm Springs		Cathedral City		Coachella	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	Red - N. Palm Springs wind speed was at, or above, 50 mph.					
MONTH: MARCH - 2016						
3/1	7	10	8	10	5	6
3/2	20	24	9	12	<i>not reporting</i>	
3/3	20	26	6	7	<i>not reporting</i>	
3/4	27	35	12	17	<i>not reporting</i>	
3/5	38	45	9	12	<i>not reporting</i>	
3/6	66	72	21	28	<i>not reporting</i>	
3/7	50	55	13	17	17	30
3/8	39	45	10	12	17	24
3/9	34	37	8	10	11	19
3/10	32	37	8	10	10	14
3/11	64	70	20	28	34	46
3/12	49	55	18	22	18	31
3/13	58	65	11	15	21	35
3/14	58	65	13	17	19	34
3/15	31	35	9	12	10	18
3/16	17	25	8	10	10	13
3/17	37	42	10	10	10	15
3/18	34	37	11	12	13	20
3/19	32	37	8	10	10	14
3/20	44	53	9	12	11	18
3/21	49	53	16	22	15	23
3/22	53	60	17	20	18	34
3/23	25	28	14	20	14	24
3/24	31	35	7	7	8	15
3/25	36	42	11	12	14	19
3/26	43	47	16	22	18	25
3/27	38	45	10	12	11	20
3/28	54	60	24	32	27	39
3/29	50	58	17	25	34	55
3/30	40	42	19	28	17	26
3/31	43	50	17	25	15	23

The Four Seasons – Temperature and Wind Speed

March - 2016 (# of days: 31)

Temperature

of days at/over **95°**: 0 days **0% of the month had excessive heat**

Wind Speed

of days at/over **20 mph**: 29 days **94% of the month had excessive wind**

Wind Gusts

of days with *gusts* at/over **25 mph**: 29 days **94% of the days of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of **25-29 mph**: 3
of days with gusts of **30-34 mph**: 0
of days with gusts of **35-44 mph**: 10
of days with gusts of **45-54 mph**: 7
of days with gusts over **55 mph**: 9

Strongest gust of the month: **72 mph**

SUMMARY

Our primary weather station (immediately adjacent to the levee) continued to be down for the first 5 days of March ... values from our secondary station (located on an interior street) were used for those days. OMG ... did the wind ever blow this month ... 29 days of severe wind. On nine of the days with lower level winds, the temps soared above 90 degrees. Altogether this would have been a miserable month to use a levee-oriented CV Link in North Palm Springs.

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to **wind**: 29
Number of **additional** unusable days due just to **heat**: 0
TOTAL: 29 unusable days

Number of usable days in March, 2016: **2 day(s)** (31 minus 29)

Number of usable days **year-to-date**: 34 / 91 (37%)

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: APRIL - 2016				
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		
4/1	85.5	43	47	Severe high winds
4/2	88.5	22	25	Excessive Wind
4/3	89.8	31	35	Severe high winds
4/4	90.5	34	37	Severe high winds
4/5	95.2	27	30	Extreme high winds
4/6	97.9	50	55	Severe high winds
4/7	80.6	43	55	Severe high winds
4/8	72.1	32	35	Severe high winds and Rain (.11")
4/9	74.1	37	45	Severe high winds
4/10	74.3	38	42	Severe high winds
4/11	77.4	29	37	Extreme high winds
4/12	82.9	44	50	Severe high winds
4/13	86.4	44	46	Severe high winds
4/14	81.7	54	60	Severe high winds
4/15	81.5	54	60	Severe high winds
4/16	85.6	35	40	Severe high winds
4/17	88.7	24	30	Excessive Wind
4/18	92.7	18	22	
4/19	94.5	30	32	Severe high winds
4/20	95	35	42	Severe high winds
4/21	94.5	43	47	Severe high winds
4/22	90.9	62	70	Severe high winds
4/23	85.6	53	60	Severe high winds
4/24	86.5	59	65	Severe high winds
4/25	75.2	57	58	Severe high winds and Rain (.01)
4/26	77.7	48	55	Severe high winds
4/27	79.7	49	55	Severe high winds
4/28	75	49	58	Severe high winds
4/29	80.6	51	58	Severe high winds
4/30	72.7	56	62	Severe high winds

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: APRIL - 2016				
4/1	43	47	20	27
4/2	22	25	30	36
4/3	31	35	12	16
4/4	34	37	15	19
4/5	27	30	26	31
4/6	50	55	25	32
4/7	43	55	29	34
4/8	32	35	26	33
4/9	37	45	13	20
4/10	38	42	15	19
4/11	29	37	12	16
4/12	44	50	14	17
4/13	44	46	13	16
4/14	54	60	23	30
4/15	54	60	23	30
4/16	35	40	13	17
4/17	24	30	10	15
4/18	18	22	21	26
4/19	30	32	14	18
4/20	35	42	18	24
4/21	43	47	25	31
4/22	62	70	20	24
4/23	53	60	23	29
4/24	59	65	28	36
4/25	57	58	31	37
4/26	48	55	15	19
4/27	49	55	29	36
4/28	49	58	15	21
4/29	51	58	20	24
4/30	56	62	16	22

The Four Seasons – Temperature and Wind Speed

April - 2016 (# of days: 30)

Temperature

of days at/over 95°: 3 days **10% of the month had excessive heat**

Wind Speed

of days at/over 20 mph: 29 days **97% of the month had excessive wind**

Wind Gusts

of days with gusts at/over 25 mph: 29 days **97% of the days of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of 25-29 mph: 1
of days with gusts of 30-34 mph: 3
of days with gusts of 35-44 mph: 7
of days with gusts of 45-54 mph: 5
of days with gusts over 55 mph: 13

Strongest gust of the month: **70 mph**

SUMMARY

Roller coaster temperatures and consistently high winds, again ... welcome to Spring! It's the same thing every year ... there were some really nice temperatures, but the strong winds prevented the enjoyment of outdoor activities. On days when temperatures turned hot, the winds continued, compounding the discomfort ... a preview of the summer heat and the wind that always blows in the northern end of Palm Springs.

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to wind: 29
Number of additional unusable days due just to heat: 0
TOTAL: 29 unusable days

Number of usable days in April, 2016: **1 day** (30 minus 29)

Number of usable days year-to-date: 35 / 121 (29%)

Coachella Valley Wind Comparison

Date	North Palm Springs		Cathedral City		Coachella	
	Max. Wind	Max. Gust	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	Red - N. Palm Springs wind speed was at, or above, 50 mph.					
MONTH: APRIL - 2016						
4/1	43	47	13	15	13	22
4/2	22	25	10	15	11	17
4/3	31	35	13	15	11	18
4/4	34	37	13	17	7	15
4/5	27	30	8	10	8	11
4/6	50	55	10	12	14	20
4/7	43	55	10	12	18	26
4/8	32	35	10	12	18	26
4/9	37	45	13	15	14	23
4/10	38	42	9	15	9	17
4/11	29	37	10	15	10	15
4/12	44	50	13	17	11	18
4/13	44	46	10	12	16	24
4/14	54	60	18	20	23	35
4/15	54	60	17	22	18	34
4/16	35	40	17	20	<i>not reporting</i>	
4/17	24	30	11	15	<i>not reporting</i>	
4/18	18	22	9	10	<i>not reporting</i>	
4/19	30	32	10	12	<i>not reporting</i>	
4/20	35	42	10	12	9	16
4/21	43	47	11	15	13	21
4/22	62	70	22	32	29	40
4/23	53	60	18	28	16	32
4/24	59	65	18	25	22	35
4/25	57	58	28	37	25	41
4/26	48	55	13	17	16	26
4/27	49	55	18	28	24	35
4/28	49	58	21	28	26	34
4/29	51	58	12	17	19	32
4/30	56	62	20	25	29	39

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: MAY - 2016				
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		
5/1	87.3	33	37	Severe high winds
5/2	90.7	23	28	Excessive Wind
5/3	94.5	32	35	Severe high winds
5/4	95.7	50	55	Severe high winds
5/5	75.6	56	62	Severe high winds
5/6	72.5	52	58	Severe high winds
5/7	77	41	50	Severe high winds
5/8	77	47	50	Severe high winds
5/9	83.5	49	58	Severe high winds
5/10	88	39	42	Severe high winds
5/11	94.8	35	40	Severe high winds
5/12	100.4	27	30	Extreme high winds
5/13	98.4	36	45	Severe high winds
5/14	91.6	64	70	Severe high winds
5/15	78.3	62	70	Severe high winds
5/16	86.2	58	65	Severe high winds
5/17	88.3	46	55	Severe high winds
5/18	98.1	42	45	Severe high winds
5/19	95.4	47	53	Severe high winds
5/20	81.1	57	62	Severe high winds
5/21	77.7	52	62	Severe high winds
5/22	82.2	53	60	Severe high winds
5/23	81.1	56	62	Severe high winds
5/24	79.5	52	58	Severe high winds
5/25	77.2	53	60	Severe high winds
5/26	85.1	49	58	Severe high winds
5/27	94.5	45	50	Severe high winds
5/28	94.1	34	40	Severe high winds
5/29	91.2	45	50	Severe high winds
5/30	95.5	42	50	Severe high winds
5/31	100.4	40	45	Severe high winds

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: MAY - 2016				
5/1	33	37	22	27
5/2	23	28	21	30
5/3	32	35	22	30
5/4	50	55	20	29
5/5	56	62	24	29
5/6	52	58	23	29
5/7	41	50	25	34
5/8	47	50	26	33
5/9	49	58	24	29
5/10	39	42	15	17
5/11	35	40	17	24
5/12	27	30	25	31
5/13	36	45	18	24
5/14	64	70	26	35
5/15	62	70	12	15
5/16	58	65	21	28
5/17	46	55	13	16
5/18	42	45	29	36
5/19	47	53	22	30
5/20	57	62	22	27
5/21	52	62	31	40
5/22	53	60	25	31
5/23	56	62	28	36
5/24	52	58	24	30
5/25	53	60	20	25
5/26	49	58	15	19
5/27	45	50	10	19
5/28	34	40	12	16
5/29	45	50	15	20
5/30	42	50	14	19
5/31	40	45	13	15

Coachella Valley Wind Comparison

	North Palm Springs		Cathedral City		Coachella	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	Red - N. Palm Springs wind speed was at, or above, 50 mph.					
MONTH: MAY - 2016						
5/1	33	37	14	20	12	21
5/2	23	28	10	12	6	14
5/3	32	35	10	15	8	13
5/4	50	55	19	22	not	reporting
5/5	56	62	18	25	not	reporting
5/6	52	58	9	10	not	reporting
5/7	41	50	12	15	not	reporting
5/8	47	50	16	22	not	reporting
5/9	49	58	13	17	10	19
5/10	39	42	11	15	13	21
5/11	35	40	12	15	10	16
5/12	27	30	14	20	11	18
5/13	36	45	10	15	10	17
5/14	64	70	20	25	24	36
5/15	62	70	19	22	23	38
5/16	58	65	13	17	24	37
5/17	46	55	19	28	23	33
5/18	42	45	12	15	14	24
5/19	47	53	18	22	20	32
5/20	57	62	24	35	22	31
5/21	52	62	15	20	20	34
5/22	53	60	15	22	21	33
5/23	56	62	13	17	21	36
5/24	52	58	18	22	20	32
5/25	53	60	17	22	21	34
5/26	49	58	14	17	18	27
5/27	45	50	12	17	16	24
5/28	34	40	14	15	11	19
5/29	45	50	11	17	14	22
5/30	42	50	11	12	15	22
5/31	40	45	11	15	11	17

The Four Seasons – Temperature and Wind Speed

May - 2016 (# of days: 31)

Temperature

of days at/over **95°**: 7 days **23% of the month had excessive heat**

Wind Speed

of days at/over **20 mph**: 31 days **100% of the month had excessive wind**

Wind Gusts

of days with *gusts* at/over **25 mph**: 31 days **100% of the days of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of **25-29 mph**: 1
of days with gusts of **30-34 mph**: 1
of days with gusts of **35-44 mph**: 5
of days with gusts of **45-54 mph**: 9
of days with gusts over **55 mph**: 15

Strongest gust of the month: **70 mph (2 days)**

SUMMARY

Every single day in May had excessive wind ... meaning that 100% of the month had sustained winds exceeding 23 mph. With gusts on 29 days reaching the “severe” level of 35 mph or over. It was a miserable, windy month --- one of the worst in memory. No other Valley city had such a wretched month. **Please see the page of Valley city comparisons to see the vast difference in wind speeds --- it’s just not the same elsewhere. Enough said.**

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to **wind**: 31
Number of **additional** unusable days due just to **heat**: 0 (but 14 days = 90+ degrees)
TOTAL: 31 unusable days

Number of usable days in May, 2016: **0 day(s)** (31 minus 31)

Number of usable days **year-to-date**: 35 / 152 (23%)

Weather - The Four Seasons at the Whitewater Wash

Temperature and wind-speed information collected between
Hwy. 111 and Gene Autry Trail, where a section of the CV Link is proposed to be built.

YEARLY TOTALS: May, 2011 through April, 2016

- **May, 2011:** A weather station was installed by new residents at their home located on the perimeter of the FOUR SEASONS.
- **January, 2014:** Owners and their weather station moved to an interior home at the FOUR SEASONS, **further away from the levee and the wash.**
- **January 1, 2015:** A NEW (additional) weather station was installed immediately adjacent to the wash and the proposed CV Link route.
- The "# of days in the year" column indicates the # of days that data was collected per year at a Four Seasons weather station.

MO/YEAR	# of days at/over 95°	# of days with Wind +15/20 mph	# of days with Gusts +20/25 mph		# of days in the year	# of USABLE Days	Unusable Days	COMMENTS
May-Dec, 2011	133	191	190		244	46	198	Partial year
2012	160	279	277		361	73	288	
2013	149	237	233		355	102	253	
2014	144	197	205		340	104	236	Weather station moved to its new location in Jan, 2014
								NOTE: A NEW weather station was erected immediately adjacent to the wash on January, 1, 2015. Because the readings are more accurate at this location, the "windy day" value was increased to 20 mph, and the "gusty day" value was increased to 25 mph beginning in 2015.
2015	124	263	261		365	91	274	New weather station location resulted in more accurate readings.
2016 (Apr)	3	86	83		121	35	86	So far this year, unusual heat and usual wind.
2017								
2018								
2019								
2020								
	713 HOT DAYS 40%	1253 Very WINDY DAYS 70%	1249 GUSTY DAYS 70%		1786 Days of Data Collection	451 USABLE DAYS 25%	1335 Days NOT Usable	75% of May 2011 - April 2016: This section of the CV Link would NOT have been useable due to excessive WIND or heat.

Weather - The Four Seasons at the Whitewater Wash

Temperature and wind-speed information collected between
Hwy. 111 and Gene Autry Trail, where a section of the CV Link is proposed to be built.

YEARLY TOTALS: May, 2011 through June, 2016

- **May, 2011:** A weather station was installed by new residents at their home located on the perimeter of the FOUR SEASONS.
- **January, 2014:** Owners and their weather station moved to an interior home at the FOUR SEASONS, **further away from the levee and the wash.**
- **January 1, 2015:** A NEW (additional) weather station was installed immediately adjacent to the wash and the proposed CV Link route.
- The "# of days in the year" column indicates the # of days that data was collected per year at a Four Seasons weather station.

MO/YEAR	# of days at/over 95°	# of days with Wind +15/20 mph	# of days with Gusts +20/25 mph		# of days in the year	# of USABLE Days	Unusable Days	COMMENTS
May-Dec, 2011	133	191	190		244	46	198	Partial year
2012	160	279	277		361	73	288	
2013	149	237	233		355	102	253	
2014	144	197	205		340	104	236	Weather station moved to its new location in Jan, 2014
								NOTE: A NEW weather station was erected immediately adjacent to the wash on January, 1, 2015. Because the readings are more accurate at this location, the "windy day" value was increased to 20 mph, and the "gusty day" value was increased to 25 mph beginning in 2015.
2015	124	263	261		365	91	274	New weather station location resulted in more accurate readings.
2016 (June)	34	146	143		182	35	147	So far this year, unusual heat and usual wind.
2017								
2018								
2019								
2020								
	744 HOT DAYS 40%	1313 Very WINDY DAYS 71%	1309 GUSTY DAYS 71%		1847 Days of Data Collection	451 USABLE DAYS 24%	1396 Days NOT Usable	76% of May 2011 - June 2016: This section of the CV Link would NOT have been useable due to excessive WIND or heat.

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: JUNE - 2015				
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		
6/1/15	94.6	52.0	55.0	severe high winds
6/2/15	97.0	51.0	55.0	severe high winds
6/3/15	89.6	48.0	60.0	severe high winds
6/4/15	83.5	52.0	60.0	severe high winds
6/5/15	85.5	49.0	58.0	severe high winds
6/6/15	91.6	46.0	58.0	severe high winds
6/7/15	100.8	38.0	42.0	severe high winds
6/8/15	104.7	34.0	40.0	severe high winds
6/9/15	90.5	28.0	30.0	severe high winds
6/10/15	95.0	47.0	53.0	severe high winds
6/11/15	95.7	50.0	55.0	severe high winds
6/12/15	103.5	47.0	53.0	severe high winds
6/13/15	100.2	45.0	55.0	severe high winds
6/14/15	105.8	36.0	40.0	severe high winds
6/15/15	109.4	46.0	53.0	severe high winds
6/16/15	107.8	38.0	45.0	severe high winds
6/17/15	110.8	43.0	45.0	severe high winds
6/18/15	110.1	51.0	58.0	severe high winds
6/19/15	107.2	43.0	47.0	severe high winds
6/20/15	108.3	43.0	47.0	severe high winds
6/21/15	106.9	46.0	50.0	severe high winds
6/22/15	109.0	47.0	60.0	severe high winds
6/23/15	106.5	44.0	50.0	severe high winds
6/24/15	107.4	42.0	47.0	severe high winds
6/25/15	108.9	39.0	45.0	severe high winds
6/26/15	95.5	43.0	53.0	severe high winds
6/27/15	107.8	46.0	53.0	severe high winds
6/28/15	102.2	26.0	32.0	extreme high winds
6/29/15	106.5	29.0	35.0	extreme high winds
6/30/15	100.4	52.0	65.0	severe high winds

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: JUNE - 2016				
6/1	36	42	8	11
6/2	36	40	15	18
6/3	33	37	17	22
6/4	49	53	26	32
6/5	47	53	24	31
6/6	56	62	25	31
6/7	51	58	17	22
6/8	35	40	12	16
6/9	29	32	14	18
6/10	32	37	18	22
6/11	49	55	24	30
6/12	43	50	21	27
6/13	50	55	21	26
6/14	48	55	21	26
6/15	59	68	22	27
6/16	52	58	18	24
6/17	41	42	21	24
6/18	32	35	12	14
6/19	32	35	13	17
6/20	43	50	21	30
6/21	53	58	16	19
6/22	57	70	24	31
6/23	49	60	17	22
6/24	52	60	23	30
6/25	41	45	17	22
6/26	23	28	17	24
6/27	30	35	17	22
6/28	47	50	21	27
6/29	40	50	16	20
6/30	18	25	17	31

Coachella Valley Wind Comparison

Date	North Palm Springs		Cathedral City		Coachella	
	Max. Wind	Max. Gust	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	Red - N. Palm Springs wind speed was at, or above, 50 mph.					
MONTH: JUNE - 2016						
6/1	36	42	9	12	11	16
6/2	36	40	14	15	10	16
6/3	33	37	14	17	12	16
6/4	49	53	15	20	15	27
6/5	47	53	14	17	18	27
6/6	56	62	15	20	19	30
6/7	51	58	10	15	13	24
6/8	35	40	9	12	9	14
6/9	29	32	10	12	11	19
6/10	32	37	14	17	15	25
6/11	49	55	17	22	14	18
6/12	43	50	17	22	17	27
6/13	50	55	16	20	16	25
6/14	48	55	11	17	16	21
6/15	59	68	20	22	18	29
6/16	52	58	16	17	15	25
6/17	41	42	16	17	14	20
6/18	32	35	8	10	10	16
6/19	32	35	9	12	11	13
6/20	43	50	20	22	10	15
6/21	53	58	11	15	12	19
6/22	57	70	14	17	18	27
6/23	49	60	11	15	15	22
6/24	52	60	14	17	16	25
6/25	41	45	10	15	11	19
6/26	23	28	14	17	15	21
6/27	30	35	12	15	6	11
6/28	47	50	15	17	12	22
6/29	40	50	13	17	12	18
6/30	18	25	12	17	8	12

Coachella Valley Wind Comparison

	North Palm Springs		Cathedral City		Coachella	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust	Max. Wind	Max. Gust
MONTH: SEPTEMBER - 2015						
9/1/15	43.0	45.0	10	12	14	22
9/2/15	41.0	45.0	12	17	Station	Down
9/3/15	42.0	47.0	14	17	Station	Down
9/4/15	47.0	50.0	12	17	Station	Down
9/5/15	33.0	40.0	7	12	Station	Down
9/6/15	34.0	37.0	10	12	Station	Down
9/7/15	32.0	37.0	11	15	Station	Down
9/8/15	40.0	47.0	12	17	Station	Down
9/9/15	14.0	20.0	12	15	Station	Down
9/10/15	19.0	20.0	13	15	Station	Down
9/11/15	37.0	40.0	11	12	Station	Down
9/12/15	33.0	37.0	6	7	Station	Down
9/13/15	44.0	50.0	12	15	Station	Down
9/14/15	56.0	60.0	16	20	18	26
9/15/15	43.0	53.0	10	15	19	28
9/16/15	44.0	50.0	14	17	15	23
9/17/15	48.0	58.0	9	12	21	30
9/18/15	29.0	32.0	10	12	9	15
9/19/15	20.0	25.0	11	12	10	16
9/20/15	19.0	22.0	10	12	9	15
9/21/15	35.0	37.0	9	12	11	16
9/22/15	30.0	32.0	9	10	10	17
9/23/15	18.0	20.0	12	12	9	14
9/24/15	29.0	32.0	10	12	10	16
9/25/15	26.0	30.0	13	17	11	18
9/26/15	31.0	32.0	10	15	11	18
9/27/15	33.0	37.0	10	12	8	13
9/28/15	33.0	40.0	14	17	11	19
9/29/15	35.0	40.0	10	12	12	18
9/30/15	23.0	25.0	10	12	10	15

The Four Seasons – Temperature and Wind Speed

June - 2015 (# of days: 30)

Temperature

of days at/over **95°**: 24 days **80% of the month had excessive heat**

Wind Speed

of days at/over **20 mph**: 30 days **100% of the month had excessive wind**

Wind Gusts

of days with *gusts* at/over **25 mph**: 30 days **100% of the days of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of **25-29 mph**: 0
of days with gusts of **30-34 mph**: 2
of days with gusts of **35-44 mph**: 4
of days with gusts of **45-54 mph**: 14
of days with gusts over **55 mph**: 10

Strongest gust of the month: **65 mph**

SUMMARY

Traditionally, June ushers-in consistent temperatures above 100°. This year, 47% of the days in the month soared above 105° with two days reaching above 110°. This extreme heat was accompanied **everyday** by incredibly strong wind ---24 days (80%) had wind gusts of over 45 mph. For most days in June, being outside was like standing in front of a hair dryer set on high heat.

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to **wind**: 30
Number of **additional** unusable days due just to **heat**: 0
TOTAL: 30 unusable days

Number of usable days in June, 2015: **0 day(s)** (30 minus 30)

Number of usable days **year-to-date**: 51 / 181

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: AUGUST - 2015				
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		
8/1/15	108.5	39.0	42.0	severe high winds
8/2/15	108.7	39.0	47.0	severe high winds
8/3/15	106.0	42.0	47.0	severe high winds
8/4/15	109.8	42.0	47.0	severe high winds
8/5/15	109.6	40.0	45.0	severe high winds
8/6/15	106.5	46.0	50.0	severe high winds
8/7/15	99.7	51.0	58.0	severe high winds
8/8/15	99.3	50.0	55.0	severe high winds
8/9/15	104.0	42.0	47.0	severe high winds
8/10/15	99.0	40.0	45.0	severe high winds
8/11/15	102.0	38.0	45.0	severe high winds
8/12/15	106.2	32.0	37.0	severe high winds
8/13/15	111.2	39.0	45.0	severe high winds
8/14/15	111.2	39.0	45.0	severe high winds
8/15/15	113.4	37.0	45.0	severe high winds
8/16/15	113.0	41.0	45.0	severe high winds
8/17/15	108.3	54.0	60.0	severe high winds
8/18/15	104.4	59.0	68.0	severe high winds
8/19/15	101.7	60.0	72.0	severe high winds - <i>and HOW!</i>
8/20/15	100.9	50.0	55.0	severe high winds
8/21/15	102.0	46.0	50.0	severe high winds
8/22/15	104.4	35.0	37.0	severe high winds
8/23/15	105.6	25.0	28.0	extreme high winds
8/24/15	106.9	28.0	32.0	extreme high winds
8/25/15	97.0	30.0	35.0	extreme high winds
8/26/15	104.5	31.0	35.0	severe high winds
8/27/15	109.4	33.0	37.0	severe high winds
8/28/15	109.8	36.0	45.0	severe high winds
8/29/15	108.5	42.0	50.0	severe high winds
8/30/15	104.5	46.0	50.0	severe high winds
8/31/15	103.1	47.0	53.0	severe high winds

The Four Seasons – Temperature and Wind Speed

August - 2015 (# of days: 31)

Temperature

of days at/over **95°**: 31 days **100% of the month had excessive heat**

Wind Speed

of days at/over **20 mph**: 31 days **100% of the month had excessive wind**

Wind Gusts

of days with *gusts* at/over **25 mph**: 31 days **100% of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of **25-29 mph**: 1

of days with gusts of **30-34 mph**: 1

of days with gusts of **35-44 mph**: 6

of days with gusts of **45-54 mph**: 17

of days with gusts over **55 mph**: 6

Strongest gust of the month: **72 mph**

SUMMARY

August actually exceeded July in its brutal weather conditions. Not a single day in the month had temperatures less than 95 degrees. Twice there was a series of six days when the temperature was over 105 degrees. But the entire valley suffered with similar heat. It was the ever-present wind in North Palm Springs that made this area – once again – unique. 40, 50 and 60 mph wind wasn't uncommon, and the “winner” gust-of-the-month was 72 mph!

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to **wind**: 31
Number of **additional** unusable days due just to **heat**: 0
TOTAL: 31 unusable days

Number of usable days in August, 2015: **0 day(s)** (31 minus 31)

Number of usable days **year-to-date**: 51 / 243

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: SEPTEMBER - 2015				
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		
9/1/15	99.1	43.0	45.0	severe high winds
9/2/15	97.7	41.0	45.0	severe high winds
9/3/15	96.4	42.0	47.0	severe high winds
9/4/15	93.0	47.0	50.0	severe high winds
9/5/15	97.7	33.0	40.0	severe high winds
9/6/15	100.9	34.0	37.0	severe high winds
9/7/15	105.8	32.0	37.0	severe high winds
9/8/15	106.9	40.0	47.0	severe high winds
9/9/15	100.0	14.0	20.0	
9/10/15	98.1	19.0	20.0	
9/11/15	103.6	37.0	40.0	severe high winds
9/12/15	96.6	33.0	37.0	severe high winds
9/13/15	103.3	44.0	50.0	severe high winds
9/14/15	93.6	56.0	60.0	severe high winds
9/15/15	86.2	43.0	53.0	severe high winds
9/16/15	87.4	44.0	50.0	severe high winds
9/17/15	90.3	48.0	58.0	severe high winds
9/18/15	99.9	29.0	32.0	extreme high winds
9/19/15	103.5	20.0	25.0	excessive wind
9/20/15	104.0	19.0	22.0	
9/21/15	93.0	35.0	37.0	severe high winds
9/22/15	94.1	30.0	32.0	severe high winds
9/23/15	99.1	18.0	20.0	
9/24/15	107.1	29.0	32.0	extreme high winds
9/25/15	106.7	26.0	30.0	excessive wind
9/26/15	105.3	31.0	32.0	severe high winds
9/27/15	102.9	33.0	37.0	severe high winds
9/28/15	103.8	33.0	40.0	severe high winds
9/29/15	100.8	35.0	40.0	severe high winds
9/30/15	103.5	23.0	25.0	excessive wind

Coachella Valley Wind Comparison

Date	North Palm Springs		Cathedral City		Coachella	
	Max. Wind	Max. Gust	Max. Wind	Max. Gust	Max. Wind	Max. Gust
12/1/15	10.0	12.0	7	7	5	9
12/2/15	9.0	12.0	7	10	6	8
12/3/15	11.0	12.0	6	7	5	7
12/4/15	10.0	15.0	4	5	5	7
12/5/15	12.0	15.0	8	10	8	10
12/6/15	10.0	12.0	5	7	5	10
12/7/15	9.0	12.0	6	7	6	8
12/8/15	10.0	12.0	7	10	5	7
12/9/15	10.0	12.0	6	7	5	8
12/10/15	30.0	35.0	8	10	5	11
12/11/15	57.0	62.0	26	35	22	35
12/12/15	33.0	37.0	10	12	14	27
12/13/15	52.0	58.0	10	15	22	36
12/14/15	51.0	55.0	20	28	30	49
12/15/15	28.0	32.0	11	12	11	19
12/16/15	13.0	20.0	6	7	9	10
12/17/15	8.0	12.0	8	10	6	9
12/18/15	11.0	15.0	6	7	5	7
12/19/15	18.0	20.0	8	10	6	12
12/20/15	35.0	42.0	7	10	10	15
12/21/15	28.0	32.0	6	7	5	11
12/22/15	26.0	32.0	9	12	7	12
12/23/15	42.0	50.0	9	12	12	20
12/24/15	53.0	62.0	17	22	12	19
12/25/15	58.0	62.0	17	25	17	32
12/26/15	42.0	55.0	19	28	20	36
12/27/15	24.0	30.0	10	12	24	38
12/28/15	29.0	35.0	10	12	7	11
12/29/15	13.0	15.0	6	10	7	11
12/30/15	11.0	12.0	7	10	5	10
12/31/15	15.0	20.0	8	10	8	13

Coachella Valley Wind Comparison

Date	North Palm Springs		Cathedral City		Coachella	
	Max. Wind	Max. Gust	Max. Wind	Max. Gust	Max. Wind	Max. Gust
12/1/15	10.0	12.0	7	7	5	9
12/2/15	9.0	12.0	7	10	6	8
12/3/15	11.0	12.0	6	7	5	7
12/4/15	10.0	15.0	4	5	5	7
12/5/15	12.0	15.0	8	10	8	10
12/6/15	10.0	12.0	5	7	5	10
12/7/15	9.0	12.0	6	7	6	8
12/8/15	10.0	12.0	7	10	5	7
12/9/15	10.0	12.0	6	7	5	8
12/10/15	30.0	35.0	8	10	5	11
12/11/15	57.0	62.0	26	35	22	35
12/12/15	33.0	37.0	10	12	14	27
12/13/15	52.0	58.0	10	15	22	36
12/14/15	51.0	55.0	20	28	30	49
12/15/15	28.0	32.0	11	12	11	19
12/16/15	13.0	20.0	6	7	9	10
12/17/15	8.0	12.0	8	10	6	9
12/18/15	11.0	15.0	6	7	5	7
12/19/15	18.0	20.0	8	10	6	12
12/20/15	35.0	42.0	7	10	10	15
12/21/15	28.0	32.0	6	7	5	11
12/22/15	26.0	32.0	9	12	7	12
12/23/15	42.0	50.0	9	12	12	20
12/24/15	53.0	62.0	17	22	12	19
12/25/15	58.0	62.0	17	25	17	32
12/26/15	42.0	55.0	19	28	20	36
12/27/15	24.0	30.0	10	12	24	38
12/28/15	29.0	35.0	10	12	7	11
12/29/15	13.0	15.0	6	10	7	11
12/30/15	11.0	12.0	7	10	5	10
12/31/15	15.0	20.0	8	10	8	13

The Four Seasons – Temperature and Wind Speed

September - 2015 (# of days: 30)

Temperature

of days at/over **95°**: 24 days **80% of the month had excessive heat**

Wind Speed

of days at/over **20 mph**: 26 days **87% of the month had excessive wind**

Wind Gusts

of days with *gusts* at/over **25 mph**: 26 days **87% of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of **25-29 mph**: 2

of days with gusts of **30-34 mph**: 5

of days with gusts of **35-44 mph**: 9

of days with gusts of **45-54 mph**: 8

of days with gusts over **55 mph**: 2

Strongest gust of the month: **60 mph**

SUMMARY

Apparently, the Valley isn't quite ready to turn the temperature-corner! Only six days were under 95 degrees. The northern end of Palm Springs suffered through the heat with everyone else, but unlike most, it continued to be assaulted by strong and consistent wind. Throw-in high dew points and humidity levels and misery was a daily experience. Heat, wind, thick air... take your pick, September was a month to spend indoors.

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to **wind**: 26
Number of **additional** unusable days due just to **heat**: 4
TOTAL: 30 unusable days

Number of usable days in September, 2015: **0 day(s)** (30 minus 30)

Number of usable days **year-to-date**: 51 / 273

Air Quality Advisories

The advisories listed below are for the far Western portion of the Coachella Valley specified by the *South Coast Air Quality Management District* as **Coachella 1**. The data collection site for Coachella 1 is located at the **fire station at 590 E. Racquet Club Ave. in Palm Springs**.

Air Quality Alert: **ORANGE**

When air quality is in the **Unhealthy for Sensitive Groups** range, (AQI 101-150), members of sensitive groups may experience health effects, but the general public is unlikely to be affected. **Persons with heart or lung disease, children, older adults, and people who are active outdoors may be sensitive and therefore at greater risk. People in the sensitive groups should reduce prolonged or heavy exertion.**

#	Date	From	Area Affected	Notes
1	7/8/14	SCAQMD	Western Coachella Valley	Air Quality Alert: ORANGE (unhealthy for Sensitive Groups)
2	7/22/14	SCAQMD	Western Coachella Valley	Air Quality Alert: ORANGE (unhealthy for Sensitive Groups)
3	7/24/14	SCAQMD	Western Coachella Valley	Air Quality Alert: ORANGE (unhealthy for Sensitive Groups)
4	7/30/14	SCAQMD	Western Coachella Valley	Air Quality Alert: ORANGE (unhealthy for Sensitive Groups)
5	8/7/14	SCAQMD	Western Coachella Valley	Air Quality Alert: ORANGE (unhealthy for Sensitive Groups)
6	8/11/14	SCAQMD	Western Coachella Valley	Air Quality Alert: ORANGE (unhealthy for Sensitive Groups)
7	8/16/14	SCAQMD	Western Coachella Valley	Air Quality Alert: ORANGE (unhealthy for Sensitive Groups)
8	8/18/14	SCAQMD	Coachella Valley	Windblown Dust Advisory (PM 10 levels) <u>unhealthy for sensitive groups.</u>
9	8/21/14	SCAQMD	Coachella Valley	Windblown Dust Advisory (PM 10 levels) <u>unhealthy for sensitive groups.</u>
10	8/22/14	SCAQMD	Coachella Valley	Odor Advisory (hydrogen sulfide concentration)
11	8/28/14	SCAQMD	Western Coachella Valley	Air Quality Alert: ORANGE (unhealthy for Sensitive Groups)
12	8/30/14	SCAQMD	Western Coachella Valley	Air Quality Alert: ORANGE (unhealthy for Sensitive Groups)
13	9/12/14	SCAQMD	Western Coachella Valley	Air Quality Alert: ORANGE (unhealthy for Sensitive Groups)
14	9/16/14	SCAQMD	Coachella Valley	Odor Advisory - Salton Sea (hydrogen sulfide concentration), plus incredible humidity (75%)

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: JANUARY - 2015				
1/1/15	7.4	7.4	10	11
1/2/15	6.0	7.4	9	11
1/3/15	5.6	7.4	8	11
1/4/15	7.2	7.4	12	12
1/5/15	8.1	9.8	10	12
1/6/15	7.4	7.4	10	12
1/7/15	7.6	9.8	12	12
1/8/15	13.0	17.4	10	12
1/9/15	8.7	9.8	10	13
1/10/15	10.7	15.0	10	13
1/11/15	10.7	12.2	10	19
1/12/15	17.1	22.4	8	10
1/13/15	22.1	27.5	24	30
1/14/15	13.6	17.4	10	17
1/15/15	8.7	9.8	9	12
1/16/15	6.7	7.4	10	11
1/17/15	9.2	9.8	9	13
1/18/15	8.3	9.8	12	12
1/19/15	8.1	9.8	9	12
1/20/15	14.5	17.4	10	11
1/21/15	23.9	30.0	24	31
1/22/15	14.5	17.4	15	21
1/23/15	8.9	9.8	10	12
1/24/15	23.0	27.5	17	23
1/25/15	13.0	17.4	12	14
1/26/15	10.7	12.3	15	17
1/27/15	6.7	9.8	7	10
1/28/15	7.6	9.8	9	10
1/29/15	12.1	15.0	10	12
1/30/15	10.7	12.3	10	14
1/31/15	17.7	19.9	20	23

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: FEBRUARY - 2015				
2/1/15	11.9	12.3	15	17
2/2/15	6.7	9.8	10	12
2/3/15	8.9	9.8	9	15
2/4/15	9.2	9.8	12	13
2/5/15	9.2	12.3	10	13
2/6/15	9.6	12.3	10	13
2/7/15	40.0	45.0	9	12
2/8/15	33.3	34.9	8	11
2/9/15	30.6	34.9	17	22
2/10/15	30.2	32.4	16	20
2/11/15	19.7	22.4	21	24
2/12/15	9.8	12.3	13	17
2/13/15	10.7	12.3	14	16
2/14/15	18.6	19.9	10	13
2/15/15	16.8	19.9	10	13
2/16/15	14.5	15.0	12	13
2/17/15	11.2	12.3	12	15
2/18/15	8.7	9.8	13	15
2/19/15	25.5	27.5	12	16
2/20/15	30.2	32.4	8	12
2/21/15	51.2	65.1	15	18
2/22/15	44.7	47.4	21	27
2/23/15	30.2	32.4	22	25
2/24/15	22.1	24.8	28	34
2/25/15	23.7	27.5	9	13
2/26/15	38.9	42.5	17	22
2/27/15	52.1	57.5	25	31
2/28/15	35.3	42.5	20	26

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: MARCH - 2015				
3/1/15	25.5	27.5	8	9
3/2/15	37.6	42.5	26	32
3/3/15	21.5	24.8	9	12
3/4/15	14.5	17.4	16	20
3/5/15	10.7	12.3	10	14
3/6/15	18.1	19.9	17	22
3/7/15	10.3	12.3	12	13
3/8/15	29.3	32.4	14	17
3/9/15	32.7	34.9	16	20
3/10/15	20.8	22.4	14	17
3/11/15	35.8	40.0	12	16
3/12/15	23.3	27.5	23	28
3/13/15	20.6	24.8	18	25
3/14/15	13.0	15.0	13	17
3/15/15	15.2	19.9	16	23
3/16/15	19.9	22.4	14	17
3/17/15	36.5	42.5	17	21
3/18/15	37.8	42.5	24	28
3/19/15	27.5	30.0	15	20
3/20/15	11.2	12.3	12	17
3/21/15	37.8	42.5	13	17
3/22/15	41.8	49.9	18	22
3/23/15	47.9	52.6	26	33
3/24/15	45.9	49.9	21	24
3/25/15	30.9	34.9	22	28
3/26/15	14.3	17.4	13	17
3/27/15	18.1	19.9	12	17
3/28/15	30.2	34.9	12	17
3/29/15	29.5	32.4	14	19
3/30/15	30.9	34.9	15	20
3/31/15	53.0	57.5	23	30

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: APRIL - 2015				
4/1/15	53.0	60.0	20	27
4/2/15	57.0	60.0	30	36
4/3/15	13.0	25.0	12	16
4/4/15	36.0	40.0	15	19
4/5/15	55.0	68.0	26	31
4/6/15	50.0	55.0	25	32
4/7/15	50.0	55.0	29	34
4/8/15	52.0	60.0	26	33
4/9/15	36.0	37.0	13	20
4/10/15	39.0	42.0	15	19
4/11/15	40.0	45.0	12	16
4/12/15	37.0	42.0	14	17
4/13/15	40.0	45.0	13	16
4/14/15	57.0	62.0	23	30
4/15/15	36.0	42.0	23	30
4/16/15	22.0	28.0	13	17
4/17/15	33.0	37.0	10	15
4/18/15	42.0	47.0	21	36
4/19/15	40.0	42.0	14	18
4/20/15	47.0	50.0	18	24
4/21/15	50.0	55.0	25	31
4/22/15	46.0	53.0	20	24
4/23/15	44.0	47.0	23	29
4/24/15	59.0	65.0	28	36
4/25/15	48.0	55.0	31	37
4/26/15	38.0	42.0	15	19
4/27/15	34.0	40.0	29	36
4/28/15	28.0	32.0	15	21
4/29/15	25.0	30.0	20	24
4/30/15	28.0	30.0	16	22

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: MAY - 2015				
5/1/15	42.0	47.0	22	27
5/2/15	49.0	58.0	21	30
5/3/15	42.0	50.0	22	30
5/4/15	51.0	55.0	20	29
5/5/15	50.0	53.0	24	29
5/6/15	59.0	65.0	23	29
5/7/15	51.0	60.0	25	34
5/8/15	47.0	53.0	26	33
5/9/15	45.0	50.0	24	29
5/10/15	31.0	37.0	15	17
5/11/15	40.0	45.0	17	24
5/12/15	48.0	55.0	25	31
5/13/15	45.0	50.0	18	24
5/14/15	55.0	60.0	26	35
5/15/15	23.0	25.0	12	15
5/16/15	37.0	42.0	21	28
5/17/15	46.0	50.0	13	16
5/18/15	49.0	58.0	29	36
5/19/15	50.0	55.0	22	30
5/20/15	47.0	53.0	22	27
5/21/15	62.0	70.0	31	40
5/22/15	54.0	60.0	25	31
5/23/15	53.0	60.0	28	36
5/24/15	53.0	58.0	24	30
5/25/15	40.0	42.0	20	25
5/26/15	38.0	45.0	15	19
5/27/15	40.0	45.0	10	19
5/28/15	31.0	32.0	12	16
5/29/15	28.0	30.0	15	20
5/30/15	17.0	20.0	14	19
5/31/15	45.0	50.0	13	15

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: JUNE - 2015				
6/1/15	52.0	55.0	25	31
6/2/15	51.0	55.0	25	32
6/3/15	48.0	60.0	23	29
6/4/15	52.0	60.0	23	29
6/5/15	49.0	58.0	26	34
6/6/15	46.0	58.0	17	23
6/7/15	38.0	42.0	14	20
6/8/15	34.0	40.0	20	26
6/9/15	28.0	30.0	22	26
6/10/15	47.0	53.0	25	33
6/11/15	50.0	55.0	21	25
6/12/15	47.0	53.0	25	32
6/13/15	45.0	55.0	16	19
6/14/15	36.0	40.0	14	22
6/15/15	46.0	53.0	17	21
6/16/15	38.0	45.0	12	16
6/17/15	43.0	45.0	22	28
6/18/15	51.0	58.0	25	30
6/19/15	43.0	47.0	9	11
6/20/15	43.0	47.0	14	19
6/21/15	46.0	50.0	10	17
6/22/15	47.0	60.0	17	32
6/23/15	44.0	50.0	13	15
6/24/15	42.0	47.0	24	27
6/25/15	39.0	45.0	14	18
6/26/15	43.0	53.0	16	19
6/27/15	46.0	53.0	10	15
6/28/15	26.0	32.0	23	27
6/29/15	29.0	35.0	15	18
6/30/15	52.0	65.0	29	35

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: JULY - 2015				
7/1/15	31.0	35.0	16	18
7/2/15	47.0	53.0	23	32
7/3/15	53.0	62.0	18	27
7/4/15	47.0	50.0	21	27
7/5/15	42.0	47.0	17	25
7/6/15	40.0	45.0	15	19
7/7/15	57.0	60.0	23	30
7/8/15	54.0	60.0	35	42
7/9/15	53.0	60.0	28	34
7/10/15	52.0	55.0	22	29
7/11/15	40.0	45.0	15	19
7/12/15	37.0	40.0	12	14
7/13/15	48.0	53.0	21	26
7/14/15	50.0	55.0	26	35
7/15/15	48.0	55.0	15	20
7/16/15	43.0	47.0	12	19
7/17/15	35.0	40.0	14	20
7/18/15	31.0	35.0	23	26
7/19/15	31.0	35.0	16	22
7/20/15	35.0	40.0	20	23
7/21/15	46.0	53.0	21	29
7/22/15	43.0	50.0	26	38
7/23/15	38.0	45.0	23	29
7/24/15	42.0	47.0	20	24
7/25/15	53.0	60.0	20	24
7/26/15	58.0	68.0	25	37
7/27/15	55.0	60.0	20	28
7/28/15	37.0	40.0	12	16
7/29/15	22.0	25.0	<i>no reading</i>	<i>no reading</i>
7/30/15	47.0	53.0	14	17
7/31/15	36.0	40.0	21	24

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: AUGUST - 2015				
8/1/15	39.0	42.0	13	17
8/2/15	39.0	47.0	21	28
8/3/15	42.0	47.0	22	26
8/4/15	42.0	47.0	17	23
8/5/15	40.0	45.0	18	25
8/6/15	46.0	50.0	21	24
8/7/15	51.0	58.0	24	32
8/8/15	50.0	55.0	17	25
8/9/15	42.0	47.0	21	26
8/10/15	40.0	45.0	18	24
8/11/15	38.0	45.0	14	20
8/12/15	32.0	37.0	14	19
8/13/15	39.0	45.0	17	24
8/14/15	39.0	45.0	15	21
8/15/15	37.0	45.0	14	16
8/16/15	41.0	45.0	14	20
8/17/15	54.0	60.0	21	29
8/18/15	59.0	68.0	26	31
8/19/15	60.0	72.0	17	24
8/20/15	50.0	55.0	16	20
8/21/15	46.0	50.0	9	13
8/22/15	35.0	37.0	12	15
8/23/15	25.0	28.0	15	17
8/24/15	28.0	32.0	13	19
8/25/15	30.0	35.0	20	23
8/26/15	31.0	35.0	13	15
8/27/15	33.0	37.0	16	19
8/28/15	36.0	45.0	14	17
8/29/15	42.0	50.0	31	40
8/30/15	46.0	50.0	26	32
8/31/15	47.0	53.0	24	31

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: SEPTEMBER - 2015				
9/1/15	43.0	45.0	10	14
9/2/15	41.0	45.0	16	20
9/3/15	42.0	47.0	23	28
9/4/15	47.0	50.0	20	27
9/5/15	33.0	40.0	12	15
9/6/15	34.0	37.0	13	16
9/7/15	32.0	37.0	20	24
9/8/15	40.0	47.0	13	23
9/9/15	14.0	20.0	14	17
9/10/15	19.0	20.0	16	21
9/11/15	37.0	40.0	16	23
9/12/15	33.0	37.0	10	13
9/13/15	44.0	50.0	13	16
9/14/15	56.0	60.0	15	27
9/15/15	43.0	53.0	16	22
9/16/15	44.0	50.0	16	23
9/17/15	48.0	58.0	12	17
9/18/15	29.0	32.0	10	-
9/19/15	20.0	25.0	12	-
9/20/15	19.0	22.0	29	35
9/21/15	35.0	37.0	13	16
9/22/15	30.0	32.0	10	14
9/23/15	18.0	20.0	12	14
9/24/15	29.0	32.0	12	17
9/25/15	26.0	30.0	17	20
9/26/15	31.0	32.0	14	19
9/27/15	33.0	37.0	13	19
9/28/15	33.0	40.0	10	16
9/29/15	35.0	40.0	17	22
9/30/15	23.0	25.0	10	14

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: OCTOBER - 2015				
10/1/15	44.0	53.0	22	26
10/2/15	40.0	50.0	23	28
10/3/15	44.0	53.0	17	23
10/4/15	45.0	50.0	28	32
10/5/15	29.0	35.0	18	23
10/6/15	32.0	37.0	17	22
10/7/15	20.0	25.0	16	22
10/8/15	25.0	28.0	18	23
10/9/15	18.0	20.0	13	17
10/10/15	16.0	20.0	14	19
10/11/15	15.0	17.0	14	17
10/12/15	12.0	15.0	12	16
10/13/15	29.0	32.0	13	17
10/14/15	28.0	32.0	12	16
10/15/15	33.0	37.0	16	19
10/16/15	31.0	35.0	15	20
10/17/15	24.0	28.0	13	15
10/18/15	39.0	45.0	17	24
10/19/15	37.0	42.0	20	26
10/20/15	32.0	35.0	16	23
10/21/15	28.0	30.0	13	17
10/22/15	34.0	37.0	13	14
10/23/15	20.0	25.0	12	14
10/24/15	12.0	17.0	12	12
10/25/15	8.0	10.0	10	12
10/26/15	13.0	17.0	13	---
10/27/15	10.0	12.0	12	---
10/28/15	37.0	42.0	7	---
10/29/15	40.0	45.0	23	35
10/30/15	42.0	45.0	35	46
10/31/15	13.0	15.0	12	16

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: NOVEMBER - 2015				
11/1/15	10.0	12.0	12	15
11/2/15	59.0	65.0	25	30
11/3/15	46.0	58.0	18	21
11/4/15	33.0	35.0	26	35
11/5/15	12.0	17.0	13	15
11/6/15	23.0	28.0	16	20
11/7/15	14.0	17.0	13	17
11/8/15	10.0	12.0	10	12
11/9/15	42.0	47.0	17	22
11/10/15	45.0	50.0	30	41
11/11/15	14.0	17.0	12	15
11/12/15	10.0	12.0	10	11
11/13/15	11.0	12.0	10	12
11/14/15	13.0	15.0	12	18
11/15/15	40.0	45.0	22	29
11/16/15	55.0	65.0	28	40
11/17/15	22.0	25.0	16	21
11/18/15	9.0	12.0	10	12
11/19/15	10.0	12.0	10	13
11/20/15	16.0	20.0	10	11
11/21/15	14.0	17.0	8	12
11/22/15	10.0	12.0	10	14
11/23/15	10.0	15.0	12	16
11/24/15	42.0	50.0	12	17
11/25/15	45.0	53.0	23	29
11/26/15	34.0	37.0	9	13
11/27/15	17.0	17.0	13	16
11/28/15	14.0	17.0	13	16
11/29/15	11.0	12.0	8	10
11/30/15	10.0	12.0	9	11

N. PS vs Airport Wind Comparison

	North Palm Springs		Palm Springs Airport	
Date	Max. Wind	Max. Gust	Max. Wind	Max. Gust
	RED = N. Palm Springs wind speed was at least DOUBLE the airport wind speed.			
MONTH: DECEMBER - 2015				
12/1/15	10.0	12.0	9	12
12/2/15	9.0	12.0	10	12
12/3/15	11.0	12.0	10	11
12/4/15	10.0	15.0	10	11
12/5/15	12.0	15.0	8	---
12/6/15	10.0	12.0	9	---
12/7/15	9.0	12.0	12	12
12/8/15	10.0	12.0	12	12
12/9/15	10.0	12.0	9	12
12/10/15	30.0	35.0	12	14
12/11/15	57.0	62.0	45	54
12/12/15	33.0	37.0	14	18
12/13/15	52.0	58.0	12	15
12/14/15	51.0	55.0	31	43
12/15/15	28.0	32.0	17	22
12/16/15	13.0	20.0	9	11
12/17/15	8.0	12.0	10	13
12/18/15	11.0	15.0	9	11
12/19/15	18.0	20.0	9	13
12/20/15	35.0	42.0	10	22
12/21/15	28.0	32.0	9	13
12/22/15	26.0	32.0	10	12
12/23/15	42.0	50.0	17	25
12/24/15	53.0	62.0	18	22
12/25/15	58.0	62.0	29	35
12/26/15	42.0	55.0	36	43
12/27/15	24.0	30.0	20	26
12/28/15	29.0	35.0	13	16
12/29/15	13.0	15.0	14	16
12/30/15	11.0	12.0	12	12
12/31/15	15.0	20.0	13	18

The Four Seasons – Temperature and Wind Speed

December - 2014

Temperature

of days over 95°: 0 days **0% of the month had excessive heat**

Wind Speed

of days over 15 mph: 3 days **10% of the month had excessive wind**

Wind Gusts

of days with *gusts* over 20 mph: 3 days **10% of the days of the month exhibited strong gusts**

Wind-speed details of the “gusty” days:

of days with gusts of 20-24 mph: 3

of days with gusts of 25-29 mph: 0

of days with gusts of 30-39 mph: 0

of days with gusts of 40-49 mph: 0

Strongest gust of the month: 25.9 mph

SUMMARY

Low daytime temperatures, rather than heat, were an issue this month, often combined with cold winds. While wind speeds were deemed excessive for just 10% of days, wind gusts above 10 mph occurred for 50% of the month.

When would the CV LINK have been usable from Hwy 111 to Gene Autry Trail?

Number of unusable days due to wind: 3
Number of additional unusable days due just to heat: 0
TOTAL: 3 unusable days

Number of usable days in December, 2014: **28 days** (31 minus 3)

Number of usable days year-to-date: 118/365

(Note: the number of actual “data collection” days at the Four Seasons =340)

The Four Seasons - Temp and Wind

Date	High Temp	Max. Wind	Max. Wind Gust	Notes
MONTH: DECEMBER - 2014				
		Orange box indicates excessive HEAT (+ 95°) - a red box is extreme heat (+105°)		
12/1/14	72.9	13.0	15.9	
12/2/14	65.8	6.9	8.3	
12/3/14	67.8	4.5	6.0	
12/4/14	68.5	4.5	9.2	
12/5/14	70.5	2.2	4.5	
12/6/14	75.7	7.6	11.4	
12/7/14	77.4	4.5	6.0	
12/8/14	77.0	3.1	4.5	
12/9/14	79.9	9.2	13.0	
12/10/14	77.5	4.5	6.9	
12/11/14	71.6	6.9	9.2	
12/12/14	62.1	9.8	14.5	
12/13/14	64.9	17.4	22.8	excessive wind
12/14/14	67.3	7.6	11.4	
12/15/14	65.1	3.1	5.4	
12/16/14	64.0	3.1	5.4	
12/17/14	61.3	4.5	6.9	
12/18/14	65.8	9.2	13.0	
12/19/14	65.5	3.8	5.4	
12/20/14	67.5	9.8	13.6	
12/21/14	68.5	4.5	6.0	
12/22/14	73.8	6.0	10.7	
12/23/14	78.6	10.7	15.9	
12/24/14	68.4	6.0	9.2	
12/25/14	66.4	17.4	23.5	excessive wind
12/26/14	61.2	10.7	15.9	
12/27/14	59.4	8.3	13.0	
12/28/14	58.3	3.1	6.0	
12/29/14	60.4	4.5	6.0	
12/30/14	58.5	12.1	19.0	
12/31/14	53.1	17.4	25.9	excessive wind

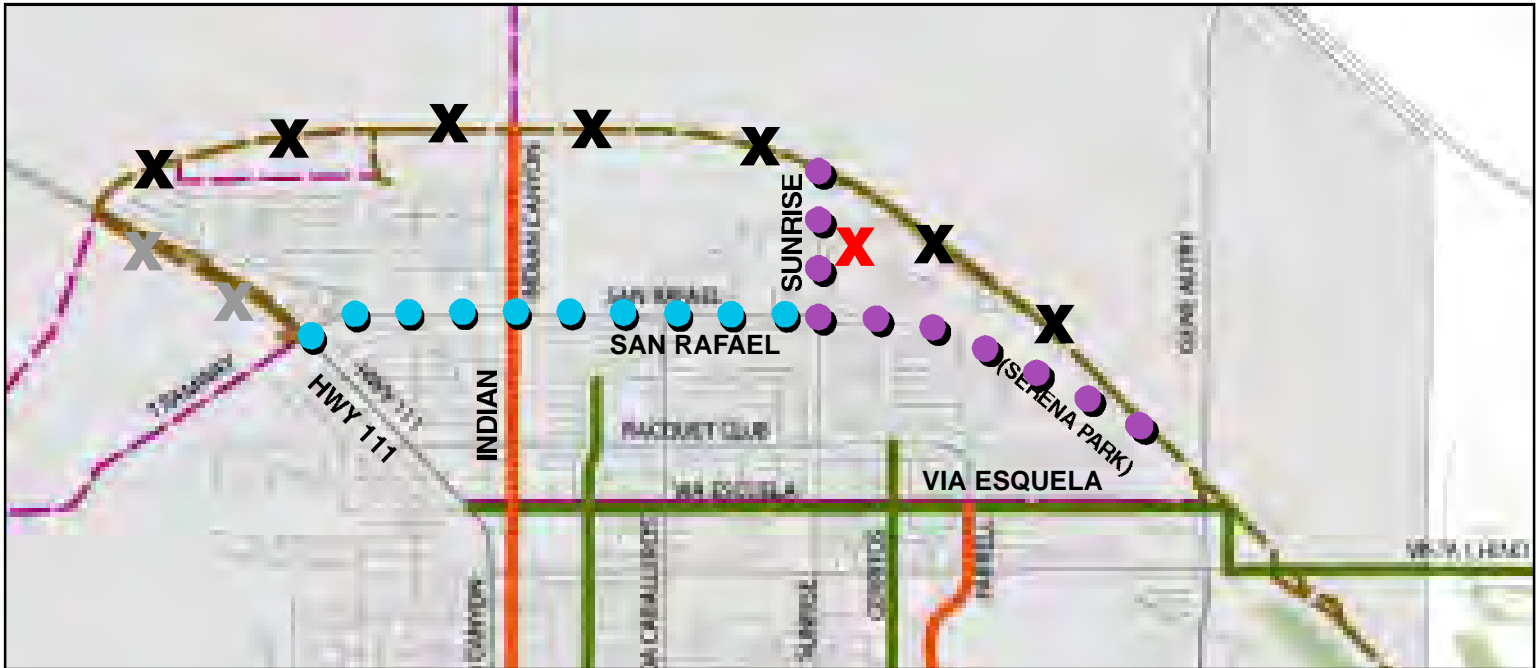
Palm Springs Road Closures

#	Date	From	Area Affected	Notes
1	2/28/14	NIXLE	Indian Canyon, Gene Autry, Golf Club, Vista Chino	Roads closed due to <u>flash flooding</u> .
2	3/7/14	NIXLE	Gene Autry Trail, Vista Chino	Roads closed due to <u>low visibility</u>
3	3/17/14	NIXLE	Indian Canyon, Gene Autry, Vista Chino	Roads closed due to <u>unsafe visibility conditions</u>
4	3/25/14	NIXLE	Indian Canyon, Gene Autry, Vista Chino	Roads closed at the wash due to <u>weather</u>
5	3/26/14	NIXLE	Indian Canyon, Gene Autry	Roads closed at the wash due to <u>weather</u>
6	3/27/14	NIXLE	Indian Canyon	Closed due to <u>extensive clean-up</u>
7	3/30/14	NIXLE	Vista Chino, Gene Autry	Roads closed at the Whitewater wash due to <u>zero visibility</u>
8	4/12/14	NIXLE	Gene Autry, Indian Canyon	Roads closed to significant & hazardous roadway conditions (<u>blowing sand, zero visibility</u>)
9	5/10/14	NIXLE	Gene Autry, Indian Canyon	Roads closed due to <u>blowing sand, extremely low visibility, and sand drifts</u> .
10	5/11/14	NIXLE	Gene Autry, Indian Canyon, Vista Chino	Roads closed at the Whitewater wash due to <u>reduced visibility, blowing sand and sand drifts</u> .
11	8/3/13	NIXLE	Gene Autry, Indian Canyon, Vista Chino	Roads closed due to <u>flash flooding</u> .
12	8/19/14	PSPD	Gene Autry	Roads closed due to <u>flash flooding</u> .
13	9/8/14	NIXLE	Gene Autry, Indian Canyon, Vista Chino	Roads closed due to <u>flash flooding</u> .

Palm Springs Road Closures

#	Date	From	Area Affected	Notes
14	12/2/14	NIXLE	Gene Autry, Indian Canyon, Vista Chino	Roads closed due to <u>flash flooding</u> .
15	12/3/14	NIXLE	Gene Autry, Indian Canyon, Vista Chino	Roads closed due to <u>water flow and debris</u> .
16	12/4/14	NIXLE	Gene Autry, Indian Canyon, Vista Chino	Roads closed (due to <u>residual debris</u>).

PROPOSED CHANGE TO NORTHERN PALM SPRINGS CV LINK ROUTE



This CV Link route option has been placed on a map from the **NEV Draft Plan** created by CVAG.

●●●● **CURRENT ALTERNATIVE #4:** Thru **Serena Park**, then back to the levee. This route leaves the levee just past Gene Autry, passes through the Serena Park community, exiting on San Rafael, then immediately turning north on Sunrise, returning to the levee.

●●●● **PROPOSED CHANGE:** Thru **Serena Park**, continuing straight on **San Rafael** to **Hwy. 111**. This route also leaves the levee just past Gene Autry, passes through the Serena Park community and exits on San Rafael ... but **continues west on San Rafael**, NOT returning to the levee.

X The on-levee segment of the CV Link that this proposal would eliminate.

X The “Sunrise” segment of “Alternative #4” that this proposal would eliminate.

X Additional CV Link segment that could be eliminated.

ADVANTAGES OF UTILIZING SAN RAFAEL FOR THE NORTHERN PALM SPRINGS ROUTE:

- It is a safer, healthier path that protects users from the brutal wind of the open desert.
- Sand would not accumulate on this route, greatly reducing maintenance costs.
- Maintenance in general could be folded into regular street upkeep.
- Police already regularly patrol these city streets.
- Cost of CV Link security would be reduced.
- Increased police presence and access will result in a safer path for users.
- Access to the PS Visitor Center on Hwy. 111 is maintained, and is more direct.
- Option to connect with a future CV Link route to DHS via Gene Autry is preserved.

Weather - The Four Seasons at the Whitewater Wash

*Temperature and wind-speed information collected between
Hwy. 111 and Gene Autry Trail, where a section of the CV Link is proposed to be built.*

YEARLY TOTALS: May, 2011 through December, 2014

- **May, 2011:** A weather station was installed by new residents at their home located on the perimeter of the FOUR SEASONS.
- **January, 2014:** Owners and their weather station moved to an interior home at the FOUR SEASONS, **further away from the levee and the wash.**
- **January 1, 2015:** A **NEW** (additional) weather station was installed immediately adjacent to the wash and the proposed CV Link route.
- The "# of days in the year" column indicates the # of days that data was collected per year at a Four Seasons weather station.

MO/YEAR	# of days at/over 95°	# of days with Wind +15 mph	# of days with Gusts +20 mph		# of days in the year	# of USABLE Days	Unusable Days	COMMENTS
May-Dec, 2011	133	191	190		244	46	198	<i>partial year</i>
2012	160	279	277		361	73	288	
2013	149	237	233		355	102	253	
2014	144	197	205		340	104	236	<i>weather station moved to its new location in Jan, 2014</i>
2015								<i>January 1: NEW weather station was erected immediately adjacent to the wash</i>
	586	904	905		1300	325	975	of May 2011 thru Dec 2014: This section of the CV Link would NOT have been useable due to excessive WIND or heat.
	HOT DAYS	Very WINDY DAYS	GUSTY DAYS		Days of Data Collection	USABLE DAYS	Days NOT Usable	
	45%	70%	70%			25%		

Weather - The Four Seasons at the Whitewater Wash

Temperature and wind-speed information collected between Hwy. 111 and Gene Autry Trail, where a section of the CV Link is proposed to be built.

2014

- **NEW WEATHER STATION LOCATION:** The owners of this weather station MOVED to another location in the FOUR SEASONS in January, 2014.
- The weather station is now further away from the open desert, and FURTHER AWAY from the levee - the wind is calmer here than the previous location.
- If readings could be taken AT the levee, where the CV Link would be, the wind-speeds would be much higher.
- The "# of days in the month" column indicates the # of days that data was collected that month at the Four Seasons weather station.

MONTH	# of days at/over 95°	# of days with Wind +15 mph	# of days with Gusts +20 mph	Max gust of the month	# of days in the month	# of USABLE Days	Unusable Days	COMMENTS
January	0	4	4	32 mph	14	10	4	<i>The Four Seasons weather station was installed in mid-January. Temps were moderate these months, but wind and gusts (into the 30 mph range) were experienced.</i>
February	0	11	11	36 mph	28	17	11	
March	1	18	21	44 mph	30	11	19	<i>By the end of spring, temps were heating-up again. It was windy almost every day of each month. Strong gusts (40+ mph) also happened almost every day.</i>
April	7	24	26	43 mph	30	4	26	
May	16	25	24	45 mph	31	2	29	
June	22	20	20	44 mph	23	3	20	<i>It's summer! We all experienced excessive heat every day of these months. AND, the wind almost never stopped at this end of the valley. Typical weather for this time of year.</i>
July	31	29	29	37 mph	31	0	31	
August	30	26	28	34 mph	31	1	30	
September	27	13	15	37 mph	30	0	30	<i>A transition month, heat remained for 90% the month and the wind howled for 50% of the days - no enjoyable days.</i>
October	10	13	13	30 mph	31	9	22	<i>Temps continued downward, but the wind remained for almost half of the month.</i>
November	0	11	11	40 mph	30	19	11	<i>Temps were finally below 95° - wind continued for 1/3 of the month, sometimes to the severe level.</i>
December	0	3	3	25 mph	31	28	3	<i>Low temps, rather than heat was an issue this month; some daytime highs dipped into the low 50s.</i>
	144 HOT days (2014) 42%	197 Very WINDY days (2014) 58%	205 GUSTY days (2014) 60%		340 Days of Data Collection	104 Usable Days (2014) 31%	236 Days NOT Usable	69% of 2014: This section of the CV Link would NOT have been useable due to excessive WIND or heat.