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July 2, 2020
Project No: 18-06601

Juliet Martin
Senior Associate Environmental Planner
Circlepoint
46 South First Street
San Jose, California 95113

Subject: Air Quality and Greenhouse Gas Construction Technical Letter Report for the I-80/Hiddenbrooke Interchange Roundabout Project, Vallejo, California

Dear Ms. Martin:

At Circlepoint's request, Rincon Consultants, Inc. estimated criteria air pollutant and greenhouse gas (GHG) emissions using the California Emissions Estimator Model (CalEEMod) for construction of the Interstate 80 (I-80)/Hiddenbrooke Interchange Roundabout Project. The purpose of this technical letter report is to disclose the air quality and GHG emissions related to project construction. As requested by Circlepoint a comparison of estimated emissions to established thresholds is not included in this letter. It is our understanding these results will be used in support of documentation prepared by Circlepoint for compliance with the California Environmental Quality Act.

Project Description

The proposed project would involve the construction of two roundabouts at the I-80/Hiddenbrooke interchange. The existing bridge over I-80 would remain; however, modifications would be made to the I-80 westbound and eastbound ramps, McGary Road, Hiddenbrooke Parkway, and American Canyon Road. See Figure 1 for a conceptual exhibit of the proposed project. The interchange improvements are part of a long-standing agreement between the City of Vallejo and the Hiddenbrooke Community developer as a means to mitigate for traffic impacts generated by population growth in the immediate vicinity of the project site.

Project construction would commence in spring 2022 and would occur over the course of approximately 24 months in the following phases:

- Demolition: April 2022 to May 2022
- Site Preparation: May 2022 to June 2022
- Grading: June 2022 to November 2023
- Roadway Construction: August 2022 to January 2024
- Asphalt Paving: August 2022 to April 2024

Construction activities would occur Monday through Friday, excluding holidays observed by the City. The project would include demolition on portions of I-80 westbound and eastbound ramps, McGary Road,



Hiddenbrooke Parkway, and American Canyon Road. Approximately 15,000 cubic yards of soil would be exported during construction.



Environmental Setting

Air Quality

The City of Vallejo is located within the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). Air pollutant emissions in the SFBAAB are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include sources such as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

The U.S. Environmental Protection Agency (U.S. EPA) has set primary National Ambient Air Quality Standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter with a diameter of ten microns or less (PM₁₀) and 2.5 microns or less (PM_{2.5}), and lead (Pb). Primary standards are set at levels considered necessary to protect public health, with an adequate margin of safety, including those at most risk. In addition, the State of California has established the California Ambient Air Quality Standards for these and other pollutants, some of which are more stringent than the federal standards. The SFBAAB is in non-attainment for the state and federal ozone standards, the state and federal PM_{2.5} standards, and the state PM₁₀ standard and is required to prepare a plan for improvement.¹ The health effects associated with criteria pollutants for which the SFBAAB is in non-attainment are described in Table 1.

¹ BAAQMD. 2017. "Air Quality Standards and Attainment Status." <http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status> (accessed June 2020).

Table 1 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	<ul style="list-style-type: none"> ▪ Short-term exposures: pulmonary function decrements and localized lung edema in humans and animals and risk to public health implied by alterations in pulmonary morphology and host defense in animals ▪ Long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans ▪ Vegetation damage ▪ Property damage
Suspended particulate matter (PM ₁₀)	<ul style="list-style-type: none"> ▪ Excess deaths from short-term and long-term exposures ▪ Excess seasonal declines in pulmonary function, especially in children ▪ Asthma exacerbation and possibly induction ▪ Adverse birth outcomes including low birth weight ▪ Increased infant mortality ▪ Increased respiratory symptoms in children such as cough and bronchitis ▪ Increased hospitalization for both cardiovascular and respiratory disease (including asthma)
Suspended particulate matter (PM _{2.5})	<ul style="list-style-type: none"> ▪ Excess deaths from short- and long-term exposures ▪ Excess seasonal declines in pulmonary function, especially in children ▪ Asthma exacerbation and possibly induction ▪ Adverse birth outcomes, including low birth weight ▪ Increased infant mortality ▪ Increased respiratory symptoms in children, such as cough and bronchitis ▪ Increased hospitalization for both cardiovascular and respiratory disease, including asthma

Source: U.S. EPA. 2018. "Criteria Air Pollutants." <https://www.epa.gov/criteria-air-pollutants> (accessed June 2020).

Greenhouse Gas Emissions

Climate change is the observed increase in the average temperature of the earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change, the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century.²

GHGs are gases that absorb and re-emit infrared radiation in the atmosphere. The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane

² Intergovernmental Panel on Climate Change. 2007. Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.



(CH₄), nitrous oxide (N₂O), fluorinated gases such as hydrofluorocarbons and perfluorocarbons, and sulfur hexafluoride. Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Anthropogenic GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆.³

The accumulation of GHGs in the atmosphere regulates Earth's temperature. Without the natural heat-trapping effect of GHGs, Earth's surface would be about 34 degrees Celsius cooler.⁴ However, emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of GHGs in the atmosphere beyond the level of naturally occurring concentrations. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Some of the potential impacts of climate change in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years.⁵ While these potential impacts identify the possible effects of climate change at a statewide level, in general, scientific modeling tools are currently unable to predict what impacts would occur locally.

Methodology

Air quality and GHG emissions were quantified for temporary construction-related activities associated with the project. The project is intended to serve planned growth and reduce congestion, and upon completion, the project itself would not generate additional air pollutant and GHG emissions compared to existing conditions. Therefore, operational emissions were not quantified. The project's construction-related emissions were estimated using CalEEMod, version 2016.3.2. CalEEMod uses project-specific information, including the project's land use, location, construction schedule, and construction equipment to estimate construction emissions. Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker, vendor, and haul trips. The construction schedule and soil export volume were based on data provided by the project applicant, as summarized in the *Project Description* above. In addition, it was assumed that project construction would comply with applicable regulatory standards, including BAAQMD Regulation 8, Rule 3 (Architectural Coatings), which restricts the volatile organic compound content of traffic marking coatings to 150 grams per liter. Complete CalEEMod results and assumptions are provided in Attachment 1.

³ U.S. EPA. 2020. "Inventory of U.S. Greenhouse Gas Emissions and Sinks." Last modified: April 13, 2020. <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks> (accessed June 2020).

⁴ California Environmental Protection Agency. 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature.

⁵ State of California. 2018. California's Fourth Climate Change Assessment Statewide Summary Report. August 27, 2018. <http://www.climateassessment.ca.gov/state/> (accessed June 2020).



Results

Air Quality

Table 2 summarizes maximum construction daily emissions generated by the proposed project.

Table 2 Estimated Daily Construction Emissions

	Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO ₂	Exhaust PM ₁₀	Exhaust PM _{2.5}
2022	5.1	49.8	46.9	0.1	2.3	2.1
2023	4.6	43.9	45.9	0.1	1.9	1.8
2024	4.0	23.7	30.4	0.1	1.0	1.0
Maximum Daily Emissions	5.1	49.8	46.9	0.1	2.3	2.1

ROG = reactive organic gases, NO_x = nitrogen oxides, CO = carbon monoxide, SO₂ = sulfur dioxide, PM₁₀ = particulate matter 10 microns in diameter or less, PM_{2.5} = particulate matter 2.5 microns or less in diameter; lbs/day = pounds per day

Notes: All emissions modeling was completed using CalEEMod in accordance with applicant-provided data. Some numbers may not add up due to rounding. Emissions presented are the highest of the winter and summer modeled emissions.

See Attachment 1 for CalEEMod output files.

GHG Emissions

Table 2 summarizes annual GHG emissions generated by the proposed project.

Table 3 Estimated Construction GHG Emissions

Year	Project Emissions (MT of CO ₂ e)
2022	575.5
2023	1,029.8
2024	98.4
Total	1,703.7

MT = metric tons; CO₂e = carbon dioxide equivalents

See Attachment 1 for CalEEMod output files.

Thank you for the opportunity to assist with this assignment. Please do not hesitate to contact us if you have questions about this report.



Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "Kari Zajac".

Kari Zajac, MESM
Project Manager

A handwritten signature in blue ink, appearing to read "Abe Leider".

Abe Leider, AICP CEP
Principal

Attachments

Attachment 1 Air Quality and Greenhouse Gas Emission Modeling Results

Attachment A

Air Quality and Greenhouse Gas Emission Modeling Results

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

I-80 Hiddenbrooke Interchange Roundabout Project
Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.42	Acre	3.42	148,975.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

Project Characteristics - No electricity emissions.

Land Use - Based on impact exhibit - 1.25 acres for west roundabout and 2.17 acres for east roundabout

Construction Phase - Based on schedule provided by Circlepoint.

Demolition - 31,201 sf for west roundabout and 59,228 sf for east roundabout based on Google Earth estimate

Grading - Export of 15,000 CY provided by Circlepoint.

Architectural Coating - Consistent with BAAQMD Regulation 8, Rule 3

Vehicle Trips - Construction emissions only

Woodstoves - Construction emissions only

Consumer Products - Construction emissions only

Area Coating - Construction emissions only

Landscape Equipment - Construction emissions only

Energy Use - Construction emissions only

Water And Wastewater - Construction emissions only

Solid Waste - Construction emissions only

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Stationary Sources - Process Boilers EF -

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	22.00
tblConstructionPhase	NumDays	230.00	392.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	8.00	381.00
tblConstructionPhase	NumDays	18.00	415.00
tblConstructionPhase	NumDays	5.00	23.00
tblGrading	MaterialExported	0.00	15,000.00

2.0 Emissions Summary

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	5.0752	49.7893	46.8177	0.0925	18.2141	2.2509	19.8276	9.9699	2.0897	11.4543	0.0000	8,990.2395	8,990.2395	2.1771	0.0000	9,044.6672
2023	4.5958	43.9371	45.9044	0.0919	7.6662	1.9188	9.5850	3.6703	1.7818	5.4522	0.0000	8,931.7575	8,931.7575	2.1646	0.0000	8,985.8711
2024	4.0012	23.6620	30.4152	0.0574	0.8443	1.0181	1.8624	0.2276	0.9511	1.1787	0.0000	5,546.3405	5,546.3405	1.2095	0.0000	5,576.5784
Maximum	5.0752	49.7893	46.8177	0.0925	18.2141	2.2509	19.8276	9.9699	2.0897	11.4543	0.0000	8,990.2395	8,990.2395	2.1771	0.0000	9,044.6672

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	5.0752	49.7893	46.8177	0.0925	18.2141	2.2509	19.8276	9.9699	2.0897	11.4543	0.0000	8,990.2395	8,990.2395	2.1771	0.0000	9,044.6672
2023	4.5958	43.9371	45.9044	0.0919	7.6662	1.9188	9.5850	3.6703	1.7818	5.4522	0.0000	8,931.7575	8,931.7575	2.1646	0.0000	8,985.8711
2024	4.0012	23.6620	30.4152	0.0574	0.8443	1.0181	1.8624	0.2276	0.9511	1.1787	0.0000	5,546.3405	5,546.3405	1.2095	0.0000	5,576.5784
Maximum	5.0752	49.7893	46.8177	0.0925	18.2141	2.2509	19.8276	9.9699	2.0897	11.4543	0.0000	8,990.2395	8,990.2395	2.1771	0.0000	9,044.6672

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004
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	0.0698	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000	0.0000	8.0000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004
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	0.0698	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000	0.0000	8.0000e-004

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/15/2022	5/15/2022	5	21	
2	Site Preparation	Site Preparation	5/16/2022	6/15/2022	5	23	
3	Grading	Grading	6/16/2022	11/30/2023	5	381	
4	Roadway Construction	Building Construction	8/1/2022	1/30/2024	5	392	
5	Paving	Paving	8/30/2022	4/1/2024	5	415	
6	Striping	Architectural Coating	3/1/2024	4/1/2024	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 191

Acres of Paving: 3.42

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,939 (Architectural Coating – sqft)

OffRoad Equipment

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Roadway Construction	Cranes	1	7.00	231	0.29
Roadway Construction	Forklifts	3	8.00	89	0.20
Roadway Construction	Generator Sets	1	8.00	84	0.74
Roadway Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Roadway Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Striping	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	411.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,875.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Roadway Construction	9	63.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Striping	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.2388	0.0000	4.2388	0.6418	0.0000	0.6418			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388	4.2388	1.2427	5.4814	0.6418	1.1553	1.7971		3,746.7812	3,746.7812	1.0524		3,773.0920

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1476	4.8684	1.1491	0.0149	0.3420	0.0142	0.3561	0.0937	0.0135	0.1073		1,593.8689	1,593.8689	0.0835		1,595.9556
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	0.1953	4.8996	1.4655	0.0159	0.4652	0.0149	0.4801	0.1264	0.0142	0.1406		1,699.2877	1,699.2877	0.0857		1,701.4298

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					4.2388	0.0000	4.2388	0.6418	0.0000	0.6418			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388	4.2388	1.2427	5.4814	0.6418	1.1553	1.7971	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1476	4.8684	1.1491	0.0149	0.3420	0.0142	0.3561	0.0937	0.0135	0.1073		1,593.8689	1,593.8689	0.0835		1,595.9556
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	0.1953	4.8996	1.4655	0.0159	0.4652	0.0149	0.4801	0.1264	0.0142	0.1406		1,699.2877	1,699.2877	0.0857		1,701.4298

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0663	1.6126	19.6788	9.9307	1.4836	11.4143		3,686.0619	3,686.0619	1.1922		3,715.8655

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3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0572	0.0375	0.3796	1.2700e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		126.5026	126.5026	2.6600e-003		126.5691
Total	0.0572	0.0375	0.3796	1.2700e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		126.5026	126.5026	2.6600e-003		126.5691

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0663	1.6126	19.6788	9.9307	1.4836	11.4143	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0572	0.0375	0.3796	1.2700e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		126.5026	126.5026	2.6600e-003		126.5691
Total	0.0572	0.0375	0.3796	1.2700e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		126.5026	126.5026	2.6600e-003		126.5691

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5740	0.0000	6.5740	3.3770	0.0000	3.3770			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5740	0.9409	7.5148	3.3770	0.8656	4.2426		2,872.0464	2,872.0464	0.9289		2,895.2684

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0371	1.2242	0.2890	3.7400e-003	0.1955	3.5600e-003	0.1991	0.0504	3.4000e-003	0.0539		400.7803	400.7803	0.0210		401.3050
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	0.0848	1.2554	0.6053	4.8000e-003	0.3187	4.3200e-003	0.3230	0.0831	4.1000e-003	0.0872		506.1991	506.1991	0.0232		506.7792

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5740	0.0000	6.5740	3.3770	0.0000	3.3770			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5740	0.9409	7.5148	3.3770	0.8656	4.2426	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0371	1.2242	0.2890	3.7400e-003	0.1955	3.5600e-003	0.1991	0.0504	3.4000e-003	0.0539		400.7803	400.7803	0.0210		401.3050
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	0.0848	1.2554	0.6053	4.8000e-003	0.3187	4.3200e-003	0.3230	0.0831	4.1000e-003	0.0872		506.1991	506.1991	0.0232		506.7792

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5740	0.0000	6.5740	3.3770	0.0000	3.3770			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.5740	0.7749	7.3489	3.3770	0.7129	4.0899		2,872.6910	2,872.6910	0.9291		2,895.9182

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0254	0.8173	0.2600	3.5900e-003	0.1247	1.4900e-003	0.1261	0.0331	1.4200e-003	0.0345		385.5071	385.5071	0.0188		385.9776
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0447	0.0281	0.2905	1.0200e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		101.3817	101.3817	1.9800e-003		101.4313
Total	0.0700	0.8454	0.5505	4.6100e-003	0.2479	2.2300e-003	0.2501	0.0657	2.1000e-003	0.0679		486.8889	486.8889	0.0208		487.4089

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5740	0.0000	6.5740	3.3770	0.0000	3.3770			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.5740	0.7749	7.3489	3.3770	0.7129	4.0899	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0254	0.8173	0.2600	3.5900e-003	0.1247	1.4900e-003	0.1261	0.0331	1.4200e-003	0.0345		385.5071	385.5071	0.0188		385.9776
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0447	0.0281	0.2905	1.0200e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		101.3817	101.3817	1.9800e-003		101.4313
Total	0.0700	0.8454	0.5505	4.6100e-003	0.2479	2.2300e-003	0.2501	0.0657	2.1000e-003	0.0679		486.8889	486.8889	0.0208		487.4089

3.5 Roadway Construction - 2022

Unmitigated Construction On-Site

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

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.5 Roadway Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0735	2.3683	0.6319	6.3100e-003	0.1625	4.8300e-003	0.1673	0.0468	4.6200e-003	0.0514		669.2134	669.2134	0.0336		670.0543
Worker	0.2003	0.1311	1.3286	4.4400e-003	0.5175	3.1800e-003	0.5207	0.1373	2.9300e-003	0.1402		442.7590	442.7590	9.3100e-003		442.9918
Total	0.2738	2.4994	1.9605	0.0108	0.6800	8.0100e-003	0.6880	0.1840	7.5500e-003	0.1916		1,111.9723	1,111.9723	0.0430		1,113.0461

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

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3.5 Roadway Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0735	2.3683	0.6319	6.3100e-003	0.1625	4.8300e-003	0.1673	0.0468	4.6200e-003	0.0514		669.2134	669.2134	0.0336		670.0543
Worker	0.2003	0.1311	1.3286	4.4400e-003	0.5175	3.1800e-003	0.5207	0.1373	2.9300e-003	0.1402		442.7590	442.7590	9.3100e-003		442.9918
Total	0.2738	2.4994	1.9605	0.0108	0.6800	8.0100e-003	0.6880	0.1840	7.5500e-003	0.1916		1,111.9723	1,111.9723	0.0430		1,113.0461

3.5 Roadway Construction - 2023

Unmitigated Construction On-Site

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

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3.5 Roadway Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0553	1.8254	0.5611	6.1300e-003	0.1625	2.1600e-003	0.1646	0.0468	2.0600e-003	0.0488		650.5585	650.5585	0.0286		651.2724
Worker	0.1876	0.1179	1.2202	4.2700e-003	0.5175	3.1200e-003	0.5207	0.1373	2.8700e-003	0.1401		425.8032	425.8032	8.3300e-003		426.0115
Total	0.2429	1.9432	1.7814	0.0104	0.6800	5.2800e-003	0.6853	0.1840	4.9300e-003	0.1890		1,076.3617	1,076.3617	0.0369		1,077.2840

Mitigated Construction On-Site

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

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3.5 Roadway Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0553	1.8254	0.5611	6.1300e-003	0.1625	2.1600e-003	0.1646	0.0468	2.0600e-003	0.0488		650.5585	650.5585	0.0286		651.2724
Worker	0.1876	0.1179	1.2202	4.2700e-003	0.5175	3.1200e-003	0.5207	0.1373	2.8700e-003	0.1401		425.8032	425.8032	8.3300e-003		426.0115
Total	0.2429	1.9432	1.7814	0.0104	0.6800	5.2800e-003	0.6853	0.1840	4.9300e-003	0.1890		1,076.3617	1,076.3617	0.0369		1,077.2840

3.5 Roadway Construction - 2024

Unmitigated Construction On-Site

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

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3.5 Roadway Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0534	1.8050	0.5400	6.0900e-003	0.1625	2.1200e-003	0.1646	0.0468	2.0200e-003	0.0488		646.2430	646.2430	0.0280		646.9421
Worker	0.1767	0.1064	1.1290	4.1000e-003	0.5175	3.0600e-003	0.5206	0.1373	2.8100e-003	0.1401		408.9520	408.9520	7.4900e-003		409.1393
Total	0.2301	1.9114	1.6690	0.0102	0.6800	5.1800e-003	0.6852	0.1840	4.8300e-003	0.1889		1,055.1950	1,055.1950	0.0355		1,056.0814

Mitigated Construction On-Site

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

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.5 Roadway Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0534	1.8050	0.5400	6.0900e-003	0.1625	2.1200e-003	0.1646	0.0468	2.0200e-003	0.0488		646.2430	646.2430	0.0280		646.9421
Worker	0.1767	0.1064	1.1290	4.1000e-003	0.5175	3.0600e-003	0.5206	0.1373	2.8100e-003	0.1401		408.9520	408.9520	7.4900e-003		409.1393
Total	0.2301	1.9114	1.6690	0.0102	0.6800	5.1800e-003	0.6852	0.1840	4.8300e-003	0.1889		1,055.1950	1,055.1950	0.0355		1,056.0814

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9981	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	0.0416	0.4218	1.4100e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		140.5584	140.5584	2.9600e-003		140.6323
Total	0.0636	0.0416	0.4218	1.4100e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		140.5584	140.5584	2.9600e-003		140.6323

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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9981	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	0.0416	0.4218	1.4100e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		140.5584	140.5584	2.9600e-003		140.6323
Total	0.0636	0.0416	0.4218	1.4100e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		140.5584	140.5584	2.9600e-003		140.6323

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9397	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0374	0.3874	1.3600e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		135.1756	135.1756	2.6500e-003		135.2418
Total	0.0596	0.0374	0.3874	1.3600e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		135.1756	135.1756	2.6500e-003		135.2418

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	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9397	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0374	0.3874	1.3600e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		135.1756	135.1756	2.6500e-003		135.2418
Total	0.0596	0.0374	0.3874	1.3600e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		135.1756	135.1756	2.6500e-003		135.2418

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9030	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0338	0.3584	1.3000e-003	0.1643	9.7000e-004	0.1653	0.0436	8.9000e-004	0.0445		129.8260	129.8260	2.3800e-003		129.8855
Total	0.0561	0.0338	0.3584	1.3000e-003	0.1643	9.7000e-004	0.1653	0.0436	8.9000e-004	0.0445		129.8260	129.8260	2.3800e-003		129.8855

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	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9030	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0338	0.3584	1.3000e-003	0.1643	9.7000e-004	0.1653	0.0436	8.9000e-004	0.0445		129.8260	129.8260	2.3800e-003		129.8855
Total	0.0561	0.0338	0.3584	1.3000e-003	0.1643	9.7000e-004	0.1653	0.0436	8.9000e-004	0.0445		129.8260	129.8260	2.3800e-003		129.8855

3.7 Striping - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.8249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	3.0057	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

3.7 Striping - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0220	0.2330	8.5000e-004	0.1068	6.3000e-004	0.1074	0.0283	5.8000e-004	0.0289		84.3869	84.3869	1.5500e-003		84.4256
Total	0.0365	0.0220	0.2330	8.5000e-004	0.1068	6.3000e-004	0.1074	0.0283	5.8000e-004	0.0289		84.3869	84.3869	1.5500e-003		84.4256

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.8249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	3.0057	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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3.7 Striping - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0220	0.2330	8.5000e-004	0.1068	6.3000e-004	0.1074	0.0283	5.8000e-004	0.0289		84.3869	84.3869	1.5500e-003		84.4256
Total	0.0365	0.0220	0.2330	8.5000e-004	0.1068	6.3000e-004	0.1074	0.0283	5.8000e-004	0.0289		84.3869	84.3869	1.5500e-003		84.4256

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	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 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 Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.581705	0.037849	0.193793	0.109044	0.014574	0.005304	0.018664	0.026966	0.002656	0.002072	0.005755	0.000900	0.000719

5.0 Energy Detail

Historical Energy Use: N

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

5.1 Mitigation Measures Energy

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

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004
Unmitigated	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0528					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004
Total	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0528					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004
Total	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004

7.0 Water Detail

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

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

11.0 Vegetation

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

I-80 Hiddenbrooke Interchange Roundabout Project
Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.42	Acre	3.42	148,975.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

Project Characteristics - No electricity emissions.

Land Use - Based on impact exhibit - 1.25 acres for west roundabout and 2.17 acres for east roundabout

Construction Phase - Based on schedule provided by Circlepoint.

Demolition - 31,201 sf for west roundabout and 59,228 sf for east roundabout based on Google Earth estimate

Grading - Export of 15,000 CY provided by Circlepoint.

Architectural Coating - Consistent with BAAQMD Regulation 8, Rule 3

Vehicle Trips - Construction emissions only

Woodstoves - Construction emissions only

Consumer Products - Construction emissions only

Area Coating - Construction emissions only

Landscape Equipment - Construction emissions only

Energy Use - Construction emissions only

Water And Wastewater - Construction emissions only

Solid Waste - Construction emissions only

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Stationary Sources - Process Boilers EF -

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	22.00
tblConstructionPhase	NumDays	230.00	392.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	8.00	381.00
tblConstructionPhase	NumDays	18.00	415.00
tblConstructionPhase	NumDays	5.00	23.00
tblGrading	AcresOfGrading	190.50	191.00
tblGrading	MaterialExported	0.00	15,000.00

2.0 Emissions Summary

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	5.0518	49.7064	46.8680	0.0933	18.2141	2.2506	19.8276	9.9699	2.0894	11.4543	0.0000	9,073.634 3	9,073.634 3	2.1748	0.0000	9,128.002 9
2023	4.5738	43.8802	45.9723	0.0927	7.6504	1.9187	9.5690	3.6617	1.7817	5.4434	0.0000	9,011.9346	9,011.9346	2.1629	0.0000	9,066.007 1
2024	3.9951	23.6268	30.4730	0.0580	0.8443	1.0180	1.8623	0.2276	0.9510	1.1787	0.0000	5,608.992 8	5,608.992 8	1.2084	0.0000	5,639.203 9
Maximum	5.0518	49.7064	46.8680	0.0933	18.2141	2.2506	19.8276	9.9699	2.0894	11.4543	0.0000	9,073.634 3	9,073.634 3	2.1748	0.0000	9,128.002 9

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	5.0518	49.7064	46.8680	0.0933	18.2141	2.2506	19.8276	9.9699	2.0894	11.4543	0.0000	9,073.634 3	9,073.634 3	2.1748	0.0000	9,128.002 9
2023	4.5738	43.8802	45.9723	0.0927	7.6504	1.9187	9.5690	3.6617	1.7817	5.4434	0.0000	9,011.9346	9,011.9346	2.1629	0.0000	9,066.007 0
2024	3.9951	23.6268	30.4730	0.0580	0.8443	1.0180	1.8623	0.2276	0.9510	1.1787	0.0000	5,608.992 8	5,608.992 8	1.2084	0.0000	5,639.203 9
Maximum	5.0518	49.7064	46.8680	0.0933	18.2141	2.2506	19.8276	9.9699	2.0894	11.4543	0.0000	9,073.634 3	9,073.634 3	2.1748	0.0000	9,128.002 9

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004
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	0.0698	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000	0.0000	8.0000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004
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	0.0698	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000	0.0000	8.0000e-004

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/15/2022	5/15/2022	5	21	
2	Site Preparation	Site Preparation	5/16/2022	6/15/2022	5	23	
3	Grading	Grading	6/16/2022	11/30/2023	5	381	
4	Roadway Construction	Building Construction	8/1/2022	1/30/2024	5	392	
5	Paving	Paving	8/30/2022	4/1/2024	5	415	
6	Striping	Architectural Coating	3/1/2024	4/1/2024	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 191

Acres of Paving: 3.42

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,939 (Architectural Coating – sqft)

OffRoad Equipment

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Roadway Construction	Cranes	1	7.00	231	0.29
Roadway Construction	Forklifts	3	8.00	89	0.20
Roadway Construction	Generator Sets	1	8.00	84	0.74
Roadway Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Roadway Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Striping	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	411.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,875.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Roadway Construction	9	63.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Striping	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.2388	0.0000	4.2388	0.6418	0.0000	0.6418			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388	4.2388	1.2427	5.4814	0.6418	1.1553	1.7971		3,746.7812	3,746.7812	1.0524		3,773.0920

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1437	4.7633	1.0728	0.0151	0.3420	0.0139	0.3559	0.0937	0.0133	0.1070		1,621.5484	1,621.5484	0.0797		1,623.5415
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	0.1886	4.7885	1.4123	0.0163	0.4652	0.0147	0.4798	0.1264	0.0140	0.1404		1,735.9827	1,735.9827	0.0821		1,738.0354

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					4.2388	0.0000	4.2388	0.6418	0.0000	0.6418			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388	4.2388	1.2427	5.4814	0.6418	1.1553	1.7971	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1437	4.7633	1.0728	0.0151	0.3420	0.0139	0.3559	0.0937	0.0133	0.1070		1,621.5484	1,621.5484	0.0797		1,623.5415
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	0.1886	4.7885	1.4123	0.0163	0.4652	0.0147	0.4798	0.1264	0.0140	0.1404		1,735.9827	1,735.9827	0.0821		1,738.0354

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0663	1.6126	19.6788	9.9307	1.4836	11.4143		3,686.0619	3,686.0619	1.1922		3,715.8655

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0539	0.0303	0.4074	1.3800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		137.3212	137.3212	2.8600e-003		137.3927
Total	0.0539	0.0303	0.4074	1.3800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		137.3212	137.3212	2.8600e-003		137.3927

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0663	1.6126	19.6788	9.9307	1.4836	11.4143	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0539	0.0303	0.4074	1.3800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		137.3212	137.3212	2.8600e-003		137.3927
Total	0.0539	0.0303	0.4074	1.3800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		137.3212	137.3212	2.8600e-003		137.3927

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5582	0.0000	6.5582	3.3683	0.0000	3.3683			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5582	0.9409	7.4990	3.3683	0.8656	4.2339		2,872.0464	2,872.0464	0.9289		2,895.2684

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0361	1.1977	0.2698	3.8100e-003	0.1955	3.4900e-003	0.1990	0.0504	3.3400e-003	0.0538		407.7403	407.7403	0.0201		408.2415
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	0.0810	1.2230	0.6093	4.9600e-003	0.3187	4.2500e-003	0.3230	0.0831	4.0400e-003	0.0872		522.1746	522.1746	0.0224		522.7354

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5582	0.0000	6.5582	3.3683	0.0000	3.3683			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895,2684
Total	1.9486	20.8551	15.2727	0.0297	6.5582	0.9409	7.4990	3.3683	0.8656	4.2339	0.0000	2,872.0464	2,872.0464	0.9289		2,895,2684

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0361	1.1977	0.2698	3.8100e-003	0.1955	3.4900e-003	0.1990	0.0504	3.3400e-003	0.0538		407.7403	407.7403	0.0201		408.2415
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	0.0810	1.2230	0.6093	4.9600e-003	0.3187	4.2500e-003	0.3230	0.0831	4.0400e-003	0.0872		522.1746	522.1746	0.0224		522.7354

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5582	0.0000	6.5582	3.3683	0.0000	3.3683			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.5582	0.7749	7.3331	3.3683	0.7129	4.0812		2,872.6910	2,872.6910	0.9291		2,895.9182

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3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0247	0.8041	0.2463	3.6600e-003	0.1247	1.4500e-003	0.1261	0.0331	1.3900e-003	0.0344		392.1998	392.1998	0.0181		392.6523
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0419	0.0227	0.3131	1.1000e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		110.0473	110.0473	2.1400e-003		110.1009
Total	0.0666	0.8269	0.5594	4.7600e-003	0.2479	2.1900e-003	0.2501	0.0657	2.0700e-003	0.0678		502.2471	502.2471	0.0202		502.7532

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5582	0.0000	6.5582	3.3683	0.0000	3.3683			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.5582	0.7749	7.3331	3.3683	0.7129	4.0812	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0247	0.8041	0.2463	3.6600e-003	0.1247	1.4500e-003	0.1261	0.0331	1.3900e-003	0.0344		392.1998	392.1998	0.0181		392.6523
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0419	0.0227	0.3131	1.1000e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		110.0473	110.0473	2.1400e-003		110.1009
Total	0.0666	0.8269	0.5594	4.7600e-003	0.2479	2.1900e-003	0.2501	0.0657	2.0700e-003	0.0678		502.2471	502.2471	0.0202		502.7532

3.5 Roadway Construction - 2022

Unmitigated Construction On-Site

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

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.5 Roadway Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0694	2.3506	0.5500	6.4800e-003	0.1625	4.6600e-003	0.1671	0.0468	4.4500e-003	0.0512		686.7468	686.7468	0.0311		687.5248
Worker	0.1885	0.1062	1.4259	4.8200e-003	0.5175	3.1800e-003	0.5207	0.1373	2.9300e-003	0.1402		480.6241	480.6241	0.0100		480.8745
Total	0.2580	2.4568	1.9759	0.0113	0.6800	7.8400e-003	0.6878	0.1840	7.3800e-003	0.1914		1,167.3709	1,167.3709	0.0411		1,168.3993

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.5 Roadway Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0694	2.3506	0.5500	6.4800e-003	0.1625	4.6600e-003	0.1671	0.0468	4.4500e-003	0.0512		686.7468	686.7468	0.0311		687.5248
Worker	0.1885	0.1062	1.4259	4.8200e-003	0.5175	3.1800e-003	0.5207	0.1373	2.9300e-003	0.1402		480.6241	480.6241	0.0100		480.8745
Total	0.2580	2.4568	1.9759	0.0113	0.6800	7.8400e-003	0.6878	0.1840	7.3800e-003	0.1914		1,167.3709	1,167.3709	0.0411		1,168.3993

3.5 Roadway Construction - 2023

Unmitigated Construction On-Site

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

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3.5 Roadway Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0520	1.8165	0.4952	6.2900e-003	0.1625	2.0700e-003	0.1645	0.0468	1.9800e-003	0.0488		667.4278	667.4278	0.0266		668.0928
Worker	0.1760	0.0955	1.3151	4.6300e-003	0.5175	3.1200e-003	0.5207	0.1373	2.8700e-003	0.1401		462.1987	462.1987	8.9900e-003		462.4236
Total	0.2280	1.9120	1.8103	0.0109	0.6800	5.1900e-003	0.6852	0.1840	4.8500e-003	0.1889		1,129.6265	1,129.6265	0.0356		1,130.5163

Mitigated Construction On-Site

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

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3.5 Roadway Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0520	1.8165	0.4952	6.2900e-003	0.1625	2.0700e-003	0.1645	0.0468	1.9800e-003	0.0488		667.4278	667.4278	0.0266		668.0928
Worker	0.1760	0.0955	1.3151	4.6300e-003	0.5175	3.1200e-003	0.5207	0.1373	2.8700e-003	0.1401		462.1987	462.1987	8.9900e-003		462.4236
Total	0.2280	1.9120	1.8103	0.0109	0.6800	5.1900e-003	0.6852	0.1840	4.8500e-003	0.1889		1,129.6265	1,129.6265	0.0356		1,130.5163

3.5 Roadway Construction - 2024

Unmitigated Construction On-Site

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

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3.5 Roadway Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0503	1.7964	0.4771	6.2400e-003	0.1625	2.0300e-003	0.1645	0.0468	1.9400e-003	0.0487		662.8687	662.8687	0.0261		663.5206
Worker	0.1651	0.0863	1.2207	4.4500e-003	0.5175	3.0600e-003	0.5206	0.1373	2.8100e-003	0.1401		443.8879	443.8879	8.1100e-003		444.0906
Total	0.2155	1.8827	1.6977	0.0107	0.6800	5.0900e-003	0.6851	0.1840	4.7500e-003	0.1888		1,106.7565	1,106.7565	0.0342		1,107.6113

Mitigated Construction On-Site

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

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3.5 Roadway Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0503	1.7964	0.4771	6.2400e-003	0.1625	2.0300e-003	0.1645	0.0468	1.9400e-003	0.0487		662.8687	662.8687	0.0261		663.5206
Worker	0.1651	0.0863	1.2207	4.4500e-003	0.5175	3.0600e-003	0.5206	0.1373	2.8100e-003	0.1401		443.8879	443.8879	8.1100e-003		444.0906
Total	0.2155	1.8827	1.6977	0.0107	0.6800	5.0900e-003	0.6851	0.1840	4.7500e-003	0.1888		1,106.7565	1,106.7565	0.0342		1,107.6113

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9981	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091

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3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0599	0.0337	0.4527	1.5300e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		152.5791	152.5791	3.1800e-003		152.6586
Total	0.0599	0.0337	0.4527	1.5300e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		152.5791	152.5791	3.1800e-003		152.6586

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9981	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091

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3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0599	0.0337	0.4527	1.5300e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		152.5791	152.5791	3.1800e-003		152.6586
Total	0.0599	0.0337	0.4527	1.5300e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		152.5791	152.5791	3.1800e-003		152.6586

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9397	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0559	0.0303	0.4175	1.4700e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		146.7298	146.7298	2.8500e-003		146.8011
Total	0.0559	0.0303	0.4175	1.4700e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		146.7298	146.7298	2.8500e-003		146.8011

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	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9397	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0559	0.0303	0.4175	1.4700e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		146.7298	146.7298	2.8500e-003		146.8011
Total	0.0559	0.0303	0.4175	1.4700e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		146.7298	146.7298	2.8500e-003		146.8011

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9030	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0274	0.3875	1.4100e-003	0.1643	9.7000e-004	0.1653	0.0436	8.9000e-004	0.0445		140.9168	140.9168	2.5700e-003		140.9812
Total	0.0524	0.0274	0.3875	1.4100e-003	0.1643	9.7000e-004	0.1653	0.0436	8.9000e-004	0.0445		140.9168	140.9168	2.5700e-003		140.9812

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	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9030	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0274	0.3875	1.4100e-003	0.1643	9.7000e-004	0.1653	0.0436	8.9000e-004	0.0445		140.9168	140.9168	2.5700e-003		140.9812
Total	0.0524	0.0274	0.3875	1.4100e-003	0.1643	9.7000e-004	0.1653	0.0436	8.9000e-004	0.0445		140.9168	140.9168	2.5700e-003		140.9812

3.7 Striping - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.8249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	3.0057	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.7 Striping - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0341	0.0178	0.2519	9.2000e-004	0.1068	6.3000e-004	0.1074	0.0283	5.8000e-004	0.0289		91.5959	91.5959	1.6700e-003		91.6378
Total	0.0341	0.0178	0.2519	9.2000e-004	0.1068	6.3000e-004	0.1074	0.0283	5.8000e-004	0.0289		91.5959	91.5959	1.6700e-003		91.6378

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.8249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	3.0057	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

3.7 Striping - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0341	0.0178	0.2519	9.2000e-004	0.1068	6.3000e-004	0.1074	0.0283	5.8000e-004	0.0289		91.5959	91.5959	1.6700e-003		91.6378
Total	0.0341	0.0178	0.2519	9.2000e-004	0.1068	6.3000e-004	0.1074	0.0283	5.8000e-004	0.0289		91.5959	91.5959	1.6700e-003		91.6378

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	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 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 Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.581705	0.037849	0.193793	0.109044	0.014574	0.005304	0.018664	0.026966	0.002656	0.002072	0.005755	0.000900	0.000719

5.0 Energy Detail

Historical Energy Use: N

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

5.1 Mitigation Measures Energy

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

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004
Unmitigated	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0528					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004
Total	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0528					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004
Total	0.0698	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.5000e-004	7.5000e-004	0.0000		8.0000e-004

7.0 Water Detail

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Annual

I-80 Hiddenbrooke Interchange Roundabout Project
Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.42	Acre	3.42	148,975.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Annual

Project Characteristics - No electricity emissions.

Land Use - Based on impact exhibit - 1.25 acres for west roundabout and 2.17 acres for east roundabout

Construction Phase - Based on schedule provided by Circlepoint.

Demolition - 31,201 sf for west roundabout and 59,228 sf for east roundabout based on Google Earth estimate

Grading - Export of 15,000 CY provided by Circlepoint.

Architectural Coating - Consistent with BAAQMD Regulation 8, Rule 3

Vehicle Trips - Construction emissions only

Woodstoves - Construction emissions only

Consumer Products - Construction emissions only

Area Coating - Construction emissions only

Landscape Equipment - Construction emissions only

Energy Use - Construction emissions only

Water And Wastewater - Construction emissions only

Solid Waste - Construction emissions only

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Stationary Sources - Process Boilers EF -

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	22.00
tblConstructionPhase	NumDays	230.00	392.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	8.00	381.00
tblConstructionPhase	NumDays	18.00	415.00
tblConstructionPhase	NumDays	5.00	23.00
tblGrading	AcresOfGrading	190.50	191.00
tblGrading	MaterialExported	0.00	15,000.00

2.0 Emissions Summary

I-80 Hiddenbrooke Interchange Roundabout Project - Bay Area AQMD Air District, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3654	3.6930	3.1527	6.4600e-003	0.8531	0.1655	1.0187	0.3861	0.1535	0.5396	0.0000	571.9859	571.9859	0.1402	0.0000	575.4909
2023	0.5746	5.5131	5.7963	0.0116	0.9560	0.2413	1.1973	0.4428	0.2241	0.6669	0.0000	1,023.6493	1,023.6493	0.2461	0.0000	1,029.8007
2024	0.0834	0.4565	0.6329	1.1200e-003	0.0136	0.0207	0.0342	3.6500e-003	0.0193	0.0229	0.0000	97.8038	97.8038	0.0236	0.0000	98.3939
Maximum	0.5746	5.5131	5.7963	0.0116	0.9560	0.2413	1.1973	0.4428	0.2241	0.6669	0.0000	1,023.6493	1,023.6493	0.2461	0.0000	1,029.8007

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3654	3.6930	3.1527	6.4600e-003	0.8531	0.1655	1.0187	0.3861	0.1535	0.5396	0.0000	571.9854	571.9854	0.1402	0.0000	575.4903
2023	0.5746	5.5131	5.7963	0.0116	0.9560	0.2413	1.1973	0.4428	0.2241	0.6669	0.0000	1,023.6483	1,023.6483	0.2461	0.0000	1,029.7997
2024	0.0834	0.4565	0.6329	1.1200e-003	0.0136	0.0207	0.0342	3.6500e-003	0.0193	0.0229	0.0000	97.8037	97.8037	0.0236	0.0000	98.3938
Maximum	0.5746	5.5131	5.7963	0.0116	0.9560	0.2413	1.1973	0.4428	0.2241	0.6669	0.0000	1,023.6483	1,023.6483	0.2461	0.0000	1,029.7997

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-15-2022	7-14-2022	1.0211	1.0211
2	7-15-2022	10-14-2022	1.5037	1.5037
3	10-15-2022	1-14-2023	1.7710	1.7710
4	1-15-2023	4-14-2023	1.5596	1.5596
5	4-15-2023	7-14-2023	1.5748	1.5748
6	7-15-2023	10-14-2023	1.5925	1.5925
7	10-15-2023	1-14-2024	1.2559	1.2559
8	1-15-2024	4-14-2024	0.4045	0.4045
		Highest	1.7710	1.7710

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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	0.0127	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0127	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0127	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0127	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/15/2022	5/15/2022	5	21	
2	Site Preparation	Site Preparation	5/16/2022	6/15/2022	5	23	
3	Grading	Grading	6/16/2022	11/30/2023	5	381	
4	Roadway Construction	Building Construction	8/1/2022	1/30/2024	5	392	
5	Paving	Paving	8/30/2022	4/1/2024	5	415	
6	Striping	Architectural Coating	3/1/2024	4/1/2024	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 191

Acres of Paving: 3.42

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,939 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Roadway Construction	Cranes	1	7.00	231	0.29
Roadway Construction	Forklifts	3	8.00	89	0.20
Roadway Construction	Generator Sets	1	8.00	84	0.74
Roadway Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Roadway Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Striping	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	411.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,875.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Roadway Construction	9	63.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Striping	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0445	0.0000	0.0445	6.7400e-003	0.0000	6.7400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.2701	0.2162	4.1000e-004		0.0131	0.0131		0.0121	0.0121	0.0000	35.6897	35.6897	0.0100	0.0000	35.9404
Total	0.0277	0.2701	0.2162	4.1000e-004	0.0445	0.0131	0.0576	6.7400e-003	0.0121	0.0189	0.0000	35.6897	35.6897	0.0100	0.0000	35.9404

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3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5300e-003	0.0510	0.0116	1.6000e-004	3.4700e-003	1.5000e-004	3.6200e-003	9.5000e-004	1.4000e-004	1.1000e-003	0.0000	15.3352	15.3352	7.7000e-004	0.0000	15.3546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.0000e-004	3.2500e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0135	1.0135	2.0000e-005	0.0000	1.0140
Total	1.9800e-003	0.0513	0.0149	1.7000e-004	4.7100e-003	1.6000e-004	4.8700e-003	1.2800e-003	1.5000e-004	1.4400e-003	0.0000	16.3487	16.3487	7.9000e-004	0.0000	16.3686

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					0.0445	0.0000	0.0445	6.7400e-003	0.0000	6.7400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.2701	0.2162	4.1000e-004		0.0131	0.0131		0.0121	0.0121	0.0000	35.6897	35.6897	0.0100	0.0000	35.9403
Total	0.0277	0.2701	0.2162	4.1000e-004	0.0445	0.0131	0.0576	6.7400e-003	0.0121	0.0189	0.0000	35.6897	35.6897	0.0100	0.0000	35.9403

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3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5300e-003	0.0510	0.0116	1.6000e-004	3.4700e-003	1.5000e-004	3.6200e-003	9.5000e-004	1.4000e-004	1.1000e-003	0.0000	15.3352	15.3352	7.7000e-004	0.0000	15.3546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.0000e-004	3.2500e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0135	1.0135	2.0000e-005	0.0000	1.0140
Total	1.9800e-003	0.0513	0.0149	1.7000e-004	4.7100e-003	1.6000e-004	4.8700e-003	1.2800e-003	1.5000e-004	1.4400e-003	0.0000	16.3487	16.3487	7.9000e-004	0.0000	16.3686

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2078	0.0000	0.2078	0.1142	0.0000	0.1142	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0365	0.3805	0.2265	4.4000e-004		0.0185	0.0185		0.0171	0.0171	0.0000	38.4553	38.4553	0.0124	0.0000	38.7662
Total	0.0365	0.3805	0.2265	4.4000e-004	0.2078	0.0185	0.2263	0.1142	0.0171	0.1313	0.0000	38.4553	38.4553	0.0124	0.0000	38.7662

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3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.3321	1.3321	3.0000e-005	0.0000	1.3327
Total	5.9000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.3321	1.3321	3.0000e-005	0.0000	1.3327

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					0.2078	0.0000	0.2078	0.1142	0.0000	0.1142	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0365	0.3805	0.2265	4.4000e-004		0.0185	0.0185		0.0171	0.0171	0.0000	38.4553	38.4553	0.0124	0.0000	38.7662
Total	0.0365	0.3805	0.2265	4.4000e-004	0.2078	0.0185	0.2263	0.1142	0.0171	0.1313	0.0000	38.4553	38.4553	0.0124	0.0000	38.7662

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3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.3321	1.3321	3.0000e-005	0.0000	1.3327
Total	5.9000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.3321	1.3321	3.0000e-005	0.0000	1.3327

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5297	0.0000	0.5297	0.2461	0.0000	0.2461	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1384	1.4807	1.0844	2.1100e-003		0.0668	0.0668		0.0615	0.0615	0.0000	184.9888	184.9888	0.0598	0.0000	186.4846
Total	0.1384	1.4807	1.0844	2.1100e-003	0.5297	0.0668	0.5965	0.2461	0.0615	0.3076	0.0000	184.9888	184.9888	0.0598	0.0000	186.4846

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6000e-003	0.0867	0.0197	2.7000e-004	0.0133	2.5000e-004	0.0136	3.4500e-003	2.4000e-004	3.6900e-003	0.0000	26.0743	26.0743	1.3200e-003	0.0000	26.1073
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0500e-003	2.0200e-003	0.0220	8.0000e-005	8.4200e-003	5.0000e-005	8.4700e-003	2.2400e-003	5.0000e-005	2.2900e-003	0.0000	6.8533	6.8533	1.4000e-004	0.0000	6.8569
Total	5.6500e-003	0.0887	0.0417	3.5000e-004	0.0218	3.0000e-004	0.0221	5.6900e-003	2.9000e-004	5.9800e-003	0.0000	32.9276	32.9276	1.4600e-003	0.0000	32.9641

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					0.5297	0.0000	0.5297	0.2461	0.0000	0.2461	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1384	1.4807	1.0844	2.1100e-003		0.0668	0.0668		0.0615	0.0615	0.0000	184.9886	184.9886	0.0598	0.0000	186.4844
Total	0.1384	1.4807	1.0844	2.1100e-003	0.5297	0.0668	0.5965	0.2461	0.0615	0.3076	0.0000	184.9886	184.9886	0.0598	0.0000	186.4844

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6000e-003	0.0867	0.0197	2.7000e-004	0.0133	2.5000e-004	0.0136	3.4500e-003	2.4000e-004	3.6900e-003	0.0000	26.0743	26.0743	1.3200e-003	0.0000	26.1073
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0500e-003	2.0200e-003	0.0220	8.0000e-005	8.4200e-003	5.0000e-005	8.4700e-003	2.2400e-003	5.0000e-005	2.2900e-003	0.0000	6.8533	6.8533	1.4000e-004	0.0000	6.8569
Total	5.6500e-003	0.0887	0.0417	3.5000e-004	0.0218	3.0000e-004	0.0221	5.6900e-003	2.9000e-004	5.9800e-003	0.0000	32.9276	32.9276	1.4600e-003	0.0000	32.9641

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8218	0.0000	0.8218	0.4066	0.0000	0.4066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2045	2.1433	1.7627	3.5500e-003		0.0926	0.0926		0.0852	0.0852	0.0000	311.4243	311.4243	0.1007	0.0000	313.9424
Total	0.2045	2.1433	1.7627	3.5500e-003	0.8218	0.0926	0.9144	0.4066	0.0852	0.4918	0.0000	311.4243	311.4243	0.1007	0.0000	313.9424

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3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9800e-003	0.0976	0.0301	4.3000e-004	0.0144	1.8000e-004	0.0145	3.8200e-003	1.7000e-004	3.9800e-003	0.0000	42.2131	42.2131	2.0000e-003	0.0000	42.2630
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-003	3.0600e-003	0.0340	1.2000e-004	0.0142	9.0000e-005	0.0143	3.7700e-003	8.0000e-005	3.8500e-003	0.0000	11.0930	11.0930	2.2000e-004	0.0000	11.0984
Total	7.7800e-003	0.1006	0.0641	5.5000e-004	0.0285	2.7000e-004	0.0288	7.5900e-003	2.5000e-004	7.8300e-003	0.0000	53.3061	53.3061	2.2200e-003	0.0000	53.3614

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					0.8218	0.0000	0.8218	0.4066	0.0000	0.4066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2045	2.1433	1.7627	3.5500e-003		0.0926	0.0926		0.0852	0.0852	0.0000	311.4240	311.4240	0.1007	0.0000	313.9420
Total	0.2045	2.1433	1.7627	3.5500e-003	0.8218	0.0926	0.9144	0.4066	0.0852	0.4918	0.0000	311.4240	311.4240	0.1007	0.0000	313.9420

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3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9800e-003	0.0976	0.0301	4.3000e-004	0.0144	1.8000e-004	0.0145	3.8200e-003	1.7000e-004	3.9800e-003	0.0000	42.2131	42.2131	2.0000e-003	0.0000	42.2630
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-003	3.0600e-003	0.0340	1.2000e-004	0.0142	9.0000e-005	0.0143	3.7700e-003	8.0000e-005	3.8500e-003	0.0000	11.0930	11.0930	2.2000e-004	0.0000	11.0984
Total	7.7800e-003	0.1006	0.0641	5.5000e-004	0.0285	2.7000e-004	0.0288	7.5900e-003	2.5000e-004	7.8300e-003	0.0000	53.3061	53.3061	2.2200e-003	0.0000	53.3614

3.5 Roadway Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0938	0.8589	0.9000	1.4800e-003		0.0445	0.0445		0.0419	0.0419	0.0000	127.4489	127.4489	0.0305	0.0000	128.2122
Total	0.0938	0.8589	0.9000	1.4800e-003		0.0445	0.0445		0.0419	0.0419	0.0000	127.4489	127.4489	0.0305	0.0000	128.2122

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3.5 Roadway Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9100e-003	0.1306	0.0324	3.5000e-004	8.6600e-003	2.6000e-004	8.9200e-003	2.5000e-003	2.5000e-004	2.7500e-003	0.0000	33.8977	33.8977	1.6100e-003	0.0000	33.9379
Worker	9.9100e-003	6.5800e-003	0.0714	2.5000e-004	0.0274	1.7000e-004	0.0276	7.2800e-003	1.6000e-004	7.4400e-003	0.0000	22.2973	22.2973	4.7000e-004	0.0000	22.3089
Total	0.0138	0.1372	0.1038	6.0000e-004	0.0360	4.3000e-004	0.0365	9.7800e-003	4.1000e-004	0.0102	0.0000	56.1950	56.1950	2.0800e-003	0.0000	56.2469

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	0.0938	0.8589	0.9000	1.4800e-003		0.0445	0.0445		0.0419	0.0419	0.0000	127.4487	127.4487	0.0305	0.0000	128.2121
Total	0.0938	0.8589	0.9000	1.4800e-003		0.0445	0.0445		0.0419	0.0419	0.0000	127.4487	127.4487	0.0305	0.0000	128.2121

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3.5 Roadway Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9100e-003	0.1306	0.0324	3.5000e-004	8.6600e-003	2.6000e-004	8.9200e-003	2.5000e-003	2.5000e-004	2.7500e-003	0.0000	33.8977	33.8977	1.6100e-003	0.0000	33.9379
Worker	9.9100e-003	6.5800e-003	0.0714	2.5000e-004	0.0274	1.7000e-004	0.0276	7.2800e-003	1.6000e-004	7.4400e-003	0.0000	22.2973	22.2973	4.7000e-004	0.0000	22.3089
Total	0.0138	0.1372	0.1038	6.0000e-004	0.0360	4.3000e-004	0.0365	9.7800e-003	4.1000e-004	0.0102	0.0000	56.1950	56.1950	2.0800e-003	0.0000	56.2469

3.5 Roadway Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
Total	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383

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3.5 Roadway Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9300e-003	0.2380	0.0685	8.1000e-004	0.0205	2.7000e-004	0.0207	5.9200e-003	2.6000e-004	6.1800e-003	0.0000	77.8764	77.8764	3.2400e-003	0.0000	77.9574
Worker	0.0219	0.0140	0.1553	5.6000e-004	0.0647	4.0000e-004	0.0651	0.0172	3.7000e-004	0.0176	0.0000	50.6843	50.6843	9.9000e-004	0.0000	50.7090
Total	0.0288	0.2519	0.2237	1.3700e-003	0.0852	6.7000e-004	0.0859	0.0231	6.3000e-004	0.0238	0.0000	128.5607	128.5607	4.2300e-003	0.0000	128.6664

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	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
Total	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380

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3.5 Roadway Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9300e-003	0.2380	0.0685	8.1000e-004	0.0205	2.7000e-004	0.0207	5.9200e-003	2.6000e-004	6.1800e-003	0.0000	77.8764	77.8764	3.2400e-003	0.0000	77.9574
Worker	0.0219	0.0140	0.1553	5.6000e-004	0.0647	4.0000e-004	0.0651	0.0172	3.7000e-004	0.0176	0.0000	50.6843	50.6843	9.9000e-004	0.0000	50.7090
Total	0.0288	0.2519	0.2237	1.3700e-003	0.0852	6.7000e-004	0.0859	0.0231	6.3000e-004	0.0238	0.0000	128.5607	128.5607	4.2300e-003	0.0000	128.6664

3.5 Roadway Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0162	0.1479	0.1778	3.0000e-004		6.7500e-003	6.7500e-003		6.3500e-003	6.3500e-003	0.0000	25.5034	25.5034	6.0300e-003	0.0000	25.6542
Total	0.0162	0.1479	0.1778	3.0000e-004		6.7500e-003	6.7500e-003		6.3500e-003	6.3500e-003	0.0000	25.5034	25.5034	6.0300e-003	0.0000	25.6542

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3.5 Roadway Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e-004	0.0199	5.5800e-003	7.0000e-005	1.7300e-003	2.0000e-005	1.7500e-003	5.0000e-004	2.0000e-005	5.2000e-004	0.0000	6.5451	6.5451	2.7000e-004	0.0000	6.5518
Worker	1.7400e-003	1.0700e-003	0.0122	5.0000e-005	5.4800e-003	3.0000e-005	5.5100e-003	1.4600e-003	3.0000e-005	1.4900e-003	0.0000	4.1189	4.1189	8.0000e-005	0.0000	4.1208
Total	2.3100e-003	0.0210	0.0178	1.2000e-004	7.2100e-003	5.0000e-005	7.2600e-003	1.9600e-003	5.0000e-005	2.0100e-003	0.0000	10.6640	10.6640	3.5000e-004	0.0000	10.6726

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	0.0162	0.1479	0.1778	3.0000e-004		6.7500e-003	6.7500e-003		6.3500e-003	6.3500e-003	0.0000	25.5034	25.5034	6.0300e-003	0.0000	25.6541
Total	0.0162	0.1479	0.1778	3.0000e-004		6.7500e-003	6.7500e-003		6.3500e-003	6.3500e-003	0.0000	25.5034	25.5034	6.0300e-003	0.0000	25.6541

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3.5 Roadway Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e-004	0.0199	5.5800e-003	7.0000e-005	1.7300e-003	2.0000e-005	1.7500e-003	5.0000e-004	2.0000e-005	5.2000e-004	0.0000	6.5451	6.5451	2.7000e-004	0.0000	6.5518
Worker	1.7400e-003	1.0700e-003	0.0122	5.0000e-005	5.4800e-003	3.0000e-005	5.5100e-003	1.4600e-003	3.0000e-005	1.4900e-003	0.0000	4.1189	4.1189	8.0000e-005	0.0000	4.1208
Total	2.3100e-003	0.0210	0.0178	1.2000e-004	7.2100e-003	5.0000e-005	7.2600e-003	1.9600e-003	5.0000e-005	2.0100e-003	0.0000	10.6640	10.6640	3.5000e-004	0.0000	10.6726

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0435	0.4237	0.5426	8.4000e-004		0.0217	0.0217		0.0200	0.0200	0.0000	72.8726	72.8726	0.0229	0.0000	73.4450
Paving	9.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0444	0.4237	0.5426	8.4000e-004		0.0217	0.0217		0.0200	0.0200	0.0000	72.8726	72.8726	0.0229	0.0000	73.4450

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3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5500e-003	1.6900e-003	0.0183	6.0000e-005	7.0300e-003	4.0000e-005	7.0800e-003	1.8700e-003	4.0000e-005	1.9100e-003	0.0000	5.7272	5.7272	1.2000e-004	0.0000	5.7301
Total	2.5500e-003	1.6900e-003	0.0183	6.0000e-005	7.0300e-003	4.0000e-005	7.0800e-003	1.8700e-003	4.0000e-005	1.9100e-003	0.0000	5.7272	5.7272	1.2000e-004	0.0000	5.7301

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	0.0435	0.4237	0.5426	8.4000e-004		0.0217	0.0217		0.0200	0.0200	0.0000	72.8725	72.8725	0.0229	0.0000	73.4449
Paving	9.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0444	0.4237	0.5426	8.4000e-004		0.0217	0.0217		0.0200	0.0200	0.0000	72.8725	72.8725	0.0229	0.0000	73.4449

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3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5500e-003	1.6900e-003	0.0183	6.0000e-005	7.0300e-003	4.0000e-005	7.0800e-003	1.8700e-003	4.0000e-005	1.9100e-003	0.0000	5.7272	5.7272	1.2000e-004	0.0000	5.7301
Total	2.5500e-003	1.6900e-003	0.0183	6.0000e-005	7.0300e-003	4.0000e-005	7.0800e-003	1.8700e-003	4.0000e-005	1.9100e-003	0.0000	5.7272	5.7272	1.2000e-004	0.0000	5.7301

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1194	1.1427	1.5848	2.4600e-003		0.0566	0.0566		0.0523	0.0523	0.0000	212.9217	212.9217	0.0669	0.0000	214.5942
Paving	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1222	1.1427	1.5848	2.4600e-003		0.0566	0.0566		0.0523	0.0523	0.0000	212.9217	212.9217	0.0669	0.0000	214.5942

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9600e-003	4.4400e-003	0.0493	1.8000e-004	0.0205	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5800e-003	0.0000	16.0903	16.0903	3.1000e-004	0.0000	16.0981
Total	6.9600e-003	4.4400e-003	0.0493	1.8000e-004	0.0205	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5800e-003	0.0000	16.0903	16.0903	3.1000e-004	0.0000	16.0981

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	0.1194	1.1427	1.5848	2.4600e-003		0.0566	0.0566		0.0523	0.0523	0.0000	212.9214	212.9214	0.0669	0.0000	214.5939
Paving	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1222	1.1427	1.5848	2.4600e-003		0.0566	0.0566		0.0523	0.0523	0.0000	212.9214	212.9214	0.0669	0.0000	214.5939

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3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9600e-003	4.4400e-003	0.0493	1.8000e-004	0.0205	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5800e-003	0.0000	16.0903	16.0903	3.1000e-004	0.0000	16.0981
Total	6.9600e-003	4.4400e-003	0.0493	1.8000e-004	0.0205	1.3000e-004	0.0207	5.4700e-003	1.2000e-004	5.5800e-003	0.0000	16.0903	16.0903	3.1000e-004	0.0000	16.0981

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0291	0.2730	0.4033	6.2000e-004		0.0132	0.0132		0.0122	0.0122	0.0000	54.0550	54.0550	0.0170	0.0000	54.4796
Paving	7.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0298	0.2730	0.4033	6.2000e-004		0.0132	0.0132		0.0122	0.0122	0.0000	54.0550	54.0550	0.0170	0.0000	54.4796

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3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6600e-003	1.0200e-003	0.0116	4.0000e-005	5.2200e-003	3.0000e-005	5.2500e-003	1.3900e-003	3.0000e-005	1.4200e-003	0.0000	3.9228	3.9228	7.0000e-005	0.0000	3.9246
Total	1.6600e-003	1.0200e-003	0.0116	4.0000e-005	5.2200e-003	3.0000e-005	5.2500e-003	1.3900e-003	3.0000e-005	1.4200e-003	0.0000	3.9228	3.9228	7.0000e-005	0.0000	3.9246

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	0.0291	0.2730	0.4033	6.2000e-004		0.0132	0.0132		0.0122	0.0122	0.0000	54.0550	54.0550	0.0170	0.0000	54.4796
Paving	7.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0298	0.2730	0.4033	6.2000e-004		0.0132	0.0132		0.0122	0.0122	0.0000	54.0550	54.0550	0.0170	0.0000	54.4796

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6600e-003	1.0200e-003	0.0116	4.0000e-005	5.2200e-003	3.0000e-005	5.2500e-003	1.3900e-003	3.0000e-005	1.4200e-003	0.0000	3.9228	3.9228	7.0000e-005	0.0000	3.9246
Total	1.6600e-003	1.0200e-003	0.0116	4.0000e-005	5.2200e-003	3.0000e-005	5.2500e-003	1.3900e-003	3.0000e-005	1.4200e-003	0.0000	3.9228	3.9228	7.0000e-005	0.0000	3.9246

3.7 Striping - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9900e-003	0.0134	0.0199	3.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	2.8086	2.8086	1.6000e-004	0.0000	2.8125
Total	0.0331	0.0134	0.0199	3.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	2.8086	2.8086	1.6000e-004	0.0000	2.8125

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3.7 Striping - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.2000e-004	2.5100e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.8499	0.8499	2.0000e-005	0.0000	0.8503
Total	3.6000e-004	2.2000e-004	2.5100e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.8499	0.8499	2.0000e-005	0.0000	0.8503

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	0.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9900e-003	0.0134	0.0199	3.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	2.8086	2.8086	1.6000e-004	0.0000	2.8125
Total	0.0331	0.0134	0.0199	3.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	2.8086	2.8086	1.6000e-004	0.0000	2.8125

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3.7 Striping - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.2000e-004	2.5100e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.8499	0.8499	2.0000e-005	0.0000	0.8503
Total	3.6000e-004	2.2000e-004	2.5100e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.8499	0.8499	2.0000e-005	0.0000	0.8503

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other 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 Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.581705	0.037849	0.193793	0.109044	0.014574	0.005304	0.018664	0.026966	0.002656	0.002072	0.005755	0.000900	0.000719

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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 Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other 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	0.0127	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Unmitigated	0.0127	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	0.0127	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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	3.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	0.0127	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

7.0 Water Detail

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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 Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other 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

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other 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 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 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
