



Appendix K: Air Quality Standards and Modeling Results



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Table K-1: Federal and State Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard ⁸	Federal Standard ⁹	SJVAB Attainment Status
Ozone (O ₃) ²	1 hour	0.09 parts per million (ppm)	---	Federal: No Federal Standard (1-hour), Nonattainment/ Extreme (8-hour) State: Nonattainment/ Severe (1-hour), Nonattainment (8-hour)
	8 hours	0.070 ppm	0.070 ppm ⁴ (4th highest in 3 years)	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Federal: Attainment/ Unclassified State: Attainment/ Unclassified
	8 hours	9.0 ppm ¹	9 ppm	
	8 hours (Lake Tahoe)	6 ppm	---	
Respirable Particulate Matter (PM ₁₀) ²	24 hours	50 µg/m ³	150 µg/m ³	Federal: Maintenance State: Nonattainment
	Annual	20 µg/m ³	--- ² (expected number of days above standard < or equal to 1)	
Fine Particulate Matter (PM _{2.5}) ²	24 hours	---	35 µg/m ³	Federal: Nonattainment State: Nonattainment
	Annual	12 µg/m ³	12.0 µg/m ³	
	Secondary Standard (annual)	---	15 µg/m ³ (98th percentile over 3 years)	
Nitrogen Dioxide (NO ₂)	1 hour	0.18 ppm	100 ppb ⁶ (98th percentile over 3 years)	Federal: Attainment/ Unclassified State: Attainment
	Annual	0.030 ppm	0.053 ppm	
Sulfur Dioxide (SO ₂)	1 hour	0.25 ppm	75 ppb ⁷ (99th percentile over 3 years)	Federal: Attainment/ Unclassified State: Attainment
	3 hours	---	0.5 ppm ⁹	
	24 hours	0.04 ppm	0.14 ppm	
	Annual Arithmetic Mean	---	0.03 ppm	



Pollutant	Averaging Time	State Standard ⁸	Federal Standard ⁹	SJVAB Attainment Status
Lead (Pb) ³	Monthly Calendar Quarter Rolling 3-month average	1.5 µg/m ³ --- ---	--- 1.5 µg/m ³ 0.15 µg/m ³ ¹⁰	Federal: No Designation/ Classification State: Attainment
Sulfates	24 hours	25 µg/m ³	---	Federal: No Federal Standard State: Attainment
Hydrogen Sulfide	1 hour	0.03 ppm	---	Federal: No Federal Standard State: Unclassified
Visibility Reducing Particles	8 hours	Visibility of 10 miles or more (Tahoe: 30 miles) at relative humidity less than 70 percent	---	Federal: No Federal Standard State: Unclassified
Vinyl Chloride ³	24 hours	0.01 ppm	---	Federal: No Federal Standard State: Attainment

¹ Rounding to an integer value is not allowed for the state 8-hour CO standard. Violation occurs at or above 9.05 ppm.

² Annual PM₁₀ NAAQS revoked October 2006; was 50 µg/m³. 24-hour PM_{2.5} NAAQS tightened October 2006; was 65 µg/m³. Annual PM_{2.5} NAAQS tightened from 15 µg/m³ to 12 µg/m³ December 2012, and secondary standard set at 15 µg/m³.

³ CARB has identified vinyl chloride and the particulate matter fraction of DPM as TACs. DPM is part of PM₁₀ and, in larger proportion, PM_{2.5}. Both CARB and the EPA have identified Pb and various organic compounds that are precursors to O₃ and PM_{2.5} as TACs. There are no exposure criteria for substantial health effects because of TACs, and control requirements may apply at ambient concentrations below any criteria levels specified above for these pollutants or the general categories of pollutants to which they belong.

⁴ Prior to June 2005, the 1-hour NAAQS was 0.12 ppm. Emission budgets for 1-hour O₃ are still in use in some areas where 8-hour O₃ emission budgets have not been developed, such as the San Francisco Bay Area. On October 1, 2015, the national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm.

⁵ The 0.08 ppm 1997 O₃ standard is revoked FOR CONFORMITY PURPOSES ONLY when area designations for the 2008 0.75 ppm standard become effective for conformity use (July 20, 2013). Conformity requirements apply for all NAAQS, including revoked NAAQS, until emission budgets for newer NAAQS are found adequate, SIP amendments for the newer NAAQS are approved with an emission budget, EPA specifically revokes conformity requirements for an older standard, or the area becomes attainment/unclassified. SIP-approved emission budgets remain in force indefinitely unless explicitly replaced or eliminated by a subsequent approved SIP amendment. During the "Interim" period prior to availability of emission budgets, conformity tests may include some combination of build versus no build, build versus baseline, or compliance with prior emission budgets for the same pollutant.

⁶ Final 1-hour NO₂ NAAQS published in the Federal Register on February 9, 2010, effective March 9, 2010. Initial area designation for California (2012) was attainment/unclassifiable throughout. Project-level hot-spot analysis requirements do not currently exist. Near-road monitoring starting in 2013 may cause redesignation to nonattainment in some areas after 2016.

⁷ The EPA finalized a 1-hour SO₂ standard of 75 ppb in June 2010. Nonattainment areas have not yet been designated as of September 2012.



⁸ California standards for O₃, carbon monoxide (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

⁹ National standards (other than O₃, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the EPA for further clarification and current national policies.

¹⁰ Lead NAAQS are not considered in Transportation Conformity analysis.

µg/m³= micrograms per cubic meter; CAAQS = California Ambient Air Quality Standards; CO= carbon monoxide; DPM = diesel particulate matter; FCAA = Federal Clean Air Act; NAAQS = National Ambient Air Quality Standards; NO₂ = nitrogen dioxide; NO_x = oxides of nitrogen; O₃ = ozone; Pb = lead; PM_{2.5} = particles of 2.5 micrometers and smaller; PM₁₀ = particles of 10 micrometers and smaller; ppb = parts per billion; ppm = parts per million; ROG = reactive organic gas; SJVAB = San Joaquin Valley Air Basin; SIP = state implementation plan; SO₂ = sulfur dioxide; SO_x = sulfur oxides; TAC = toxic air contaminant



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Air Quality Modeling Results



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Stockton Diamond_Option 1 - San Joaquin Valley Unified APCD Air District, Annual

Stockton Diamond_Option 1
San Joaquin Valley Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4,572.06	1000sqft	104.96	4,572,057.60	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	45
Climate Zone	2			Operational Year	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule
- Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Grading - .

Construction Off-road Equipment Mitigation - Tier 4

Trips and VMT - adjusted based on construction information from RJB

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

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

2023	0.7277	7.5936	5.6212	0.0230	1.4273	0.2423	1.6695	0.2248	0.2239	0.4487	0.0000	2,059.8226	2,059.8226	0.4612	0.0000	2,071.3529
2024	1.5975	15.4985	12.2971	0.0482	1.5250	0.5213	2.0463	0.2536	0.4822	0.7359	0.0000	4,302.5977	4,302.5977	1.0197	0.0000	4,328.0897
2025	2.3324	19.2127	18.7092	0.0616	1.8130	0.7436	2.5567	0.3232	0.6882	1.0114	0.0000	5,406.6144	5,406.6144	1.5159	0.0000	5,444.5129
2026	0.4893	3.8398	4.1034	0.0121	0.0844	0.1589	0.2433	0.0219	0.1469	0.1688	0.0000	1,060.7181	1,060.7181	0.3206	0.0000	1,068.7324
Maximum	2.3324	19.2127	18.7092	0.0616	1.8130	0.7436	2.5567	0.3232	0.6882	1.0114	0.0000	5,406.6144	5,406.6144	1.5159	0.0000	5,444.5129

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					
2023	0.2457	2.2719	7.6543	0.0230	1.4273	0.0276	1.4548	0.2248	0.0274	0.2522	0.0000	2,059.8209	2,059.8209	0.4612	0.0000	2,071.3513
2024	0.5403	4.5306	17.2071	0.0482	1.5250	0.0609	1.5859	0.2536	0.0607	0.3143	0.0000	4,302.5941	4,302.5941	1.0197	0.0000	4,328.0860
2025	0.8093	4.7773	27.3041	0.0616	1.8130	0.0908	1.9038	0.3232	0.0906	0.4138	0.0000	5,406.6087	5,406.6087	1.5159	0.0000	5,444.5072
2026	0.1621	0.8102	5.9093	0.0121	0.0844	0.0189	0.1033	0.0219	0.0189	0.0408	0.0000	1,060.7169	1,060.7169	0.3206	0.0000	1,068.7312
Maximum	0.8093	4.7773	27.3041	0.0616	1.8130	0.0908	1.9038	0.3232	0.0906	0.4138	0.0000	5,406.6087	5,406.6087	1.5159	0.0000	5,444.5072

	ROG	NOx	CO	SO2	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	65.86	73.15	-42.58	0.00	0.00	88.10	22.53	0.00	87.18	56.82	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	6-1-2023	8-31-2023	3.5872	1.0780
2	9-1-2023	11-30-2023	3.5557	1.0739
3	12-1-2023	2-29-2024	3.4253	1.0687
4	3-1-2024	5-31-2024	3.3856	1.0686
5	6-1-2024	8-31-2024	3.3819	1.0649

6	9-1-2024	11-30-2024	5.7285	1.5836
7	12-1-2024	2-28-2025	7.5535	2.1045
8	3-1-2025	5-31-2025	7.1022	1.9338
9	6-1-2025	8-31-2025	3.4412	0.8054
10	9-1-2025	11-30-2025	4.2674	1.0135
11	12-1-2025	2-28-2026	4.1767	0.9685
12	3-1-2026	5-31-2026	1.6685	0.3627
		Highest	7.5535	2.1045

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	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
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	0.3948	3.8000e-004	0.0419	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

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	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
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	0.3948	3.8000e-004	0.0419	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

	ROG	NOx	CO	SO2	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	Earthwork	Grading	6/1/2023	4/30/2025	5	500	
2	Charter Way Yard Connection	Building Construction	9/1/2024	2/28/2025	5	130	
3	Charter Way Main Track	Building Construction	11/1/2024	4/30/2025	5	129	
4	Mormon Slough Bridge Construction	Building Construction	1/1/2025	6/30/2025	5	129	
5	Signal Work	Building Construction	2/1/2025	7/31/2025	5	129	
6	Flyover Bridge Construction	Building Construction	3/1/2025	1/31/2026	5	240	
7	Track Work	Building Construction	5/1/2025	4/30/2026	5	261	
8	Hazelton Bridge Construction	Building Construction	9/1/2025	3/31/2026	5	152	
9	Roadway Work	Building Construction	11/1/2025	4/30/2026	5	129	
10	Signal Work 2	Building Construction	1/1/2026	4/30/2026	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 104.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Earthwork	Concrete/Industrial Saws	0	8.00	81	0.73
Earthwork	Dumpers/Tenders	9	8.00	16	0.38
Earthwork	Excavators	2	8.00	158	0.38
Earthwork	Graders	1	8.00	187	0.41
Earthwork	Off-Highway Trucks	3	8.00	350	0.38
Earthwork	Other Construction Equipment	3	8.00	452	0.42
Earthwork	Other Construction Equipment	1	8.00	157	0.42
Earthwork	Rollers	1	8.00	80	0.38
Earthwork	Rubber Tired Dozers	0	8.00	247	0.40
Earthwork	Scrapers	3	8.00	367	0.48
Earthwork	Tractors/Loaders/Backhoes	3	8.00	475	0.37
Charter Way Yard Connection	Cranes	3	8.00	550	0.29
Charter Way Yard Connection	Cranes	2	8.00	617	0.29
Charter Way Yard Connection	Forklifts	4	8.00	89	0.20
Charter Way Yard Connection	Generator Sets	0	8.00	84	0.74
Charter Way Yard Connection	Off-Highway Trucks	2	8.00	402	0.38
Charter Way Yard Connection	Other Construction Equipment	1	8.00	310	0.42
Charter Way Yard Connection	Other General Industrial Equipment	1	8.00	88	0.34
Charter Way Yard Connection	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Charter Way Yard Connection	Welders	1	8.00	17	0.45
Charter Way Yard Connection	Welders	3	8.00	46	0.45
Charter Way Main Track	Cranes	3	8.00	550	0.29
Charter Way Main Track	Cranes	2	8.00	617	0.29
Charter Way Main Track	Forklifts	4	8.00	89	0.20
Charter Way Main Track	Generator Sets	0	8.00	84	0.74
Charter Way Main Track	Off-Highway Trucks	2	8.00	402	0.38
Charter Way Main Track	Other Construction Equipment	1	8.00	310	0.42
Charter Way Main Track	Other General Industrial Equipment	1	8.00	88	0.34

Charter Way Main Track	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Charter Way Main Track	Welders	1	8.00	17	0.45
Charter Way Main Track	Welders	3	8.00	46	0.45
Mormon Slough Bridge Construction	Cranes	3	8.00	550	0.29
Mormon Slough Bridge Construction	Cranes	2	8.00	617	0.29
Mormon Slough Bridge Construction	Forklifts	4	8.00	89	0.20
Mormon Slough Bridge Construction	Generator Sets	0	8.00	84	0.74
Mormon Slough Bridge Construction	Off-Highway Trucks	2	8.00	402	0.38
Mormon Slough Bridge Construction	Other Construction Equipment	1	8.00	310	0.42
Mormon Slough Bridge Construction	Other General Industrial Equipment	1	8.00	88	0.34
Mormon Slough Bridge Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Mormon Slough Bridge Construction	Welders	1	8.00	17	0.45
Mormon Slough Bridge Construction	Welders	3	8.00	46	0.45
Flyover Bridge Construction	Cranes	3	8.00	550	0.29
Flyover Bridge Construction	Cranes	2	8.00	617	0.29
Flyover Bridge Construction	Excavators	0	8.00	158	0.38
Flyover Bridge Construction	Forklifts	4	8.00	89	0.20
Flyover Bridge Construction	Generator Sets	0	8.00	84	0.74
Flyover Bridge Construction	Graders	0	8.00	187	0.41
Flyover Bridge Construction	Off-Highway Trucks	2	8.00	402	0.38
Flyover Bridge Construction	Other Construction Equipment	1	8.00	310	0.42
Flyover Bridge Construction	Other General Industrial Equipment	1	8.00	88	0.34
Flyover Bridge Construction	Pavers	0	8.00	130	0.42
Flyover Bridge Construction	Paving Equipment	0	8.00	132	0.36
Flyover Bridge Construction	Rollers	0	8.00	80	0.38
Flyover Bridge Construction	Rubber Tired Dozers	0	8.00	247	0.40
Flyover Bridge Construction	Scrapers	0	8.00	367	0.48
Flyover Bridge Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Flyover Bridge Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Flyover Bridge Construction	Welders	1	8.00	17	0.45
Flyover Bridge Construction	Welders	3	8.00	46	0.45
Hazelton Bridge Construction	Air Compressors	0	6.00	78	0.48

Hazelton Bridge Construction	Cranes	3	8.00	550	0.29
Hazelton Bridge Construction	Cranes	2	8.00	617	0.29
Hazelton Bridge Construction	Forklifts	4	8.00	89	0.20
Hazelton Bridge Construction	Generator Sets	0	8.00	84	0.74
Hazelton Bridge Construction	Off-Highway Trucks	2	8.00	402	0.38
Hazelton Bridge Construction	Other Construction Equipment	1	8.00	310	0.42
Hazelton Bridge Construction	Other General Industrial Equipment	1	8.00	88	0.34
Hazelton Bridge Construction	Rubber Tired Dozers	0	8.00	247	0.40
Hazelton Bridge Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Hazelton Bridge Construction	Welders	1	8.00	17	0.45
Hazelton Bridge Construction	Welders	3	8.00	46	0.45
Track Work	Cranes	0	7.00	231	0.29
Track Work	Cranes	1	8.00	231	0.29
Track Work	Excavators	1	8.00	158	0.38
Track Work	Forklifts	1	8.00	89	0.20
Track Work	Generator Sets	0	8.00	84	0.74
Track Work	Off-Highway Trucks	1	8.00	550	0.38
Track Work	Off-Highway Trucks	1	8.00	455	0.38
Track Work	Other Construction Equipment	1	8.00	120	0.42
Track Work	Other Construction Equipment	1	8.00	163	0.42
Track Work	Other Construction Equipment	1	8.00	110	0.42
Track Work	Skid Steer Loaders	1	8.00	65	0.37
Track Work	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Track Work	Tractors/Loaders/Backhoes	1	8.00	475	0.37
Track Work	Welders	0	8.00	46	0.45
Signal Work	Cranes	1	8.00	550	0.29
Signal Work	Excavators	1	8.00	158	0.38
Signal Work	Forklifts	0	8.00	89	0.20
Signal Work	Generator Sets	0	8.00	84	0.74
Signal Work	Off-Highway Trucks	2	8.00	330	0.38
Signal Work	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Signal Work	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Signal Work	Welders	0	8.00	46	0.45
Signal Work 2	Cranes	1	8.00	550	0.29
Signal Work 2	Excavators	1	8.00	158	0.38
Signal Work 2	Forklifts	0	8.00	89	0.20
Signal Work 2	Generator Sets	0	8.00	84	0.74
Signal Work 2	Off-Highway Trucks	2	8.00	330	0.38
Signal Work 2	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Signal Work 2	Welders	0	8.00	46	0.45
Roadway Work	Cranes	0	7.00	231	0.29
Roadway Work	Dumpers/Tenders	4	8.00	16	0.38
Roadway Work	Forklifts	0	8.00	89	0.20
Roadway Work	Generator Sets	0	8.00	84	0.74
Roadway Work	Pavers	1	8.00	130	0.42
Roadway Work	Plate Compactors	1	8.00	131	0.43
Roadway Work	Tractors/Loaders/Backhoes	1	8.00	475	0.37
Roadway Work	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Earthwork	26	60.00	0.00	60,500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Charter Way Yard	17	74.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Charter Way Main	17	74.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Mormon Slough	17	74.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Flyover Bridge	17	148.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Flyover Bridge	17	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Hazelton Bridge	17	74.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Hazelton Bridge	17	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Track Work	10	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Signal Work	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Signal Work 2	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Roadway Work	7	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
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3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Earthwork - 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					0.9637	0.0000	0.9637	0.1056	0.0000	0.1056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6684	6.1293	5.2356	0.0157		0.2396	0.2396		0.2214	0.2214	0.0000	1,371.4607	1,371.4607	0.4354	0.0000	1,382.3454
Total	0.6684	6.1293	5.2356	0.0157	0.9637	0.2396	1.2032	0.1056	0.2214	0.3270	0.0000	1,371.4607	1,371.4607	0.4354	0.0000	1,382.3454

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	0.0441	1.4550	0.2854	6.9200e-003	0.4271	2.4800e-003	0.4296	0.1095	2.3700e-003	0.1119	0.0000	659.0278	659.0278	0.0252	0.0000	659.6569
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0153	9.2900e-003	0.1001	3.2000e-004	0.0365	2.4000e-004	0.0367	9.6900e-003	2.2000e-004	9.9100e-003	0.0000	29.3340	29.3340	6.6000e-004	0.0000	29.3506
Total	0.0593	1.4643	0.3856	7.2400e-003	0.4636	2.7200e-003	0.4663	0.1192	2.5900e-003	0.1218	0.0000	688.3619	688.3619	0.0258	0.0000	689.0075

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					0.9637	0.0000	0.9637	0.1056	0.0000	0.1056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1864	0.8076	7.2687	0.0157		0.0249	0.0249		0.0249	0.0249	0.0000	1,371.459 1	1,371.459 1	0.4354	0.0000	1,382.343 8
Total	0.1864	0.8076	7.2687	0.0157	0.9637	0.0249	0.9885	0.1056	0.0249	0.1305	0.0000	1,371.459 1	1,371.459 1	0.4354	0.0000	1,382.343 8

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	0.0441	1.4550	0.2854	6.9200e-003	0.4271	2.4800e-003	0.4296	0.1095	2.3700e-003	0.1119	0.0000	659.0278	659.0278	0.0252	0.0000	659.6569
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0153	9.2900e-003	0.1001	3.2000e-004	0.0365	2.4000e-004	0.0367	9.6900e-003	2.2000e-004	9.9100e-003	0.0000	29.3340	29.3340	6.6000e-004	0.0000	29.3506
Total	0.0593	1.4643	0.3856	7.2400e-003	0.4636	2.7200e-003	0.4663	0.1192	2.5900e-003	0.1218	0.0000	688.3619	688.3619	0.0258	0.0000	689.0075

3.2 Earthwork - 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					

Fugitive Dust					0.9637	0.0000	0.9637	0.1056	0.0000	0.1056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1212	9.8299	8.9224	0.0271		0.3858	0.3858		0.3565	0.3565	0.0000	2,364.7813	2,364.7813	0.7507	0.0000	2,383.5496
Total	1.1212	9.8299	8.9224	0.0271	0.9637	0.3858	1.3494	0.1056	0.3565	0.4621	0.0000	2,364.7813	2,364.7813	0.7507	0.0000	2,383.5496

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	0.0751	2.4583	0.4829	0.0118	0.4558	4.2200e-003	0.4600	0.1199	4.0400e-003	0.1239	0.0000	1,127.3473	1,127.3473	0.0441	0.0000	1,128.4498
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0246	0.0144	0.1593	5.4000e-004	0.0628	4.0000e-004	0.0632	0.0167	3.7000e-004	0.0171	0.0000	48.6404	48.6404	1.0300e-003	0.0000	48.6662
Total	0.0997	2.4727	0.6421	0.0124	0.5186	4.6200e-003	0.5232	0.1366	4.4100e-003	0.1410	0.0000	1,175.9877	1,175.9877	0.0451	0.0000	1,177.1160

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					0.9637	0.0000	0.9637	0.1056	0.0000	0.1056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3212	1.3921	12.5290	0.0271		0.0428	0.0428		0.0428	0.0428	0.0000	2,364.7785	2,364.7785	0.7507	0.0000	2,383.5468
Total	0.3212	1.3921	12.5290	0.0271	0.9637	0.0428	1.0065	0.1056	0.0428	0.1484	0.0000	2,364.7785	2,364.7785	0.7507	0.0000	2,383.5468

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	0.0751	2.4583	0.4829	0.0118	0.4558	4.2200e-003	0.4600	0.1199	4.0400e-003	0.1239	0.0000	1,127.3473	1,127.3473	0.0441	0.0000	1,128.4498
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0246	0.0144	0.1593	5.4000e-004	0.0628	4.0000e-004	0.0632	0.0167	3.7000e-004	0.0171	0.0000	48.6404	48.6404	1.0300e-003	0.0000	48.6662
Total	0.0997	2.4727	0.6421	0.0124	0.5186	4.6200e-003	0.5232	0.1366	4.4100e-003	0.1410	0.0000	1,175.9877	1,175.9877	0.0451	0.0000	1,177.1160

3.2 Earthwork - 2025

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					0.9637	0.0000	0.9637	0.1056	0.0000	0.1056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3446	2.8363	2.8141	8.8900e-003		0.1106	0.1106		0.1023	0.1023	0.0000	776.2774	776.2774	0.2464	0.0000	782.4385
Total	0.3446	2.8363	2.8141	8.8900e-003	0.9637	0.1106	1.0743	0.1056	0.1023	0.2079	0.0000	776.2774	776.2774	0.2464	0.0000	782.4385

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	0.0244	0.7914	0.1556	3.8600e-003	0.4100	1.3700e-003	0.4114	0.1033	1.3100e-003	0.1046	0.0000	367.4588	367.4588	0.0147	0.0000	367.8264
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5700e-003	4.2700e-003	0.0481	1.7000e-004	0.0206	1.3000e-004	0.0208	5.4800e-003	1.2000e-004	5.6000e-003	0.0000	15.3351	15.3351	3.0000e-004	0.0000	15.3427
Total	0.0320	0.7957	0.2038	4.0300e-003	0.4306	1.5000e-003	0.4321	0.1087	1.4300e-003	0.1102	0.0000	382.7939	382.7939	0.0150	0.0000	383.1691

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					0.9637	0.0000	0.9637	0.1056	0.0000	0.1056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1055	0.4569	4.1126	8.8900e-003		0.0141	0.0141		0.0141	0.0141	0.0000	776.2765	776.2765	0.2464	0.0000	782.4375
Total	0.1055	0.4569	4.1126	8.8900e-003	0.9637	0.0141	0.9777	0.1056	0.0141	0.1197	0.0000	776.2765	776.2765	0.2464	0.0000	782.4375

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	0.0244	0.7914	0.1556	3.8600e-003	0.4100	1.3700e-003	0.4114	0.1033	1.3100e-003	0.1046	0.0000	367.4588	367.4588	0.0147	0.0000	367.8264
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5700e-003	4.2700e-003	0.0481	1.7000e-004	0.0206	1.3000e-004	0.0208	5.4800e-003	1.2000e-004	5.6000e-003	0.0000	15.3351	15.3351	3.0000e-004	0.0000	15.3427
Total	0.0320	0.7957	0.2038	4.0300e-003	0.4306	1.5000e-003	0.4321	0.1087	1.4300e-003	0.1102	0.0000	382.7939	382.7939	0.0150	0.0000	383.1691

3.3 Charter Way Yard Connection - 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	0.2411	2.0981	1.7573	5.5100e-003		0.0874	0.0874		0.0810	0.0810	0.0000	478.7556	478.7556	0.1488	0.0000	482.4747
Total	0.2411	2.0981	1.7573	5.5100e-003		0.0874	0.0874		0.0810	0.0810	0.0000	478.7556	478.7556	0.1488	0.0000	482.4747

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.8000e-004	0.0348	6.2800e-003	1.2000e-004	2.8800e-003	3.0000e-005	2.9200e-003	8.3000e-004	3.0000e-005	8.7000e-004	0.0000	11.1634	11.1634	6.0000e-004	0.0000	11.1783
Worker	0.0101	5.9000e-003	0.0652	2.2000e-004	0.0257	1.6000e-004	0.0259	6.8400e-003	1.5000e-004	6.9900e-003	0.0000	19.9203	19.9203	4.2000e-004	0.0000	19.9308
Total	0.0110	0.0407	0.0715	3.4000e-004	0.0286	1.9000e-004	0.0288	7.6700e-003	1.8000e-004	7.8600e-003	0.0000	31.0836	31.0836	1.0200e-003	0.0000	31.1091

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
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Category	tons/yr										MT/yr					
Off-Road	0.0689	0.4049	2.6295	5.5100e-003		8.8100e-003	8.8100e-003		8.8100e-003	8.8100e-003	0.0000	478.7551	478.7551	0.1488	0.0000	482.4742
Total	0.0689	0.4049	2.6295	5.5100e-003		8.8100e-003	8.8100e-003		8.8100e-003	8.8100e-003	0.0000	478.7551	478.7551	0.1488	0.0000	482.4742

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.8000e-004	0.0348	6.2800e-003	1.2000e-004	2.8800e-003	3.0000e-005	2.9200e-003	8.3000e-004	3.0000e-005	8.7000e-004	0.0000	11.1634	11.1634	6.0000e-004	0.0000	11.1783
Worker	0.0101	5.9000e-003	0.0652	2.2000e-004	0.0257	1.6000e-004	0.0259	6.8400e-003	1.5000e-004	6.9900e-003	0.0000	19.9203	19.9203	4.2000e-004	0.0000	19.9308
Total	0.0110	0.0407	0.0715	3.4000e-004	0.0286	1.9000e-004	0.0288	7.6700e-003	1.8000e-004	7.8600e-003	0.0000	31.0836	31.0836	1.0200e-003	0.0000	31.1091

3.3 Charter Way Yard Connection - 2025

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	0.1099	0.9167	0.8599	2.7200e-003		0.0371	0.0371		0.0344	0.0344	0.0000	236.5758	236.5758	0.0734	0.0000	238.4114
Total	0.1099	0.9167	0.8599	2.7200e-003		0.0371	0.0371		0.0344	0.0344	0.0000	236.5758	236.5758	0.0734	0.0000	238.4114

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0171	2.9500e-003	6.0000e-005	1.4300e-003	2.0000e-005	1.4400e-003	4.1000e-004	2.0000e-005	4.3000e-004	0.0000	5.4786	5.4786	3.0000e-004	0.0000	5.4861
Worker	4.6700e-003	2.6300e-003	0.0297	1.0000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	7.0000e-005	3.4500e-003	0.0000	9.4567	9.4567	1.9000e-004	0.0000	9.4613
Total	5.0900e-003	0.0197	0.0326	1.6000e-004	0.0142	1.0000e-004	0.0142	3.7900e-003	9.0000e-005	3.8800e-003	0.0000	14.9352	14.9352	4.9000e-004	0.0000	14.9474

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	0.0341	0.2001	1.2996	2.7200e-003		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	236.5755	236.5755	0.0734	0.0000	238.4111
Total	0.0341	0.2001	1.2996	2.7200e-003		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	236.5755	236.5755	0.0734	0.0000	238.4111

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
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Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0171	2.9500e-003	6.0000e-005	1.4300e-003	2.0000e-005	1.4400e-003	4.1000e-004	2.0000e-005	4.3000e-004	0.0000	5.4786	5.4786	3.0000e-004	0.0000	5.4861	
Worker	4.6700e-003	2.6300e-003	0.0297	1.0000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	7.0000e-005	3.4500e-003	0.0000	9.4567	9.4567	1.9000e-004	0.0000	9.4613	
Total	5.0900e-003	0.0197	0.0326	1.6000e-004	0.0142	1.0000e-004	0.0142	3.7900e-003	9.0000e-005	3.8800e-003	0.0000	14.9352	14.9352	4.9000e-004	0.0000	14.9474	

3.4 Charter Way Main Track - 2024

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1192	1.0370	0.8685	2.7200e-003		0.0432	0.0432		0.0400	0.0400	0.0000	236.6263	236.6263	0.0735	0.0000	238.4645
Total	0.1192	1.0370	0.8685	2.7200e-003		0.0432	0.0432		0.0400	0.0400	0.0000	236.6263	236.6263	0.0735	0.0000	238.4645

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3000e-004	0.0172	3.1100e-003	6.0000e-005	1.4300e-003	2.0000e-005	1.4400e-003	4.1000e-004	2.0000e-005	4.3000e-004	0.0000	5.5175	5.5175	2.9000e-004	0.0000	5.5249
Worker	4.9800e-003	2.9100e-003	0.0322	1.1000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	7.0000e-005	3.4500e-003	0.0000	9.8457	9.8457	2.1000e-004	0.0000	9.8509

Total	5.4100e-003	0.0201	0.0354	1.7000e-004	0.0142	1.0000e-004	0.0142	3.7900e-003	9.0000e-005	3.8800e-003	0.0000	15.3632	15.3632	5.0000e-004	0.0000	15.3758
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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	0.0341	0.2001	1.2996	2.7200e-003		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	236.6261	236.6261	0.0735	0.0000	238.4642
Total	0.0341	0.2001	1.2996	2.7200e-003		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	236.6261	236.6261	0.0735	0.0000	238.4642

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3000e-004	0.0172	3.1100e-003	6.0000e-005	1.4300e-003	2.0000e-005	1.4400e-003	4.1000e-004	2.0000e-005	4.3000e-004	0.0000	5.5175	5.5175	2.9000e-004	0.0000	5.5249
Worker	4.9800e-003	2.9100e-003	0.0322	1.1000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	7.0000e-005	3.4500e-003	0.0000	9.8457	9.8457	2.1000e-004	0.0000	9.8509
Total	5.4100e-003	0.0201	0.0354	1.7000e-004	0.0142	1.0000e-004	0.0142	3.7900e-003	9.0000e-005	3.8800e-003	0.0000	15.3632	15.3632	5.0000e-004	0.0000	15.3758

3.4 Charter Way Main Track - 2025

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	0.2199	1.8333	1.7197	5.4500e-003		0.0742	0.0742		0.0687	0.0687	0.0000	473.1515	473.1515	0.1469	0.0000	476.8228
Total	0.2199	1.8333	1.7197	5.4500e-003		0.0742	0.0742		0.0687	0.0687	0.0000	473.1515	473.1515	0.1469	0.0000	476.8228

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0341	5.9100e-003	1.2000e-004	2.8500e-003	3.0000e-005	2.8800e-003	8.2000e-004	3.0000e-005	8.6000e-004	0.0000	10.9572	10.9572	6.0000e-004	0.0000	10.9721
Worker	9.3400e-003	5.2700e-003	0.0594	2.1000e-004	0.0254	1.6000e-004	0.0256	6.7600e-003	1.5000e-004	6.9100e-003	0.0000	18.9133	18.9133	3.8000e-004	0.0000	18.9227
Total	0.0102	0.0394	0.0653	3.3000e-004	0.0283	1.9000e-004	0.0285	7.5800e-003	1.8000e-004	7.7700e-003	0.0000	29.8704	29.8704	9.8000e-004	0.0000	29.8948

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	0.0681	0.4003	2.5993	5.4500e-003		8.7100e-003	8.7100e-003		8.7100e-003	8.7100e-003	0.0000	473.1510	473.1510	0.1469	0.0000	476.8222
Total	0.0681	0.4003	2.5993	5.4500e-003		8.7100e-003	8.7100e-003		8.7100e-003	8.7100e-003	0.0000	473.1510	473.1510	0.1469	0.0000	476.8222

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0341	5.9100e-003	1.2000e-004	2.8500e-003	3.0000e-005	2.8800e-003	8.2000e-004	3.0000e-005	8.6000e-004	0.0000	10.9572	10.9572	6.0000e-004	0.0000	10.9721
Worker	9.3400e-003	5.2700e-003	0.0594	2.1000e-004	0.0254	1.6000e-004	0.0256	6.7600e-003	1.5000e-004	6.9100e-003	0.0000	18.9133	18.9133	3.8000e-004	0.0000	18.9227
Total	0.0102	0.0394	0.0653	3.3000e-004	0.0283	1.9000e-004	0.0285	7.5800e-003	1.8000e-004	7.7700e-003	0.0000	29.8704	29.8704	9.8000e-004	0.0000	29.8948

3.5 Mormon Slough Bridge Construction - 2025

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	0.3298	2.7500	2.5796	8.1700e-003		0.1112	0.1112		0.1031	0.1031	0.0000	709.7273	709.7273	0.2203	0.0000	715.2342
Total	0.3298	2.7500	2.5796	8.1700e-003		0.1112	0.1112		0.1031	0.1031	0.0000	709.7273	709.7273	0.2203	0.0000	715.2342

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2700e-003	0.0512	8.8600e-003	1.7000e-004	4.2800e-003	5.0000e-005	4.3300e-003	1.2400e-003	5.0000e-005	1.2800e-003	0.0000	16.4357	16.4357	9.0000e-004	0.0000	16.4581
Worker	0.0140	7.9000e-003	0.0891	3.1000e-004	0.0382	2.4000e-004	0.0384	0.0101	2.2000e-004	0.0104	0.0000	28.3699	28.3699	5.6000e-004	0.0000	28.3840
Total	0.0153	0.0591	0.0979	4.8000e-004	0.0424	2.9000e-004	0.0427	0.0114	2.7000e-004	0.0116	0.0000	44.8057	44.8057	1.4600e-003	0.0000	44.8422

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	0.1022	0.6004	3.8989	8.1700e-003		0.0131	0.0131		0.0131	0.0131	0.0000	709.7265	709.7265	0.2203	0.0000	715.2333
Total	0.1022	0.6004	3.8989	8.1700e-003		0.0131	0.0131		0.0131	0.0131	0.0000	709.7265	709.7265	0.2203	0.0000	715.2333

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2700e-003	0.0512	8.8600e-003	1.7000e-004	4.2800e-003	5.0000e-005	4.3300e-003	1.2400e-003	5.0000e-005	1.2800e-003	0.0000	16.4357	16.4357	9.0000e-004	0.0000	16.4581

Worker	0.0140	7.9000e-003	0.0891	3.1000e-004	0.0382	2.4000e-004	0.0384	0.0101	2.2000e-004	0.0104	0.0000	28.3699	28.3699	5.6000e-004	0.0000	28.3840
Total	0.0153	0.0591	0.0979	4.8000e-004	0.0424	2.9000e-004	0.0427	0.0114	2.7000e-004	0.0116	0.0000	44.8057	44.8057	1.4600e-003	0.0000	44.8422

3.6 Signal Work - 2025

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	0.1010	0.7656	0.9225	2.8200e-003		0.0305	0.0305		0.0281	0.0281	0.0000	247.2944	247.2944	0.0800	0.0000	249.2939
Total	0.1010	0.7656	0.9225	2.8200e-003		0.0305	0.0305		0.0281	0.0281	0.0000	247.2944	247.2944	0.0800	0.0000	249.2939

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	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700
Total	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700

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	0.0346	0.1497	1.4306	2.8200e-003		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	247.2941	247.2941	0.0800	0.0000	249.2936
Total	0.0346	0.1497	1.4306	2.8200e-003		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	247.2941	247.2941	0.0800	0.0000	249.2936

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	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700
Total	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700

3.7 Flyover Bridge Construction - 2025

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	0.5573	4.6473	4.3593	0.0138		0.1880	0.1880		0.1742	0.1742	0.0000	1,199.384	1,199.384	0.3723	0.0000	1,208.690
												1	1			3

Total	0.5573	4.6473	4.3593	0.0138		0.1880	0.1880		0.1742	0.1742	0.0000	1,199.384	1,199.384	0.3723	0.0000	1,208.690
												1	1			3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1400e-003	0.0865	0.0150	2.9000e-004	0.0123	9.0000e-005	0.0124	3.3400e-003	8.0000e-005	3.4200e-003	0.0000	27.7751	27.7751	1.5200e-003	0.0000	27.8130
Worker	0.0473	0.0267	0.3010	1.0600e-003	0.2406	8.0000e-004	0.2414	0.0617	7.4000e-004	0.0624	0.0000	95.8860	95.8860	1.9000e-003	0.0000	95.9336
Total	0.0495	0.1132	0.3160	1.3500e-003	0.2529	8.9000e-004	0.2538	0.0650	8.2000e-004	0.0658	0.0000	123.6611	123.6611	3.4200e-003	0.0000	123.7466

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	0.1727	1.0147	6.5888	0.0138		0.0221	0.0221		0.0221	0.0221	0.0000	1,199.3827	1,199.3827	0.3723	0.0000	1,208.6889
Total	0.1727	1.0147	6.5888	0.0138		0.0221	0.0221		0.0221	0.0221	0.0000	1,199.3827	1,199.3827	0.3723	0.0000	1,208.6889

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1400e-003	0.0865	0.0150	2.9000e-004	0.0123	9.0000e-005	0.0124	3.3400e-003	8.0000e-005	3.4200e-003	0.0000	27.7751	27.7751	1.5200e-003	0.0000	27.8130
Worker	0.0473	0.0267	0.3010	1.0600e-003	0.2406	8.0000e-004	0.2414	0.0617	7.4000e-004	0.0624	0.0000	95.8860	95.8860	1.9000e-003	0.0000	95.9336
Total	0.0495	0.1132	0.3160	1.3500e-003	0.2529	8.9000e-004	0.2538	0.0650	8.2000e-004	0.0658	0.0000	123.6611	123.6611	3.4200e-003	0.0000	123.7466

3.7 Flyover Bridge Construction - 2026

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	0.0562	0.4690	0.4399	1.3900e-003		0.0190	0.0190		0.0176	0.0176	0.0000	121.0388	121.0388	0.0376	0.0000	121.9779
Total	0.0562	0.4690	0.4399	1.3900e-003		0.0190	0.0190		0.0176	0.0176	0.0000	121.0388	121.0388	0.0376	0.0000	121.9779

Unmitigated Construction Off-Site

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

Vendor	2.1000e-004	8.6500e-003	1.4500e-003	3.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	2.7851	2.7851	1.6000e-004	0.0000	2.7890
Worker	4.5100e-003	2.4500e-003	0.0283	1.0000e-004	0.0243	8.0000e-005	0.0244	6.2200e-003	7.0000e-005	6.3000e-003	0.0000	9.3382	9.3382	1.8000e-004	0.0000	9.3425
Total	4.7200e-003	0.0111	0.0298	1.3000e-004	0.0255	9.0000e-005	0.0256	6.5600e-003	8.0000e-005	6.6500e-003	0.0000	12.1233	12.1233	3.4000e-004	0.0000	12.1316

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	0.0174	0.1024	0.6649	1.3900e-003		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	121.0386	121.0386	0.0376	0.0000	121.9778
Total	0.0174	0.1024	0.6649	1.3900e-003		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	121.0386	121.0386	0.0376	0.0000	121.9778

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	8.6500e-003	1.4500e-003	3.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	2.7851	2.7851	1.6000e-004	0.0000	2.7890
Worker	4.5100e-003	2.4500e-003	0.0283	1.0000e-004	0.0243	8.0000e-005	0.0244	6.2200e-003	7.0000e-005	6.3000e-003	0.0000	9.3382	9.3382	1.8000e-004	0.0000	9.3425
Total	4.7200e-003	0.0111	0.0298	1.3000e-004	0.0255	9.0000e-005	0.0256	6.5600e-003	8.0000e-005	6.6500e-003	0.0000	12.1233	12.1233	3.4000e-004	0.0000	12.1316

3.8 Track Work - 2025

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	0.2928	2.3709	2.6818	6.7300e-003		0.1072	0.1072		0.0986	0.0986	0.0000	590.9132	590.9132	0.1911	0.0000	595.6910
Total	0.2928	2.3709	2.6818	6.7300e-003		0.1072	0.1072		0.0986	0.0986	0.0000	590.9132	590.9132	0.1911	0.0000	595.6910

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	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883
Total	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883

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	0.0848	0.4498	3.6450	6.7300e-003		0.0110	0.0110		0.0110	0.0110	0.0000	590.9125	590.9125	0.1911	0.0000	595.6903

Total	0.0848	0.4498	3.6450	6.7300e-003		0.0110	0.0110		0.0110	0.0110	0.0000	590.9125	590.9125	0.1911	0.0000	595.6903
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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	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883
Total	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883

3.8 Track Work - 2026

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	0.1439	1.1651	1.3179	3.3100e-003		0.0527	0.0527		0.0485	0.0485	0.0000	290.3916	290.3916	0.0939	0.0000	292.7396
Total	0.1439	1.1651	1.3179	3.3100e-003		0.0527	0.0527		0.0485	0.0485	0.0000	290.3916	290.3916	0.0939	0.0000	292.7396

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223	
Total	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223	

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	0.0417	0.2210	1.7913	3.3100e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	290.3913	290.3913	0.0939	0.0000	292.7392
Total	0.0417	0.2210	1.7913	3.3100e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	290.3913	290.3913	0.0939	0.0000	292.7392

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	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223
Total	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223

3.9 Hazelton Bridge Construction - 2025

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	0.2250	1.8760	1.7597	5.5800e-003		0.0759	0.0759		0.0703	0.0703	0.0000	484.1551	484.1551	0.1503	0.0000	487.9117
Total	0.2250	1.8760	1.7597	5.5800e-003		0.0759	0.0759		0.0703	0.0703	0.0000	484.1551	484.1551	0.1503	0.0000	487.9117

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6000e-004	0.0349	6.0500e-003	1.2000e-004	4.9700e-003	3.0000e-005	5.0100e-003	1.3500e-003	3.0000e-005	1.3800e-003	0.0000	11.2120	11.2120	6.1000e-004	0.0000	11.2273
Worker	9.5500e-003	5.3900e-003	0.0608	2.1000e-004	0.0486	1.6000e-004	0.0487	0.0125	1.5000e-004	0.0126	0.0000	19.3531	19.3531	3.8000e-004	0.0000	19.3628
Total	0.0104	0.0403	0.0668	3.3000e-004	0.0535	1.9000e-004	0.0537	0.0138	1.8000e-004	0.0140	0.0000	30.5651	30.5651	9.9000e-004	0.0000	30.5900

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	0.0697	0.4096	2.6597	5.5800e-003		8.9100e-003	8.9100e-003		8.9100e-003	8.9100e-003	0.0000	484.1545	484.1545	0.1503	0.0000	487.9111
Total	0.0697	0.4096	2.6597	5.5800e-003		8.9100e-003	8.9100e-003		8.9100e-003	8.9100e-003	0.0000	484.1545	484.1545	0.1503	0.0000	487.9111

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6000e-004	0.0349	6.0500e-003	1.2000e-004	4.9700e-003	3.0000e-005	5.0100e-003	1.3500e-003	3.0000e-005	1.3800e-003	0.0000	11.2120	11.2120	6.1000e-004	0.0000	11.2273
Worker	9.5500e-003	5.3900e-003	0.0608	2.1000e-004	0.0486	1.6000e-004	0.0487	0.0125	1.5000e-004	0.0126	0.0000	19.3531	19.3531	3.8000e-004	0.0000	19.3628
Total	0.0104	0.0403	0.0668	3.3000e-004	0.0535	1.9000e-004	0.0537	0.0138	1.8000e-004	0.0140	0.0000	30.5651	30.5651	9.9000e-004	0.0000	30.5900

3.9 Hazelton Bridge Construction - 2026

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	0.1636	1.3643	1.2798	4.0500e-003		0.0552	0.0552		0.0512	0.0512	0.0000	352.1128	352.1128	0.1093	0.0000	354.8449

Total	0.1636	1.3643	1.2798	4.0500e-003		0.0552	0.0552		0.0512	0.0512	0.0000	352.1128	352.1128	0.1093	0.0000	354.8449
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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	6.1000e-004	0.0252	4.2300e-003	9.0000e-005	3.6200e-003	2.0000e-005	3.6400e-003	9.8000e-004	2.0000e-005	1.0000e-003	0.0000	8.1022	8.1022	4.5000e-004	0.0000	8.1135
Worker	6.5500e-003	3.5700e-003	0.0412	1.5000e-004	0.0353	1.1000e-004	0.0354	9.0500e-003	1.1000e-004	9.1600e-003	0.0000	13.5828	13.5828	2.6000e-004	0.0000	13.5892
Total	7.1600e-003	0.0287	0.0454	2.4000e-004	0.0389	1.3000e-004	0.0391	0.0100	1.3000e-004	0.0102	0.0000	21.6850	21.6850	7.1000e-004	0.0000	21.7027

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	0.0507	0.2979	1.9343	4.0500e-003		6.4800e-003	6.4800e-003		6.4800e-003	6.4800e-003	0.0000	352.1124	352.1124	0.1093	0.0000	354.8445
Total	0.0507	0.2979	1.9343	4.0500e-003		6.4800e-003	6.4800e-003		6.4800e-003	6.4800e-003	0.0000	352.1124	352.1124	0.1093	0.0000	354.8445

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	6.1000e-004	0.0252	4.2300e-003	9.0000e-005	3.6200e-003	2.0000e-005	3.6400e-003	9.8000e-004	2.0000e-005	1.0000e-003	0.0000	8.1022	8.1022	4.5000e-004	0.0000	8.1135
Worker	6.5500e-003	3.5700e-003	0.0412	1.5000e-004	0.0353	1.1000e-004	0.0354	9.0500e-003	1.1000e-004	9.1600e-003	0.0000	13.5828	13.5828	2.6000e-004	0.0000	13.5892
Total	7.1600e-003	0.0287	0.0454	2.4000e-004	0.0389	1.3000e-004	0.0391	0.0100	1.3000e-004	0.0102	0.0000	21.6850	21.6850	7.1000e-004	0.0000	21.7027

3.10 Roadway Work - 2025

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	0.0197	0.1437	0.1661	4.9000e-004		5.7000e-003	5.7000e-003		5.3600e-003	5.3600e-003	0.0000	42.0991	42.0991	0.0126	0.0000	42.4138
Total	0.0197	0.1437	0.1661	4.9000e-004		5.7000e-003	5.7000e-003		5.3600e-003	5.3600e-003	0.0000	42.0991	42.0991	0.0126	0.0000	42.4138

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	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571
Total	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571

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	5.2400e-003	0.0227	0.2232	4.9000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	42.0991	42.0991	0.0126	0.0000	42.4138
Total	5.2400e-003	0.0227	0.2232	4.9000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	42.0991	42.0991	0.0126	0.0000	42.4138

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	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571
Total	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571

3.10 Roadway Work - 2026

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	0.0394	0.2874	0.3321	9.8000e-004		0.0114	0.0114		0.0107	0.0107	0.0000	84.1983	84.1983	0.0252	0.0000	84.8277
Total	0.0394	0.2874	0.3321	9.8000e-004		0.0114	0.0114		0.0107	0.0107	0.0000	84.1983	84.1983	0.0252	0.0000	84.8277

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	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353
Total	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353

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	0.0105	0.0454	0.4464	9.8000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	84.1982	84.1982	0.0252	0.0000	84.8276

Total	0.0105	0.0454	0.4464	9.8000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	84.1982	84.1982	0.0252	0.0000	84.8276
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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	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353
Total	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353

3.11 Signal Work 2 - 2026

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	0.0674	0.5104	0.6150	1.8800e-003		0.0203	0.0203		0.0187	0.0187	0.0000	164.8629	164.8629	0.0533	0.0000	166.1959
Total	0.0674	0.5104	0.6150	1.8800e-003		0.0203	0.0203		0.0187	0.0187	0.0000	164.8629	164.8629	0.0533	0.0000	166.1959

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547	
Total	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547	

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	0.0230	0.0998	0.9538	1.8800e-003		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	164.8627	164.8627	0.0533	0.0000	166.1957
Total	0.0230	0.0998	0.9538	1.8800e-003		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	164.8627	164.8627	0.0533	0.0000	166.1957

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	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547
Total	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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 Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-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 Non-Asphalt Surfaces	0.534593	0.029957	0.175680	0.101283	0.012799	0.004084	0.020526	0.111620	0.001754	0.001343	0.004908	0.000890	0.000563

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	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	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	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000							

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 Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000							

5.3 Energy by Land Use - Electricity

Unmitigated

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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
Unmitigated	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0954					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8600e-003	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

Total	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
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Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0954					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8600e-003	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
Total	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e

	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

Stockton Diamond_Option 2 - San Joaquin Valley Unified APCD Air District, Annual

Stockton Diamond_Option 2
San Joaquin Valley Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4,572.06	1000sqft	104.96	4,572,058.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	45
Climate Zone	2			Operational Year	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - area of disturbance
- Construction Phase - construction schedule
- Off-road Equipment - .

Trips and VMT - adjusted based on construction info from RJB

Grading - .

Construction Off-road Equipment Mitigation - tier 4

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	28.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	21.00
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblOffRoadEquipment	HorsePower	231.00	550.00
tblOffRoadEquipment	HorsePower	231.00	550.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.4380	4.3863	3.3512	0.0153	0.4130	0.1298	0.5428	0.0918	0.1197	0.2115	0.0000	1,381.157 3	1,381.157 3	0.3004	0.0000	1,388.666 5
2024	0.8611	8.2753	6.4090	0.0304	0.3782	0.2464	0.6246	0.1011	0.2277	0.3288	0.0000	2,739.359 7	2,739.359 7	0.5813	0.0000	2,753.893 1
2025	1.9559	15.5807	15.6913	0.0487	0.2775	0.6315	0.9090	0.0742	0.5844	0.6586	0.0000	4,247.543 1	4,247.543 1	1.2545	0.0000	4,278.905 4
2026	0.4885	3.8326	4.0914	0.0121	0.0547	0.1586	0.2133	0.0146	0.1467	0.1613	0.0000	1,059.245 3	1,059.245 3	0.3201	0.0000	1,067.247 7
Maximum	1.9559	15.5807	15.6913	0.0487	0.4130	0.6315	0.9090	0.1011	0.5844	0.6586	0.0000	4,247.543 1	4,247.543 1	1.2545	0.0000	4,278.905 4

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					
2023	0.1608	1.6222	4.9716	0.0153	0.4130	0.0181	0.4311	0.0918	0.0180	0.1097	0.0000	1,381.156 3	1,381.156 3	0.3004	0.0000	1,388.665 4
2024	0.3274	3.4263	9.8431	0.0304	0.3782	0.0355	0.4137	0.1011	0.0353	0.1365	0.0000	2,739.357 6	2,739.357 6	0.5813	0.0000	2,753.891 0
2025	0.6719	3.5247	22.9877	0.0487	0.2775	0.0753	0.3527	0.0742	0.0751	0.1493	0.0000	4,247.538 4	4,247.538 4	1.2545	0.0000	4,278.900 6
2026	0.1619	0.8093	5.8967	0.0121	0.0547	0.0189	0.0736	0.0146	0.0189	0.0335	0.0000	1,059.244 1	1,059.244 1	0.3201	0.0000	1,067.246 4
Maximum	0.6719	3.5247	22.9877	0.0487	0.4130	0.0753	0.4311	0.1011	0.0751	0.1493	0.0000	4,247.538 4	4,247.538 4	1.2545	0.0000	4,278.900 6

	ROG	NOx	CO	SO2	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	64.68	70.75	-47.92	0.00	0.00	87.33	44.48	0.00	86.34	68.46	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	6-1-2023	8-31-2023	2.9357	0.7953
2	9-1-2023	11-30-2023	1.4443	0.7446
3	12-1-2023	2-29-2024	1.4033	0.7404
4	3-1-2024	5-31-2024	1.3896	0.7386
5	6-1-2024	8-31-2024	1.3865	0.7355
6	9-1-2024	11-30-2024	3.7537	1.2567
7	12-1-2024	2-28-2025	4.9158	1.3114
8	3-1-2025	5-31-2025	5.0742	1.2324
9	6-1-2025	8-31-2025	3.4412	0.8054
10	9-1-2025	11-30-2025	4.2674	1.0135
11	12-1-2025	2-28-2026	4.1728	0.9680
12	3-1-2026	5-31-2026	1.6645	0.3622
		Highest	5.0742	1.3114

2.2 Overall Operational Unmitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Area	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
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	0.3948	3.8000e-004	0.0419	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
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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	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
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	0.3948	3.8000e-004	0.0419	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

	ROG	NOx	CO	SO2	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	Earthwork	Grading	6/1/2023	7/31/2023	5	43	
2	Retaining Wall Construction	Building Construction	7/1/2023	12/31/2024	5	392	
3	Charter Way Yard Connection Bridge	Building Construction	9/1/2024	2/28/2025	5	130	
4	Charter Way Main Track Bridge	Building Construction	11/1/2024	4/30/2025	5	129	
5	Mormon Slough	Building Construction	1/1/2025	6/30/2025	5	129	
6	Signal Work	Building Construction	2/1/2025	7/31/2025	5	129	

7	Flyover Bridge	Building Construction	3/1/2025	1/31/2026	5	240
8	Track Work	Building Construction	5/1/2025	4/30/2026	5	261
9	Hazelton Ave Bridge	Building Construction	9/1/2025	3/31/2026	5	152
10	Roadway Work	Building Construction	11/1/2025	4/30/2026	5	129
11	Signal Work 2	Building Construction	1/1/2026	4/30/2026	5	86

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 104.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Earthwork	Dumpers/Tenders	9	8.00	16	0.38
Earthwork	Excavators	2	8.00	158	0.38
Earthwork	Graders	1	8.00	187	0.41
Earthwork	Off-Highway Trucks	3	8.00	350	0.38
Earthwork	Other Construction Equipment	3	8.00	452	0.42
Earthwork	Other Construction Equipment	1	8.00	157	0.42
Earthwork	Rollers	1	8.00	80	0.38
Earthwork	Rubber Tired Dozers	0	8.00	247	0.40
Earthwork	Scrapers	3	8.00	367	0.48
Earthwork	Tractors/Loaders/Backhoes	3	8.00	475	0.37
Retaining Wall Construction	Off-Highway Trucks	2	8.00	402	0.38
Retaining Wall Construction	Cranes	0	7.00	231	0.29
Retaining Wall Construction	Excavators	1	8.00	158	0.38
Retaining Wall Construction	Forklifts	0	8.00	89	0.20
Retaining Wall Construction	Generator Sets	0	8.00	84	0.74
Retaining Wall Construction	Off-Highway Trucks	1	8.00	402	0.38
Retaining Wall Construction	Off-Highway Trucks	2	8.00	350	0.38
Retaining Wall Construction	Other General Industrial Equipment	1	8.00	88	0.34

Retaining Wall Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Retaining Wall Construction	Tractors/Loaders/Backhoes	1	8.00	475	0.37
Retaining Wall Construction	Welders	0	8.00	46	0.45
Charter Way Yard Connection Bridge	Cranes	3	8.00	550	0.29
Charter Way Yard Connection Bridge	Cranes	2	8.00	617	0.29
Charter Way Yard Connection Bridge	Forklifts	4	8.00	89	0.20
Charter Way Yard Connection Bridge	Generator Sets	0	8.00	84	0.74
Charter Way Yard Connection Bridge	Off-Highway Trucks	2	8.00	402	0.38
Charter Way Yard Connection Bridge	Other Construction Equipment	1	8.00	310	0.42
Charter Way Yard Connection Bridge	Other General Industrial Equipment	1	8.00	88	0.34
Charter Way Yard Connection Bridge	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Charter Way Yard Connection Bridge	Welders	3	8.00	46	0.45
Charter Way Yard Connection Bridge	Welders	1	8.00	17	0.45
Charter Way Main Track Bridge	Cranes	3	8.00	550	0.29
Charter Way Main Track Bridge	Cranes	2	8.00	617	0.29
Charter Way Main Track Bridge	Forklifts	4	8.00	89	0.20
Charter Way Main Track Bridge	Generator Sets	0	8.00	84	0.74
Charter Way Main Track Bridge	Off-Highway Trucks	2	8.00	402	0.38
Charter Way Main Track Bridge	Other Construction Equipment	1	8.00	310	0.42
Charter Way Main Track Bridge	Other General Industrial Equipment	1	8.00	88	0.34
Charter Way Main Track Bridge	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Charter Way Main Track Bridge	Welders	1	8.00	17	0.45
Charter Way Main Track Bridge	Welders	3	8.00	46	0.45
Mormon Slough	Cranes	3	8.00	550	0.29
Mormon Slough	Cranes	2	8.00	617	0.29
Mormon Slough	Forklifts	4	8.00	89	0.20
Mormon Slough	Generator Sets	0	8.00	84	0.74
Mormon Slough	Off-Highway Trucks	2	8.00	402	0.38
Mormon Slough	Other Construction Equipment	1	8.00	310	0.42
Mormon Slough	Other General Industrial Equipment	1	8.00	88	0.34
Mormon Slough	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Mormon Slough	Welders	1	8.00	17	0.45

Mormon Slough	Welders	3	8.00	46	0.45
Signal Work	Cranes	1	8.00	550	0.29
Signal Work	Excavators	1	8.00	158	0.38
Signal Work	Forklifts	0	8.00	89	0.20
Signal Work	Generator Sets	0	8.00	84	0.74
Signal Work	Off-Highway Trucks	2	8.00	330	0.38
Signal Work	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Signal Work	Welders	0	8.00	46	0.45
Flyover Bridge	Cranes	3	8.00	550	0.29
Flyover Bridge	Cranes	2	8.00	617	0.29
Flyover Bridge	Forklifts	4	8.00	89	0.20
Flyover Bridge	Generator Sets	0	8.00	84	0.74
Flyover Bridge	Off-Highway Trucks	2	8.00	402	0.38
Flyover Bridge	Other Construction Equipment	1	8.00	310	0.42
Flyover Bridge	Other General Industrial Equipment	1	8.00	88	0.34
Flyover Bridge	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Flyover Bridge	Welders	1	8.00	17	0.45
Flyover Bridge	Welders	3	8.00	46	0.45
Track Work	Cranes	1	8.00	231	0.29
Track Work	Excavators	1	8.00	158	0.38
Track Work	Forklifts	1	8.00	89	0.20
Track Work	Generator Sets	0	8.00	84	0.74
Track Work	Off-Highway Trucks	1	8.00	550	0.38
Track Work	Off-Highway Trucks	1	8.00	455	0.38
Track Work	Other Construction Equipment	1	8.00	120	0.42
Track Work	Other Construction Equipment	1	8.00	163	0.42
Track Work	Other Construction Equipment	1	8.00	110	0.42
Track Work	Skid Steer Loaders	1	8.00	65	0.37
Track Work	Tractors/Loaders/Backhoes	1	8.00	475	0.37
Track Work	Welders	0	8.00	46	0.45
Hazelton Ave Bridge	Cranes	3	8.00	550	0.29
Hazelton Ave Bridge	Cranes	2	8.00	617	0.29

Hazelton Ave Bridge	Forklifts	4	8.00	89	0.20
Hazelton Ave Bridge	Generator Sets	0	8.00	84	0.74
Hazelton Ave Bridge	Off-Highway Trucks	2	8.00	402	0.38
Hazelton Ave Bridge	Other Construction Equipment	1	8.00	310	0.42
Hazelton Ave Bridge	Other General Industrial Equipment	1	8.00	88	0.34
Hazelton Ave Bridge	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Hazelton Ave Bridge	Welders	1	8.00	17	0.45
Hazelton Ave Bridge	Welders	3	8.00	46	0.45
Roadway Work	Cranes	0	7.00	231	0.29
Roadway Work	Dumpers/Tenders	4	8.00	16	0.38
Roadway Work	Forklifts	0	8.00	89	0.20
Roadway Work	Generator Sets	0	8.00	84	0.74
Roadway Work	Pavers	1	8.00	130	0.42
Roadway Work	Plate Compactors	1	8.00	131	0.43
Roadway Work	Tractors/Loaders/Backhoes	1	8.00	475	0.37
Roadway Work	Welders	0	8.00	46	0.45
Signal Work 2	Cranes	1	8.00	550	0.29
Signal Work 2	Excavators	1	8.00	158	0.38
Signal Work 2	Forklifts	0	8.00	89	0.20
Signal Work 2	Generator Sets	0	8.00	84	0.74
Signal Work 2	Off-Highway Trucks	2	8.00	330	0.38
Signal Work 2	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Signal Work 2	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Earthwork	26	60.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Retaining Wall Construction	8	12.00	6.00	40,500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Charter Way Yard Connection Bridge	17	74.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Charter Way Main Track Bridge	17	74.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Mormon Slough	17	74.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Signal Work	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Flyover Bridge	17	148.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Track Work	10	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Hazelton Ave Bridge	17	74.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Roadway Work	7	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Signal Work 2	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Earthwork - 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					0.1056	0.0000	0.1056	0.0124	0.0000	0.0124	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1891	1.7340	1.4811	4.4400e-003		0.0678	0.0678		0.0626	0.0626	0.0000	387.9790	387.9790	0.1232	0.0000	391.0582
Total	0.1891	1.7340	1.4811	4.4400e-003	0.1056	0.0678	0.1733	0.0124	0.0626	0.0751	0.0000	387.9790	387.9790	0.1232	0.0000	391.0582

Unmitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3200e-003	2.6300e-003	0.0283	9.0000e-005	0.0103	7.0000e-005	0.0104	2.7400e-003	6.0000e-005	2.8000e-003	0.0000	8.2984	8.2984	1.9000e-004	0.0000	8.3031
Total	4.3200e-003	2.6300e-003	0.0283	9.0000e-005	0.0103	7.0000e-005	0.0104	2.7400e-003	6.0000e-005	2.8000e-003	0.0000	8.2984	8.2984	1.9000e-004	0.0000	8.3031

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					0.1056	0.0000	0.1056	0.0124	0.0000	0.0124	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0527	0.2285	2.0563	4.4400e-003		7.0300e-003	7.0300e-003		7.0300e-003	7.0300e-003	0.0000	387.9786	387.9786	0.1232	0.0000	391.0578
Total	0.0527	0.2285	2.0563	4.4400e-003	0.1056	7.0300e-003	0.1126	0.0124	7.0300e-003	0.0195	0.0000	387.9786	387.9786	0.1232	0.0000	391.0578

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3200e-003	2.6300e-003	0.0283	9.0000e-005	0.0103	7.0000e-005	0.0104	2.7400e-003	6.0000e-005	2.8000e-003	0.0000	8.2984	8.2984	1.9000e-004	0.0000	8.3031
Total	4.3200e-003	2.6300e-003	0.0283	9.0000e-005	0.0103	7.0000e-005	0.0104	2.7400e-003	6.0000e-005	2.8000e-003	0.0000	8.2984	8.2984	1.9000e-004	0.0000	8.3031

3.3 Retaining Wall 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	0.2090	1.5541	1.6102	5.5600e-003		0.0601	0.0601		0.0553	0.0553	0.0000	488.5093	488.5093	0.1580	0.0000	492.4591
Total	0.2090	1.5541	1.6102	5.5600e-003		0.0601	0.0601		0.0553	0.0553	0.0000	488.5093	488.5093	0.1580	0.0000	492.4591

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	0.0322	1.0626	0.2084	5.0600e-003	0.2883	1.8100e-003	0.2902	0.0742	1.7300e-003	0.0759	0.0000	481.2681	481.2681	0.0184	0.0000	481.7275
Vendor	8.1000e-004	0.0315	5.9700e-003	1.1000e-004	2.5900e-003	3.0000e-005	2.6200e-003	7.5000e-004	3.0000e-005	7.8000e-004	0.0000	10.0848	10.0848	5.3000e-004	0.0000	10.0980
Worker	2.6100e-003	1.5900e-003	0.0171	6.0000e-005	6.2400e-003	4.0000e-005	6.2800e-003	1.6600e-003	4.0000e-005	1.6900e-003	0.0000	5.0177	5.0177	1.1000e-004	0.0000	5.0205
Total	0.0356	1.0956	0.2315	5.2300e-003	0.2972	1.8800e-003	0.2991	0.0766	1.8000e-003	0.0784	0.0000	496.3706	496.3706	0.0190	0.0000	496.8460

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	0.0682	0.2955	2.6554	5.5600e-003		9.0900e-003	9.0900e-003		9.0900e-003	9.0900e-003	0.0000	488.5087	488.5087	0.1580	0.0000	492.4585

Total	0.0682	0.2955	2.6554	5.5600e-003		9.0900e-003	9.0900e-003		9.0900e-003	9.0900e-003	0.0000	488.5087	488.5087	0.1580	0.0000	492.4585
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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	0.0322	1.0626	0.2084	5.0600e-003	0.2883	1.8100e-003	0.2902	0.0742	1.7300e-003	0.0759	0.0000	481.2681	481.2681	0.0184	0.0000	481.7275
Vendor	8.1000e-004	0.0315	5.9700e-003	1.1000e-004	2.5900e-003	3.0000e-005	2.6200e-003	7.5000e-004	3.0000e-005	7.8000e-004	0.0000	10.0848	10.0848	5.3000e-004	0.0000	10.0980
Worker	2.6100e-003	1.5900e-003	0.0171	6.0000e-005	6.2400e-003	4.0000e-005	6.2800e-003	1.6600e-003	4.0000e-005	1.6900e-003	0.0000	5.0177	5.0177	1.1000e-004	0.0000	5.0205
Total	0.0356	1.0956	0.2315	5.2300e-003	0.2972	1.8800e-003	0.2991	0.0766	1.8000e-003	0.0784	0.0000	496.3706	496.3706	0.0190	0.0000	496.8460

3.3 Retaining Wall 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	0.4139	2.9146	3.2208	0.0112		0.1117	0.1117		0.1028	0.1028	0.0000	985.0419	985.0419	0.3186	0.0000	993.0064
Total	0.4139	2.9146	3.2208	0.0112		0.1117	0.1117		0.1028	0.1028	0.0000	985.0419	985.0419	0.3186	0.0000	993.0064

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	0.0641	2.0990	0.4123	0.0101	0.3177	3.6000e-003	0.3213	0.0848	3.4500e-003	0.0883	0.0000	962.5899	962.5899	0.0377	0.0000	963.5313
Vendor	1.5800e-003	0.0629	0.0114	2.1000e-004	5.2100e-003	6.0000e-005	5.2700e-003	1.5100e-003	6.0000e-005	1.5600e-003	0.0000	20.1710	20.1710	1.0800e-003	0.0000	20.1980
Worker	4.9200e-003	2.8800e-003	0.0319	1.1000e-004	0.0126	8.0000e-005	0.0127	3.3400e-003	7.0000e-005	3.4100e-003	0.0000	9.7281	9.7281	2.1000e-004	0.0000	9.7332
Total	0.0706	2.1648	0.4555	0.0104	0.3354	3.7400e-003	0.3392	0.0897	3.5800e-003	0.0932	0.0000	992.4890	992.4890	0.0390	0.0000	993.4625

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	0.1375	0.5956	5.3516	0.0112		0.0183	0.0183		0.0183	0.0183	0.0000	985.0407	985.0407	0.3186	0.0000	993.0052
Total	0.1375	0.5956	5.3516	0.0112		0.0183	0.0183		0.0183	0.0183	0.0000	985.0407	985.0407	0.3186	0.0000	993.0052

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	0.0641	2.0990	0.4123	0.0101	0.3177	3.6000e-003	0.3213	0.0848	3.4500e-003	0.0883	0.0000	962.5899	962.5899	0.0377	0.0000	963.5313

Vendor	1.5800e-003	0.0629	0.0114	2.1000e-004	5.2100e-003	6.0000e-005	5.2700e-003	1.5100e-003	6.0000e-005	1.5600e-003	0.0000	20.1710	20.1710	1.0800e-003	0.0000	20.1980
Worker	4.9200e-003	2.8800e-003	0.0319	1.1000e-004	0.0126	8.0000e-005	0.0127	3.3400e-003	7.0000e-005	3.4100e-003	0.0000	9.7281	9.7281	2.1000e-004	0.0000	9.7332
Total	0.0706	2.1648	0.4555	0.0104	0.3354	3.7400e-003	0.3392	0.0897	3.5800e-003	0.0932	0.0000	992.4890	992.4890	0.0390	0.0000	993.4625

3.4 Charter Way Yard Connection Bridge - 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	0.2411	2.0981	1.7573	5.5100e-003		0.0874	0.0874		0.0810	0.0810	0.0000	478.7556	478.7556	0.1488	0.0000	482.4747
Total	0.2411	2.0981	1.7573	5.5100e-003		0.0874	0.0874		0.0810	0.0810	0.0000	478.7556	478.7556	0.1488	0.0000	482.4747

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.8000e-004	0.0348	6.2800e-003	1.2000e-004	2.8800e-003	3.0000e-005	2.9200e-003	8.3000e-004	3.0000e-005	8.7000e-004	0.0000	11.1634	11.1634	6.0000e-004	0.0000	11.1783
Worker	0.0101	5.9000e-003	0.0652	2.2000e-004	0.0257	1.6000e-004	0.0259	6.8400e-003	1.5000e-004	6.9900e-003	0.0000	19.9203	19.9203	4.2000e-004	0.0000	19.9308
Total	0.0110	0.0407	0.0715	3.4000e-004	0.0286	1.9000e-004	0.0288	7.6700e-003	1.8000e-004	7.8600e-003	0.0000	31.0836	31.0836	1.0200e-003	0.0000	31.1091

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	0.0689	0.4049	2.6295	5.5100e-003		8.8100e-003	8.8100e-003		8.8100e-003	8.8100e-003	0.0000	478.7551	478.7551	0.1488	0.0000	482.4742
Total	0.0689	0.4049	2.6295	5.5100e-003		8.8100e-003	8.8100e-003		8.8100e-003	8.8100e-003	0.0000	478.7551	478.7551	0.1488	0.0000	482.4742

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.8000e-004	0.0348	6.2800e-003	1.2000e-004	2.8800e-003	3.0000e-005	2.9200e-003	8.3000e-004	3.0000e-005	8.7000e-004	0.0000	11.1634	11.1634	6.0000e-004	0.0000	11.1783
Worker	0.0101	5.9000e-003	0.0652	2.2000e-004	0.0257	1.6000e-004	0.0259	6.8400e-003	1.5000e-004	6.9900e-003	0.0000	19.9203	19.9203	4.2000e-004	0.0000	19.9308
Total	0.0110	0.0407	0.0715	3.4000e-004	0.0286	1.9000e-004	0.0288	7.6700e-003	1.8000e-004	7.8600e-003	0.0000	31.0836	31.0836	1.0200e-003	0.0000	31.1091

3.4 Charter Way Yard Connection Bridge - 2025

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	0.1099	0.9167	0.8599	2.7200e-003		0.0371	0.0371		0.0344	0.0344	0.0000	236.5758	236.5758	0.0734	0.0000	238.4114

Total	0.1099	0.9167	0.8599	2.7200e-003		0.0371	0.0371		0.0344	0.0344	0.0000	236.5758	236.5758	0.0734	0.0000	238.4114
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0171	2.9500e-003	6.0000e-005	1.4300e-003	2.0000e-005	1.4400e-003	4.1000e-004	2.0000e-005	4.3000e-004	0.0000	5.4786	5.4786	3.0000e-004	0.0000	5.4861
Worker	4.6700e-003	2.6300e-003	0.0297	1.0000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	7.0000e-005	3.4500e-003	0.0000	9.4567	9.4567	1.9000e-004	0.0000	9.4613
Total	5.0900e-003	0.0197	0.0326	1.6000e-004	0.0142	1.0000e-004	0.0142	3.7900e-003	9.0000e-005	3.8800e-003	0.0000	14.9352	14.9352	4.9000e-004	0.0000	14.9474

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	0.0341	0.2001	1.2996	2.7200e-003		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	236.5755	236.5755	0.0734	0.0000	238.4111
Total	0.0341	0.2001	1.2996	2.7200e-003		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	236.5755	236.5755	0.0734	0.0000	238.4111

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0171	2.9500e-003	6.0000e-005	1.4300e-003	2.0000e-005	1.4400e-003	4.1000e-004	2.0000e-005	4.3000e-004	0.0000	5.4786	5.4786	3.0000e-004	0.0000	5.4861
Worker	4.6700e-003	2.6300e-003	0.0297	1.0000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	7.0000e-005	3.4500e-003	0.0000	9.4567	9.4567	1.9000e-004	0.0000	9.4613
Total	5.0900e-003	0.0197	0.0326	1.6000e-004	0.0142	1.0000e-004	0.0142	3.7900e-003	9.0000e-005	3.8800e-003	0.0000	14.9352	14.9352	4.9000e-004	0.0000	14.9474

3.5 Charter Way Main Track Bridge - 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	0.1192	1.0370	0.8685	2.7200e-003		0.0432	0.0432		0.0400	0.0400	0.0000	236.6263	236.6263	0.0735	0.0000	238.4645
Total	0.1192	1.0370	0.8685	2.7200e-003		0.0432	0.0432		0.0400	0.0400	0.0000	236.6263	236.6263	0.0735	0.0000	238.4645

Unmitigated Construction Off-Site

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

Vendor	4.3000e-004	0.0172	3.1100e-003	6.0000e-005	1.4300e-003	2.0000e-005	1.4400e-003	4.1000e-004	2.0000e-005	4.3000e-004	0.0000	5.5175	5.5175	2.9000e-004	0.0000	5.5249
Worker	4.9800e-003	2.9100e-003	0.0322	1.1000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	7.0000e-005	3.4500e-003	0.0000	9.8457	9.8457	2.1000e-004	0.0000	9.8509
Total	5.4100e-003	0.0201	0.0354	1.7000e-004	0.0142	1.0000e-004	0.0142	3.7900e-003	9.0000e-005	3.8800e-003	0.0000	15.3632	15.3632	5.0000e-004	0.0000	15.3758

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	0.0341	0.2001	1.2996	2.7200e-003		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	236.6261	236.6261	0.0735	0.0000	238.4642
Total	0.0341	0.2001	1.2996	2.7200e-003		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	236.6261	236.6261	0.0735	0.0000	238.4642

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3000e-004	0.0172	3.1100e-003	6.0000e-005	1.4300e-003	2.0000e-005	1.4400e-003	4.1000e-004	2.0000e-005	4.3000e-004	0.0000	5.5175	5.5175	2.9000e-004	0.0000	5.5249
Worker	4.9800e-003	2.9100e-003	0.0322	1.1000e-004	0.0127	8.0000e-005	0.0128	3.3800e-003	7.0000e-005	3.4500e-003	0.0000	9.8457	9.8457	2.1000e-004	0.0000	9.8509
Total	5.4100e-003	0.0201	0.0354	1.7000e-004	0.0142	1.0000e-004	0.0142	3.7900e-003	9.0000e-005	3.8800e-003	0.0000	15.3632	15.3632	5.0000e-004	0.0000	15.3758

3.5 Charter Way Main Track Bridge - 2025

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	0.2199	1.8333	1.7197	5.4500e-003		0.0742	0.0742		0.0687	0.0687	0.0000	473.1515	473.1515	0.1469	0.0000	476.8228
Total	0.2199	1.8333	1.7197	5.4500e-003		0.0742	0.0742		0.0687	0.0687	0.0000	473.1515	473.1515	0.1469	0.0000	476.8228

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0341	5.9100e-003	1.2000e-004	2.8500e-003	3.0000e-005	2.8800e-003	8.2000e-004	3.0000e-005	8.6000e-004	0.0000	10.9572	10.9572	6.0000e-004	0.0000	10.9721
Worker	9.3400e-003	5.2700e-003	0.0594	2.1000e-004	0.0254	1.6000e-004	0.0256	6.7600e-003	1.5000e-004	6.9100e-003	0.0000	18.9133	18.9133	3.8000e-004	0.0000	18.9227
Total	0.0102	0.0394	0.0653	3.3000e-004	0.0283	1.9000e-004	0.0285	7.5800e-003	1.8000e-004	7.7700e-003	0.0000	29.8704	29.8704	9.8000e-004	0.0000	29.8948

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	0.0681	0.4003	2.5993	5.4500e-003		8.7100e-003	8.7100e-003		8.7100e-003	8.7100e-003	0.0000	473.1510	473.1510	0.1469	0.0000	476.8222

Total	0.0681	0.4003	2.5993	5.4500e-003		8.7100e-003	8.7100e-003		8.7100e-003	8.7100e-003	0.0000	473.1510	473.1510	0.1469	0.0000	476.8222
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0341	5.9100e-003	1.2000e-004	2.8500e-003	3.0000e-005	2.8800e-003	8.2000e-004	3.0000e-005	8.6000e-004	0.0000	10.9572	10.9572	6.0000e-004	0.0000	10.9721
Worker	9.3400e-003	5.2700e-003	0.0594	2.1000e-004	0.0254	1.6000e-004	0.0256	6.7600e-003	1.5000e-004	6.9100e-003	0.0000	18.9133	18.9133	3.8000e-004	0.0000	18.9227
Total	0.0102	0.0394	0.0653	3.3000e-004	0.0283	1.9000e-004	0.0285	7.5800e-003	1.8000e-004	7.7700e-003	0.0000	29.8704	29.8704	9.8000e-004	0.0000	29.8948

3.6 Mormon Slough - 2025

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	0.3298	2.7500	2.5796	8.1700e-003		0.1112	0.1112		0.1031	0.1031	0.0000	709.7273	709.7273	0.2203	0.0000	715.2342
Total	0.3298	2.7500	2.5796	8.1700e-003		0.1112	0.1112		0.1031	0.1031	0.0000	709.7273	709.7273	0.2203	0.0000	715.2342

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2700e-003	0.0512	8.8600e-003	1.7000e-004	4.2800e-003	5.0000e-005	4.3300e-003	1.2400e-003	5.0000e-005	1.2800e-003	0.0000	16.4357	16.4357	9.0000e-004	0.0000	16.4581
Worker	0.0140	7.9000e-003	0.0891	3.1000e-004	0.0382	2.4000e-004	0.0384	0.0101	2.2000e-004	0.0104	0.0000	28.3699	28.3699	5.6000e-004	0.0000	28.3840
Total	0.0153	0.0591	0.0979	4.8000e-004	0.0424	2.9000e-004	0.0427	0.0114	2.7000e-004	0.0116	0.0000	44.8057	44.8057	1.4600e-003	0.0000	44.8422

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	0.1022	0.6004	3.8989	8.1700e-003		0.0131	0.0131		0.0131	0.0131	0.0000	709.7265	709.7265	0.2203	0.0000	715.2333
Total	0.1022	0.6004	3.8989	8.1700e-003		0.0131	0.0131		0.0131	0.0131	0.0000	709.7265	709.7265	0.2203	0.0000	715.2333

Mitigated Construction Off-Site

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

Vendor	1.2700e-003	0.0512	8.8600e-003	1.7000e-004	4.2800e-003	5.0000e-005	4.3300e-003	1.2400e-003	5.0000e-005	1.2800e-003	0.0000	16.4357	16.4357	9.0000e-004	0.0000	16.4581
Worker	0.0140	7.9000e-003	0.0891	3.1000e-004	0.0382	2.4000e-004	0.0384	0.0101	2.2000e-004	0.0104	0.0000	28.3699	28.3699	5.6000e-004	0.0000	28.3840
Total	0.0153	0.0591	0.0979	4.8000e-004	0.0424	2.9000e-004	0.0427	0.0114	2.7000e-004	0.0116	0.0000	44.8057	44.8057	1.4600e-003	0.0000	44.8422

3.7 Signal Work - 2025

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	0.1010	0.7656	0.9225	2.8200e-003		0.0305	0.0305		0.0281	0.0281	0.0000	247.2944	247.2944	0.0800	0.0000	249.2939
Total	0.1010	0.7656	0.9225	2.8200e-003		0.0305	0.0305		0.0281	0.0281	0.0000	247.2944	247.2944	0.0800	0.0000	249.2939

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	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700
Total	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700

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	0.0346	0.1497	1.4306	2.8200e-003		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	247.2941	247.2941	0.0800	0.0000	249.2936
Total	0.0346	0.1497	1.4306	2.8200e-003		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	247.2941	247.2941	0.0800	0.0000	249.2936

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	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700
Total	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700

3.8 Flyover Bridge - 2025

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	0.5573	4.6473	4.3593	0.0138		0.1880	0.1880		0.1742	0.1742	0.0000	1,199.384	1,199.384	0.3723	0.0000	1,208.690
												1	1			3

Total	0.5573	4.6473	4.3593	0.0138		0.1880	0.1880		0.1742	0.1742	0.0000	1,199.384	1,199.384	0.3723	0.0000	1,208.690
												1	1			3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1400e-003	0.0865	0.0150	2.9000e-004	7.2300e-003	9.0000e-005	7.3100e-003	2.0900e-003	8.0000e-005	2.1700e-003	0.0000	27.7751	27.7751	1.5200e-003	0.0000	27.8130
Worker	0.0473	0.0267	0.3010	1.0600e-003	0.1290	8.0000e-004	0.1298	0.0343	7.4000e-004	0.0350	0.0000	95.8860	95.8860	1.9000e-003	0.0000	95.9336
Total	0.0495	0.1132	0.3160	1.3500e-003	0.1362	8.9000e-004	0.1371	0.0364	8.2000e-004	0.0372	0.0000	123.6611	123.6611	3.4200e-003	0.0000	123.7466

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	0.1727	1.0147	6.5888	0.0138		0.0221	0.0221		0.0221	0.0221	0.0000	1,199.3827	1,199.3827	0.3723	0.0000	1,208.6889
Total	0.1727	1.0147	6.5888	0.0138		0.0221	0.0221		0.0221	0.0221	0.0000	1,199.3827	1,199.3827	0.3723	0.0000	1,208.6889

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1400e-003	0.0865	0.0150	2.9000e-004	7.2300e-003	9.0000e-005	7.3100e-003	2.0900e-003	8.0000e-005	2.1700e-003	0.0000	27.7751	27.7751	1.5200e-003	0.0000	27.8130
Worker	0.0473	0.0267	0.3010	1.0600e-003	0.1290	8.0000e-004	0.1298	0.0343	7.4000e-004	0.0350	0.0000	95.8860	95.8860	1.9000e-003	0.0000	95.9336
Total	0.0495	0.1132	0.3160	1.3500e-003	0.1362	8.9000e-004	0.1371	0.0364	8.2000e-004	0.0372	0.0000	123.6611	123.6611	3.4200e-003	0.0000	123.7466

3.8 Flyover Bridge - 2026
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	0.0562	0.4690	0.4399	1.3900e-003		0.0190	0.0190		0.0176	0.0176	0.0000	121.0388	121.0388	0.0376	0.0000	121.9779
Total	0.0562	0.4690	0.4399	1.3900e-003		0.0190	0.0190		0.0176	0.0176	0.0000	121.0388	121.0388	0.0376	0.0000	121.9779

Unmitigated Construction Off-Site

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

Vendor	2.1000e-004	8.6500e-003	1.4500e-003	3.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	2.7851	2.7851	1.6000e-004	0.0000	2.7890
Worker	4.5100e-003	2.4500e-003	0.0283	1.0000e-004	0.0130	8.0000e-005	0.0131	3.4600e-003	7.0000e-005	3.5300e-003	0.0000	9.3382	9.3382	1.8000e-004	0.0000	9.3425
Total	4.7200e-003	0.0111	0.0298	1.3000e-004	0.0138	9.0000e-005	0.0138	3.6700e-003	8.0000e-005	3.7500e-003	0.0000	12.1233	12.1233	3.4000e-004	0.0000	12.1316

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	0.0174	0.1024	0.6649	1.3900e-003		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	121.0386	121.0386	0.0376	0.0000	121.9778
Total	0.0174	0.1024	0.6649	1.3900e-003		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	121.0386	121.0386	0.0376	0.0000	121.9778

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	8.6500e-003	1.4500e-003	3.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	2.7851	2.7851	1.6000e-004	0.0000	2.7890
Worker	4.5100e-003	2.4500e-003	0.0283	1.0000e-004	0.0130	8.0000e-005	0.0131	3.4600e-003	7.0000e-005	3.5300e-003	0.0000	9.3382	9.3382	1.8000e-004	0.0000	9.3425
Total	4.7200e-003	0.0111	0.0298	1.3000e-004	0.0138	9.0000e-005	0.0138	3.6700e-003	8.0000e-005	3.7500e-003	0.0000	12.1233	12.1233	3.4000e-004	0.0000	12.1316

3.9 Track Work - 2025

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	0.2928	2.3709	2.6818	6.7300e-003		0.1072	0.1072		0.0986	0.0986	0.0000	590.9132	590.9132	0.1911	0.0000	595.6910
Total	0.2928	2.3709	2.6818	6.7300e-003		0.1072	0.1072		0.0986	0.0986	0.0000	590.9132	590.9132	0.1911	0.0000	595.6910

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	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883
Total	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883

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	0.0848	0.4498	3.6450	6.7300e-003		0.0110	0.0110		0.0110	0.0110	0.0000	590.9125	590.9125	0.1911	0.0000	595.6903

Total	0.0848	0.4498	3.6450	6.7300e-003		0.0110	0.0110		0.0110	0.0110	0.0000	590.9125	590.9125	0.1911	0.0000	595.6903
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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	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883
Total	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883

3.9 Track Work - 2026

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	0.1439	1.1651	1.3179	3.3100e-003		0.0527	0.0527		0.0485	0.0485	0.0000	290.3916	290.3916	0.0939	0.0000	292.7396
Total	0.1439	1.1651	1.3179	3.3100e-003		0.0527	0.0527		0.0485	0.0485	0.0000	290.3916	290.3916	0.0939	0.0000	292.7396

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	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223
Total	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223

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	0.0417	0.2210	1.7913	3.3100e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	290.3913	290.3913	0.0939	0.0000	292.7392
Total	0.0417	0.2210	1.7913	3.3100e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	290.3913	290.3913	0.0939	0.0000	292.7392

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	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223
Total	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223

3.10 Hazelton Ave Bridge - 2025
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	0.2250	1.8760	1.7597	5.5800e-003		0.0759	0.0759		0.0703	0.0703	0.0000	484.1551	484.1551	0.1503	0.0000	487.9117
Total	0.2250	1.8760	1.7597	5.5800e-003		0.0759	0.0759		0.0703	0.0703	0.0000	484.1551	484.1551	0.1503	0.0000	487.9117

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6000e-004	0.0349	6.0500e-003	1.2000e-004	2.9200e-003	3.0000e-005	2.9500e-003	8.4000e-004	3.0000e-005	8.8000e-004	0.0000	11.2120	11.2120	6.1000e-004	0.0000	11.2273
Worker	9.5500e-003	5.3900e-003	0.0608	2.1000e-004	0.0260	1.6000e-004	0.0262	6.9200e-003	1.5000e-004	7.0700e-003	0.0000	19.3531	19.3531	3.8000e-004	0.0000	19.3628
Total	0.0104	0.0403	0.0668	3.3000e-004	0.0290	1.9000e-004	0.0291	7.7600e-003	1.8000e-004	7.9500e-003	0.0000	30.5651	30.5651	9.9000e-004	0.0000	30.5900

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	0.0697	0.4096	2.6597	5.5800e-003		8.9100e-003	8.9100e-003		8.9100e-003	8.9100e-003	0.0000	484.1545	484.1545	0.1503	0.0000	487.9111
Total	0.0697	0.4096	2.6597	5.5800e-003		8.9100e-003	8.9100e-003		8.9100e-003	8.9100e-003	0.0000	484.1545	484.1545	0.1503	0.0000	487.9111

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6000e-004	0.0349	6.0500e-003	1.2000e-004	2.9200e-003	3.0000e-005	2.9500e-003	8.4000e-004	3.0000e-005	8.8000e-004	0.0000	11.2120	11.2120	6.1000e-004	0.0000	11.2273
Worker	9.5500e-003	5.3900e-003	0.0608	2.1000e-004	0.0260	1.6000e-004	0.0262	6.9200e-003	1.5000e-004	7.0700e-003	0.0000	19.3531	19.3531	3.8000e-004	0.0000	19.3628
Total	0.0104	0.0403	0.0668	3.3000e-004	0.0290	1.9000e-004	0.0291	7.7600e-003	1.8000e-004	7.9500e-003	0.0000	30.5651	30.5651	9.9000e-004	0.0000	30.5900

3.10 Hazelton Ave Bridge - 2026

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	0.1636	1.3643	1.2798	4.0500e-003		0.0552	0.0552		0.0512	0.0512	0.0000	352.1128	352.1128	0.1093	0.0000	354.8449

Total	0.1636	1.3643	1.2798	4.0500e-003		0.0552	0.0552		0.0512	0.0512	0.0000	352.1128	352.1128	0.1093	0.0000	354.8449
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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	6.1000e-004	0.0252	4.2300e-003	9.0000e-005	2.1200e-003	2.0000e-005	2.1500e-003	6.1000e-004	2.0000e-005	6.4000e-004	0.0000	8.1022	8.1022	4.5000e-004	0.0000	8.1135
Worker	6.5500e-003	3.5700e-003	0.0412	1.5000e-004	0.0189	1.1000e-004	0.0191	5.0300e-003	1.1000e-004	5.1400e-003	0.0000	13.5828	13.5828	2.6000e-004	0.0000	13.5892
Total	7.1600e-003	0.0287	0.0454	2.4000e-004	0.0211	1.3000e-004	0.0212	5.6400e-003	1.3000e-004	5.7800e-003	0.0000	21.6850	21.6850	7.1000e-004	0.0000	21.7027

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	0.0507	0.2979	1.9343	4.0500e-003		6.4800e-003	6.4800e-003		6.4800e-003	6.4800e-003	0.0000	352.1124	352.1124	0.1093	0.0000	354.8445
Total	0.0507	0.2979	1.9343	4.0500e-003		6.4800e-003	6.4800e-003		6.4800e-003	6.4800e-003	0.0000	352.1124	352.1124	0.1093	0.0000	354.8445

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	6.1000e-004	0.0252	4.2300e-003	9.0000e-005	2.1200e-003	2.0000e-005	2.1500e-003	6.1000e-004	2.0000e-005	6.4000e-004	0.0000	8.1022	8.1022	4.5000e-004	0.0000	8.1135
Worker	6.5500e-003	3.5700e-003	0.0412	1.5000e-004	0.0189	1.1000e-004	0.0191	5.0300e-003	1.1000e-004	5.1400e-003	0.0000	13.5828	13.5828	2.6000e-004	0.0000	13.5892
Total	7.1600e-003	0.0287	0.0454	2.4000e-004	0.0211	1.3000e-004	0.0212	5.6400e-003	1.3000e-004	5.7800e-003	0.0000	21.6850	21.6850	7.1000e-004	0.0000	21.7027

3.11 Roadway Work - 2025

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	0.0197	0.1437	0.1661	4.9000e-004		5.7000e-003	5.7000e-003		5.3600e-003	5.3600e-003	0.0000	42.0991	42.0991	0.0126	0.0000	42.4138
Total	0.0197	0.1437	0.1661	4.9000e-004		5.7000e-003	5.7000e-003		5.3600e-003	5.3600e-003	0.0000	42.0991	42.0991	0.0126	0.0000	42.4138

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	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571
Total	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571

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	5.2400e-003	0.0227	0.2232	4.9000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	42.0991	42.0991	0.0126	0.0000	42.4138
Total	5.2400e-003	0.0227	0.2232	4.9000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	42.0991	42.0991	0.0126	0.0000	42.4138

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	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571
Total	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571

3.11 Roadway Work - 2026

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	0.0394	0.2874	0.3321	9.8000e-004		0.0114	0.0114		0.0107	0.0107	0.0000	84.1983	84.1983	0.0252	0.0000	84.8277
Total	0.0394	0.2874	0.3321	9.8000e-004		0.0114	0.0114		0.0107	0.0107	0.0000	84.1983	84.1983	0.0252	0.0000	84.8277

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	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353
Total	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353

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	0.0105	0.0454	0.4464	9.8000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	84.1982	84.1982	0.0252	0.0000	84.8276

Total	0.0105	0.0454	0.4464	9.8000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	84.1982	84.1982	0.0252	0.0000	84.8276
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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	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353
Total	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353

3.12 Signal Work 2 - 2026

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	0.0666	0.5032	0.6030	1.8600e-003		0.0200	0.0200		0.0184	0.0184	0.0000	163.3901	163.3901	0.0528	0.0000	164.7111
Total	0.0666	0.5032	0.6030	1.8600e-003		0.0200	0.0200		0.0184	0.0184	0.0000	163.3901	163.3901	0.0528	0.0000	164.7111

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	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547
Total	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547

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	0.0228	0.0989	0.9412	1.8600e-003		3.0400e-003	3.0400e-003		3.0400e-003	3.0400e-003	0.0000	163.3899	163.3899	0.0528	0.0000	164.7110
Total	0.0228	0.0989	0.9412	1.8600e-003		3.0400e-003	3.0400e-003		3.0400e-003	3.0400e-003	0.0000	163.3899	163.3899	0.0528	0.0000	164.7110

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	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547
Total	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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 Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-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 Non-Asphalt Surfaces	0.534593	0.029957	0.175680	0.101283	0.012799	0.004084	0.020526	0.111620	0.001754	0.001343	0.004908	0.000890	0.000563

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	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	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	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000							

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 Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000							

5.3 Energy by Land Use - Electricity

Unmitigated

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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
Unmitigated	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0954					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8600e-003	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

Total	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
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Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0954					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8600e-003	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
Total	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e

	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

Stockton Diamond_Option 3 - San Joaquin Valley Unified APCD Air District, Annual

Stockton Diamond_Option 3
San Joaquin Valley Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4,572.06	1000sqft	104.96	4,572,057.60	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	45
Climate Zone	2			Operational Year	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - area of disturbance
- Construction Phase - construction schedule from RJB
- Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Grading -

Trips and VMT - construction info from RJB

Construction Off-road Equipment Mitigation - tier 4

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

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tblConstructionPhase	NumDays	3,100.00	131.00
tblConstructionPhase	NumDays	3,100.00	130.00
tblConstructionPhase	NumDays	3,100.00	522.00
tblConstructionPhase	NumDays	3,100.00	129.00
tblConstructionPhase	NumDays	3,100.00	261.00
tblConstructionPhase	NumDays	3,100.00	129.00
tblConstructionPhase	NumDays	3,100.00	86.00
tblGrading	MaterialImported	0.00	73,000.00
tblLandUse	LandUseSquareFeet	4,572,060.00	4,572,057.60
tblOffRoadEquipment	HorsePower	231.00	550.00
tblOffRoadEquipment	HorsePower	231.00	617.00
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tblOffRoadEquipment	HorsePower	231.00	617.00
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tblOffRoadEquipment	HorsePower	231.00	550.00
tblOffRoadEquipment	HorsePower	97.00	475.00
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tblOffRoadEquipment	HorsePower	46.00	17.00
tblOffRoadEquipment	HorsePower	402.00	350.00

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tblOffRoadEquipment	HorsePower	172.00	120.00
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tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.42
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tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.42	0.42
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tblOffRoadEquipment	LoadFactor	0.38	0.38
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tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Pavers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks

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tblTripsAndVMT	HaulingTripNumber	9,125.00	0.00
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tblTripsAndVMT	VendorTripNumber	749.00	10.00
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tblTripsAndVMT	VendorTripNumber	749.00	10.00
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tblTripsAndVMT	VendorTripNumber	749.00	0.00
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tblTripsAndVMT	WorkerTripNumber	1,920.00	222.00
tblTripsAndVMT	WorkerTripNumber	1,920.00	74.00
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tblTripsAndVMT	WorkerTripNumber	1,920.00	14.00
tblTripsAndVMT	WorkerTripNumber	1,920.00	24.00
tblTripsAndVMT	WorkerTripNumber	1,920.00	14.00
tblTripsAndVMT	WorkerTripNumber	1,920.00	20.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.4572	3.9781	3.5602	0.0111	0.1576	0.1556	0.3132	0.0220	0.1438	0.1658	0.0000	968.7411	968.7411	0.2983	0.0000	976.1975
2024	1.3977	11.5048	10.4650	0.0326	0.2639	0.4715	0.7354	0.0705	0.4367	0.5072	0.0000	2,843.2583	2,843.2583	0.8144	0.0000	2,863.6180
2025	1.2235	9.4549	10.3708	0.0301	0.2677	0.3884	0.6561	0.0714	0.3589	0.4303	0.0000	2,636.1086	2,636.1086	0.7654	0.0000	2,655.2434
2026	0.4525	3.4779	3.9016	0.0112	0.0789	0.1445	0.2233	0.0210	0.1335	0.1546	0.0000	978.1567	978.1567	0.2908	0.0000	985.4258
Maximum	1.3977	11.5048	10.4650	0.0326	0.2677	0.4715	0.7354	0.0714	0.4367	0.5072	0.0000	2,843.2583	2,843.2583	0.8144	0.0000	2,863.6180

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					
2023	0.1408	0.6332	5.1153	0.0111	0.1576	0.0173	0.1749	0.0220	0.0173	0.0393	0.0000	968.7400	968.7400	0.2983	0.0000	976.1964
2024	0.4738	2.3949	15.1131	0.0326	0.2639	0.0495	0.3133	0.0705	0.0493	0.1198	0.0000	2,843.2553	2,843.2553	0.8144	0.0000	2,863.6149
2025	0.4420	2.0503	14.6086	0.0301	0.2677	0.0462	0.3139	0.0714	0.0461	0.1174	0.0000	2,636.1057	2,636.1057	0.7654	0.0000	2,655.2405
2026	0.1563	0.7177	5.4936	0.0112	0.0789	0.0173	0.0961	0.0210	0.0172	0.0383	0.0000	978.1556	978.1556	0.2908	0.0000	985.4247
Maximum	0.4738	2.3949	15.1131	0.0326	0.2677	0.0495	0.3139	0.0714	0.0493	0.1198	0.0000	2,843.2553	2,843.2553	0.8144	0.0000	2,863.6149

	ROG	NOx	CO	SO2	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	65.65	79.60	-42.52	0.00	0.00	88.78	53.41	0.00	87.89	74.98	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	6-1-2023	8-31-2023	2.9500	0.4409
2	9-1-2023	11-30-2023	0.6446	0.1546
3	12-1-2023	2-29-2024	3.0204	0.6737
4	3-1-2024	5-31-2024	4.9186	1.0870
5	6-1-2024	8-31-2024	3.1668	0.7037
6	9-1-2024	11-30-2024	1.9484	0.4362
7	12-1-2024	2-28-2025	1.9264	0.4590
8	3-1-2025	5-31-2025	2.5391	0.6026
9	6-1-2025	8-31-2025	3.0542	0.7054
10	9-1-2025	11-30-2025	2.8130	0.6503
11	12-1-2025	2-28-2026	3.2310	0.7333
12	3-1-2026	5-31-2026	1.7182	0.3762
		Highest	4.9186	1.0870

**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	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
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	0.3948	3.8000e-004	0.0419	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

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	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
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	0.3948	3.8000e-004	0.0419	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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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
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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Earthwork	Grading	6/1/2023	8/31/2023	5	66	
2	Retaining Wall	Building Construction	9/1/2023	2/29/2024	5	130	
3	Charter Way Yard Connection Bridge	Building Construction	12/1/2023	5/31/2024	5	131	
4	Charter Way Main Track Bridge	Building Construction	2/1/2024	7/31/2024	5	130	
5	Long Viaduct Bridge	Building Construction	4/1/2024	3/31/2026	5	522	
6	Signal Work	Building Construction	2/1/2025	7/31/2025	5	129	
7	Track Work	Building Construction	5/1/2025	4/30/2026	5	261	
8	Roadway Work	Building Construction	11/1/2025	4/30/2026	5	129	
9	Signal Work 2	Building Construction	1/1/2026	4/30/2026	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 104.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Earthwork	Dumpers/Tenders	9	8.00	16	0.38
Earthwork	Excavators	2	8.00	158	0.38
Earthwork	Graders	1	8.00	187	0.41
Earthwork	Off-Highway Trucks	3	8.00	350	0.38
Earthwork	Other Construction Equipment	3	8.00	452	0.42
Earthwork	Other Construction Equipment	1	8.00	157	0.42
Earthwork	Rollers	1	8.00	80	0.38
Earthwork	Rubber Tired Dozers	0	8.00	247	0.40

Earthwork	Scrapers	3	8.00	367	0.48
Earthwork	Tractors/Loaders/Backhoes	3	8.00	475	0.37
Long Viaduct Bridge	Cranes	3	8.00	550	0.29
Long Viaduct Bridge	Cranes	2	8.00	617	0.29
Long Viaduct Bridge	Forklifts	4	8.00	89	0.20
Long Viaduct Bridge	Generator Sets	0	8.00	84	0.74
Long Viaduct Bridge	Off-Highway Trucks	2	8.00	402	0.38
Long Viaduct Bridge	Other Construction Equipment	1	8.00	310	0.42
Long Viaduct Bridge	Other General Industrial Equipment	1	8.00	88	0.34
Long Viaduct Bridge	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Long Viaduct Bridge	Welders	3	8.00	46	0.45
Long Viaduct Bridge	Welders	1	8.00	17	0.45
Charter Way Main Track Bridge	Cranes	3	8.00	550	0.29
Charter Way Main Track Bridge	Cranes	2	8.00	617	0.29
Charter Way Main Track Bridge	Forklifts	4	8.00	89	0.20
Charter Way Main Track Bridge	Generator Sets	0	8.00	84	0.74
Charter Way Main Track Bridge	Off-Highway Trucks	2	8.00	402	0.38
Charter Way Main Track Bridge	Other Construction Equipment	1	8.00	310	0.42
Charter Way Main Track Bridge	Other General Industrial Equipment	1	8.00	88	0.34
Charter Way Main Track Bridge	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Charter Way Main Track Bridge	Welders	3	8.00	46	0.45
Charter Way Main Track Bridge	Welders	1	8.00	17	0.45
Charter Way Yard Connection Bridge	Cranes	3	8.00	550	0.29
Charter Way Yard Connection Bridge	Cranes	2	8.00	617	0.29
Charter Way Yard Connection Bridge	Forklifts	4	8.00	89	0.20
Charter Way Yard Connection Bridge	Generator Sets	0	8.00	84	0.74
Charter Way Yard Connection Bridge	Off-Highway Trucks	2	8.00	402	0.38
Charter Way Yard Connection Bridge	Other Construction Equipment	1	8.00	310	0.42
Charter Way Yard Connection Bridge	Other General Industrial Equipment	1	8.00	88	0.34
Charter Way Yard Connection Bridge	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Charter Way Yard Connection Bridge	Welders	3	8.00	46	0.45
Charter Way Yard Connection Bridge	Welders	1	8.00	17	0.45

Retaining Wall	Cranes	0	7.00	231	0.29
Retaining Wall	Excavators	1	8.00	158	0.38
Retaining Wall	Forklifts	0	8.00	89	0.20
Retaining Wall	Generator Sets	0	8.00	84	0.74
Retaining Wall	Off-Highway Trucks	1	8.00	402	0.38
Retaining Wall	Off-Highway Trucks	2	8.00	350	0.38
Retaining Wall	Other General Industrial Equipment	1	8.00	88	0.34
Retaining Wall	Tractors/Loaders/Backhoes	1	8.00	475	0.37
Retaining Wall	Welders	0	8.00	46	0.45
Signal Work	Cranes	1	8.00	550	0.29
Signal Work	Excavators	1	8.00	158	0.38
Signal Work	Forklifts	0	8.00	89	0.20
Signal Work	Generator Sets	0	8.00	84	0.74
Signal Work	Off-Highway Trucks	2	8.00	330	0.38
Signal Work	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Signal Work	Welders	0	8.00	46	0.45
Track Work	Other Construction Equipment	1	8.00	120	0.42
Track Work	Other Construction Equipment	1	8.00	163	0.42
Track Work	Skid Steer Loaders	1	8.00	65	0.37
Track Work	Excavators	1	8.00	158	0.38
Track Work	Cranes	1	8.00	231	0.29
Track Work	Forklifts	1	8.00	89	0.20
Track Work	Generator Sets	0	8.00	84	0.74
Track Work	Tractors/Loaders/Backhoes	1	8.00	475	0.37
Track Work	Welders	0	8.00	46	0.45
Signal Work 2	Cranes	1	8.00	550	0.29
Signal Work 2	Forklifts	0	8.00	89	0.20
Signal Work 2	Generator Sets	0	8.00	84	0.74
Signal Work 2	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Signal Work 2	Welders	0	8.00	46	0.45
Roadway Work	Cranes	0	7.00	231	0.29
Roadway Work	Forklifts	0	8.00	89	0.20

Roadway Work	Generator Sets	0	8.00	84	0.74
Roadway Work	Tractors/Loaders/Backhoes	1	8.00	475	0.37
Roadway Work	Welders	0	8.00	46	0.45
Track Work	Other Construction Equipment	1	8.00	110	0.42
Track Work	Off-Highway Trucks	1	8.00	455	0.38
Track Work	Off-Highway Trucks	1	8.00	550	0.38
Roadway Work	Dumpers/Tenders	4	8.00	16	0.38
Roadway Work	Pavers	1	8.00	130	0.42
Roadway Work	Plate Compactors	1	8.00	131	0.43
Signal Work 2	Excavators	1	8.00	158	0.38
Signal Work 2	Off-Highway Trucks	2	8.00	330	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Earthwork	26	60.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Long Viaduct Bridge	20	222.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Charter Way Main Track Bridge	17	74.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Charter Way Yard Connection Bridge	17	74.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Retaining Wall	6	12.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Signal Work	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Track Work	10	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Signal Work 2	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Roadway Work	7	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Earthwork - 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					0.1279	0.0000	0.1279	0.0140	0.0000	0.0140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2902	2.6614	2.2734	6.8200e-003		0.1040	0.1040		0.0961	0.0961	0.0000	595.5027	595.5027	0.1891	0.0000	600.2289
Total	0.2902	2.6614	2.2734	6.8200e-003	0.1279	0.1040	0.2319	0.0140	0.0961	0.1102	0.0000	595.5027	595.5027	0.1891	0.0000	600.2289

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	6.6300e-003	4.0300e-003	0.0435	1.4000e-004	0.0158	1.0000e-004	0.0159	4.2100e-003	9.0000e-005	4.3000e-003	0.0000	12.7371	12.7371	2.9000e-004	0.0000	12.7444
Total	6.6300e-003	4.0300e-003	0.0435	1.4000e-004	0.0158	1.0000e-004	0.0159	4.2100e-003	9.0000e-005	4.3000e-003	0.0000	12.7371	12.7371	2.9000e-004	0.0000	12.7444

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					0.1279	0.0000	0.1279	0.0140	0.0000	0.0140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0809	0.3507	3.1562	6.8200e-003		0.0108	0.0108		0.0108	0.0108	0.0000	595.5020	595.5020	0.1891	0.0000	600.2282
Total	0.0809	0.3507	3.1562	6.8200e-003	0.1279	0.0108	0.1387	0.0140	0.0108	0.0248	0.0000	595.5020	595.5020	0.1891	0.0000	600.2282

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	6.6300e-003	4.0300e-003	0.0435	1.4000e-004	0.0158	1.0000e-004	0.0159	4.2100e-003	9.0000e-005	4.3000e-003	0.0000	12.7371	12.7371	2.9000e-004	0.0000	12.7444
Total	6.6300e-003	4.0300e-003	0.0435	1.4000e-004	0.0158	1.0000e-004	0.0159	4.2100e-003	9.0000e-005	4.3000e-003	0.0000	12.7371	12.7371	2.9000e-004	0.0000	12.7444

3.3 Retaining Wall - 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	0.0947	0.7197	0.7810	2.5400e-003		0.0286	0.0286		0.0263	0.0263	0.0000	222.8142	222.8142	0.0721	0.0000	224.6158
Total	0.0947	0.7197	0.7810	2.5400e-003		0.0286	0.0286		0.0263	0.0263	0.0000	222.8142	222.8142	0.0721	0.0000	224.6158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e-004	0.0347	6.5900e-003	1.2000e-004	2.8500e-003	3.0000e-005	2.8900e-003	8.2000e-004	3.0000e-005	8.6000e-004	0.0000	11.1191	11.1191	5.8000e-004	0.0000	11.1336
Worker	1.7300e-003	1.0500e-003	0.0113	4.0000e-005	4.1300e-003	3.0000e-005	4.1500e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.3194	3.3194	8.0000e-005	0.0000	3.3213
Total	2.6200e-003	0.0357	0.0179	1.6000e-004	6.9800e-003	6.0000e-005	7.0400e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	14.4385	14.4385	6.6000e-004	0.0000	14.4549

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	0.0312	0.1350	1.2444	2.5400e-003		4.1500e-003	4.1500e-003		4.1500e-003	4.1500e-003	0.0000	222.8140	222.8140	0.0721	0.0000	224.6155
Total	0.0312	0.1350	1.2444	2.5400e-003		4.1500e-003	4.1500e-003		4.1500e-003	4.1500e-003	0.0000	222.8140	222.8140	0.0721	0.0000	224.6155

Mitigated Construction Off-Site

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

Vendor	8.9000e-004	0.0347	6.5900e-003	1.2000e-004	2.8500e-003	3.0000e-005	2.8900e-003	8.2000e-004	3.0000e-005	8.6000e-004	0.0000	11.1191	11.1191	5.8000e-004	0.0000	11.1336
Worker	1.7300e-003	1.0500e-003	0.0113	4.0000e-005	4.1300e-003	3.0000e-005	4.1500e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.3194	3.3194	8.0000e-005	0.0000	3.3213
Total	2.6200e-003	0.0357	0.0179	1.6000e-004	6.9800e-003	6.0000e-005	7.0400e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	14.4385	14.4385	6.6000e-004	0.0000	14.4549

3.3 Retaining Wall - 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	0.0475	0.3423	0.3972	1.3000e-003		0.0135	0.0135		0.0124	0.0124	0.0000	114.0647	114.0647	0.0369	0.0000	114.9870
Total	0.0475	0.3423	0.3972	1.3000e-003		0.0135	0.0135		0.0124	0.0124	0.0000	114.0647	114.0647	0.0369	0.0000	114.9870

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0176	3.1800e-003	6.0000e-005	1.4600e-003	2.0000e-005	1.4800e-003	4.2000e-004	2.0000e-005	4.4000e-004	0.0000	5.6458	5.6458	3.0000e-004	0.0000	5.6534
Worker	8.3000e-004	4.8000e-004	5.3500e-003	2.0000e-005	2.1100e-003	1.0000e-005	2.1200e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.6337	1.6337	3.0000e-005	0.0000	1.6346
Total	1.2700e-003	0.0181	8.5300e-003	8.0000e-005	3.5700e-003	3.0000e-005	3.6000e-003	9.8000e-004	3.0000e-005	1.0100e-003	0.0000	7.2796	7.2796	3.3000e-004	0.0000	7.2880

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	0.0159	0.0691	0.6366	1.3000e-003		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	114.0646	114.0646	0.0369	0.0000	114.9869
Total	0.0159	0.0691	0.6366	1.3000e-003		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	114.0646	114.0646	0.0369	0.0000	114.9869

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0176	3.1800e-003	6.0000e-005	1.4600e-003	2.0000e-005	1.4800e-003	4.2000e-004	2.0000e-005	4.4000e-004	0.0000	5.6458	5.6458	3.0000e-004	0.0000	5.6534
Worker	8.3000e-004	4.8000e-004	5.3500e-003	2.0000e-005	2.1100e-003	1.0000e-005	2.1200e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.6337	1.6337	3.0000e-005	0.0000	1.6346
Total	1.2700e-003	0.0181	8.5300e-003	8.0000e-005	3.5700e-003	3.0000e-005	3.6000e-003	9.8000e-004	3.0000e-005	1.0100e-003	0.0000	7.2796	7.2796	3.3000e-004	0.0000	7.2880

3.4 Charter Way Yard Connection Bridge - 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	0.0602	0.5472	0.4259	1.3300e-003		0.0228	0.0228		0.0212	0.0212	0.0000	115.5351	115.5351	0.0359	0.0000	116.4337

Total	0.0602	0.5472	0.4259	1.3300e-003		0.0228	0.0228		0.0212	0.0212	0.0000	115.5351	115.5351	0.0359	0.0000	116.4337
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	8.4700e-003	1.6100e-003	3.0000e-005	7.0000e-004	1.0000e-005	7.0000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	2.7151	2.7151	1.4000e-004	0.0000	2.7187
Worker	2.6000e-003	1.5800e-003	0.0171	6.0000e-005	6.2100e-003	4.0000e-005	6.2500e-003	1.6500e-003	4.0000e-005	1.6900e-003	0.0000	4.9984	4.9984	1.1000e-004	0.0000	5.0012
Total	2.8200e-003	0.0101	0.0187	9.0000e-005	6.9100e-003	5.0000e-005	6.9500e-003	1.8500e-003	5.0000e-005	1.9000e-003	0.0000	7.7135	7.7135	2.5000e-004	0.0000	7.7199

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	0.0166	0.0977	0.6347	1.3300e-003		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	115.5350	115.5350	0.0359	0.0000	116.4336
Total	0.0166	0.0977	0.6347	1.3300e-003		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	115.5350	115.5350	0.0359	0.0000	116.4336

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	8.4700e-003	1.6100e-003	3.0000e-005	7.0000e-004	1.0000e-005	7.0000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	2.7151	2.7151	1.4000e-004	0.0000	2.7187
Worker	2.6000e-003	1.5800e-003	0.0171	6.0000e-005	6.2100e-003	4.0000e-005	6.2500e-003	1.6500e-003	4.0000e-005	1.6900e-003	0.0000	4.9984	4.9984	1.1000e-004	0.0000	5.0012
Total	2.8200e-003	0.0101	0.0187	9.0000e-005	6.9100e-003	5.0000e-005	6.9500e-003	1.8500e-003	5.0000e-005	1.9000e-003	0.0000	7.7135	7.7135	2.5000e-004	0.0000	7.7199

3.4 Charter Way Yard Connection Bridge - 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	0.3048	2.6528	2.2218	6.9700e-003		0.1105	0.1105		0.1024	0.1024	0.0000	605.3232	605.3232	0.1881	0.0000	610.0255
Total	0.3048	2.6528	2.2218	6.9700e-003		0.1105	0.1105		0.1024	0.1024	0.0000	605.3232	605.3232	0.1881	0.0000	610.0255

Unmitigated Construction Off-Site

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

Vendor	1.1100e-003	0.0440	7.9500e-003	1.5000e-004	3.6500e-003	4.0000e-005	3.6900e-003	1.0500e-003	4.0000e-005	1.0900e-003	0.0000	14.1146	14.1146	7.5000e-004	0.0000	14.1334
Worker	0.0127	7.4500e-003	0.0825	2.8000e-004	0.0325	2.1000e-004	0.0327	8.6500e-003	1.9000e-004	8.8400e-003	0.0000	25.1866	25.1866	5.3000e-004	0.0000	25.1999
Total	0.0138	0.0515	0.0904	4.3000e-004	0.0362	2.5000e-004	0.0364	9.7000e-003	2.3000e-004	9.9300e-003	0.0000	39.3012	39.3012	1.2800e-003	0.0000	39.3333

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	0.0872	0.5120	3.3246	6.9700e-003		0.0111	0.0111		0.0111	0.0111	0.0000	605.3225	605.3225	0.1881	0.0000	610.0248
Total	0.0872	0.5120	3.3246	6.9700e-003		0.0111	0.0111		0.0111	0.0111	0.0000	605.3225	605.3225	0.1881	0.0000	610.0248

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1100e-003	0.0440	7.9500e-003	1.5000e-004	3.6500e-003	4.0000e-005	3.6900e-003	1.0500e-003	4.0000e-005	1.0900e-003	0.0000	14.1146	14.1146	7.5000e-004	0.0000	14.1334
Worker	0.0127	7.4500e-003	0.0825	2.8000e-004	0.0325	2.1000e-004	0.0327	8.6500e-003	1.9000e-004	8.8400e-003	0.0000	25.1866	25.1866	5.3000e-004	0.0000	25.1999
Total	0.0138	0.0515	0.0904	4.3000e-004	0.0362	2.5000e-004	0.0364	9.7000e-003	2.3000e-004	9.9300e-003	0.0000	39.3012	39.3012	1.2800e-003	0.0000	39.3333

3.5 Charter Way Main Track Bridge - 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	0.3603	3.1351	2.6258	8.2400e-003		0.1306	0.1306		0.1210	0.1210	0.0000	715.3820	715.3820	0.2223	0.0000	720.9392
Total	0.3603	3.1351	2.6258	8.2400e-003		0.1306	0.1306		0.1210	0.1210	0.0000	715.3820	715.3820	0.2223	0.0000	720.9392

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3100e-003	0.0520	9.3900e-003	1.8000e-004	4.3100e-003	5.0000e-005	4.3600e-003	1.2400e-003	5.0000e-005	1.2900e-003	0.0000	16.6809	16.6809	8.9000e-004	0.0000	16.7032
Worker	0.0151	8.8100e-003	0.0975	3.3000e-004	0.0385	2.4000e-004	0.0387	0.0102	2.2000e-004	0.0105	0.0000	29.7660	29.7660	6.3000e-004	0.0000	29.7817
Total	0.0164	0.0608	0.1069	5.1000e-004	0.0428	2.9000e-004	0.0431	0.0115	2.7000e-004	0.0117	0.0000	46.4468	46.4468	1.5200e-003	0.0000	46.4849

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	0.1030	0.6051	3.9291	8.2400e-003		0.0132	0.0132		0.0132	0.0132	0.0000	715.3811	715.3811	0.2223	0.0000	720.9384

Total	0.1030	0.6051	3.9291	8.2400e-003		0.0132	0.0132		0.0132	0.0132	0.0000	715.3811	715.3811	0.2223	0.0000	720.9384
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3100e-003	0.0520	9.3900e-003	1.8000e-004	4.3100e-003	5.0000e-005	4.3600e-003	1.2400e-003	5.0000e-005	1.2900e-003	0.0000	16.6809	16.6809	8.9000e-004	0.0000	16.7032
Worker	0.0151	8.8100e-003	0.0975	3.3000e-004	0.0385	2.4000e-004	0.0387	0.0102	2.2000e-004	0.0105	0.0000	29.7660	29.7660	6.3000e-004	0.0000	29.7817
Total	0.0164	0.0608	0.1069	5.1000e-004	0.0428	2.9000e-004	0.0431	0.0115	2.7000e-004	0.0117	0.0000	46.4468	46.4468	1.5200e-003	0.0000	46.4849

3.6 Long Viaduct Bridge - 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	0.5832	5.1254	4.5571	0.0133		0.2151	0.2151		0.1992	0.1992	0.0000	1,154.8624	1,154.8624	0.3598	0.0000	1,163.8562
Total	0.5832	5.1254	4.5571	0.0133		0.2151	0.2151		0.1992	0.1992	0.0000	1,154.8624	1,154.8624	0.3598	0.0000	1,163.8562

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9900e-003	0.0788	0.0142	2.7000e-004	6.5300e-003	8.0000e-005	6.6100e-003	1.8900e-003	7.0000e-005	1.9600e-003	0.0000	25.2779	25.2779	1.3500e-003	0.0000	25.3117
Worker	0.0684	0.0401	0.4431	1.5000e-003	0.1748	1.1100e-003	0.1759	0.0465	1.0200e-003	0.0475	0.0000	135.3206	135.3206	2.8700e-003	0.0000	135.3922
Total	0.0704	0.1189	0.4573	1.7700e-003	0.1814	1.1900e-003	0.1825	0.0484	1.0900e-003	0.0495	0.0000	160.5985	160.5985	4.2200e-003	0.0000	160.7039

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	0.1659	0.9595	6.5597	0.0133		0.0213	0.0213		0.0213	0.0213	0.0000	1,154.8610	1,154.8610	0.3598	0.0000	1,163.8548
Total	0.1659	0.9595	6.5597	0.0133		0.0213	0.0213		0.0213	0.0213	0.0000	1,154.8610	1,154.8610	0.3598	0.0000	1,163.8548

Mitigated Construction Off-Site

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

Vendor	1.9900e-003	0.0788	0.0142	2.7000e-004	6.5300e-003	8.0000e-005	6.6100e-003	1.8900e-003	7.0000e-005	1.9600e-003	0.0000	25.2779	25.2779	1.3500e-003	0.0000	25.3117
Worker	0.0684	0.0401	0.4431	1.5000e-003	0.1748	1.1100e-003	0.1759	0.0465	1.0200e-003	0.0475	0.0000	135.3206	135.3206	2.8700e-003	0.0000	135.3922
Total	0.0704	0.1189	0.4573	1.7700e-003	0.1814	1.1900e-003	0.1825	0.0484	1.0900e-003	0.0495	0.0000	160.5985	160.5985	4.2200e-003	0.0000	160.7039

3.6 Long Viaduct Bridge - 2025
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	0.7125	6.0213	5.9830	0.0176		0.2436	0.2436		0.2256	0.2256	0.0000	1,529.8290	1,529.8290	0.4760	0.0000	1,541.7298
Total	0.7125	6.0213	5.9830	0.0176		0.2436	0.2436		0.2256	0.2256	0.0000	1,529.8290	1,529.8290	0.4760	0.0000	1,541.7298

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5600e-003	0.1036	0.0179	3.5000e-004	8.6500e-003	1.0000e-004	8.7500e-003	2.5000e-003	1.0000e-004	2.6000e-003	0.0000	33.2537	33.2537	1.8100e-003	0.0000	33.2990
Worker	0.0850	0.0480	0.5405	1.9000e-003	0.2316	1.4400e-003	0.2331	0.0616	1.3200e-003	0.0629	0.0000	172.1989	172.1989	3.4200e-003	0.0000	172.2844
Total	0.0876	0.1515	0.5585	2.2500e-003	0.2403	1.5400e-003	0.2418	0.0641	1.4200e-003	0.0655	0.0000	205.4526	205.4526	5.2300e-003	0.0000	205.5835

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	0.2198	1.2712	8.6907	0.0176		0.0282	0.0282		0.0282	0.0282	0.0000	1,529.8272	1,529.8272	0.4760	0.0000	1,541.7280
Total	0.2198	1.2712	8.6907	0.0176		0.0282	0.0282		0.0282	0.0282	0.0000	1,529.8272	1,529.8272	0.4760	0.0000	1,541.7280

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5600e-003	0.1036	0.0179	3.5000e-004	8.6500e-003	1.0000e-004	8.7500e-003	2.5000e-003	1.0000e-004	2.6000e-003	0.0000	33.2537	33.2537	1.8100e-003	0.0000	33.2990
Worker	0.0850	0.0480	0.5405	1.9000e-003	0.2316	1.4400e-003	0.2331	0.0616	1.3200e-003	0.0629	0.0000	172.1989	172.1989	3.4200e-003	0.0000	172.2844
Total	0.0876	0.1515	0.5585	2.2500e-003	0.2403	1.5400e-003	0.2418	0.0641	1.4200e-003	0.0655	0.0000	205.4526	205.4526	5.2300e-003	0.0000	205.5835

3.6 Long Viaduct Bridge - 2026

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	0.1747	1.4765	1.4671	4.3200e-003		0.0597	0.0597		0.0553	0.0553	0.0000	375.1305	375.1305	0.1167	0.0000	378.0487

Total	0.1747	1.4765	1.4671	4.3200e-003		0.0597	0.0597		0.0553	0.0553	0.0000	375.1305	375.1305	0.1167	0.0000	378.0487
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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	6.1000e-004	0.0252	4.2300e-003	9.0000e-005	2.1200e-003	2.0000e-005	2.1500e-003	6.1000e-004	2.0000e-005	6.4000e-004	0.0000	8.1022	8.1022	4.5000e-004	0.0000	8.1135
Worker	0.0197	0.0107	0.1236	4.5000e-004	0.0568	3.4000e-004	0.0571	0.0151	3.2000e-004	0.0154	0.0000	40.7483	40.7483	7.7000e-004	0.0000	40.7675
Total	0.0203	0.0359	0.1278	5.4000e-004	0.0589	3.6000e-004	0.0593	0.0157	3.4000e-004	0.0161	0.0000	48.8506	48.8506	1.2200e-003	0.0000	48.8810

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	0.0539	0.3117	2.1311	4.3200e-003		6.9100e-003	6.9100e-003		6.9100e-003	6.9100e-003	0.0000	375.1300	375.1300	0.1167	0.0000	378.0483
Total	0.0539	0.3117	2.1311	4.3200e-003		6.9100e-003	6.9100e-003		6.9100e-003	6.9100e-003	0.0000	375.1300	375.1300	0.1167	0.0000	378.0483

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	6.1000e-004	0.0252	4.2300e-003	9.0000e-005	2.1200e-003	2.0000e-005	2.1500e-003	6.1000e-004	2.0000e-005	6.4000e-004	0.0000	8.1022	8.1022	4.5000e-004	0.0000	8.1135
Worker	0.0197	0.0107	0.1236	4.5000e-004	0.0568	3.4000e-004	0.0571	0.0151	3.2000e-004	0.0154	0.0000	40.7483	40.7483	7.7000e-004	0.0000	40.7675
Total	0.0203	0.0359	0.1278	5.4000e-004	0.0589	3.6000e-004	0.0593	0.0157	3.4000e-004	0.0161	0.0000	48.8506	48.8506	1.2200e-003	0.0000	48.8810

3.7 Signal Work - 2025

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	0.1010	0.7656	0.9225	2.8200e-003		0.0305	0.0305		0.0281	0.0281	0.0000	247.2944	247.2944	0.0800	0.0000	249.2939
Total	0.1010	0.7656	0.9225	2.8200e-003		0.0305	0.0305		0.0281	0.0281	0.0000	247.2944	247.2944	0.0800	0.0000	249.2939

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	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700
Total	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700

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	0.0346	0.1497	1.4306	2.8200e-003		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	247.2941	247.2941	0.0800	0.0000	249.2936
Total	0.0346	0.1497	1.4306	2.8200e-003		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	0.0000	247.2941	247.2941	0.0800	0.0000	249.2936

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	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700
Total	2.6500e-003	1.4900e-003	0.0169	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3673	5.3673	1.1000e-004	0.0000	5.3700

3.8 Track Work - 2025

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	0.2927	2.3676	2.6774	6.7300e-003		0.1069	0.1069		0.0983	0.0983	0.0000	591.1255	591.1255	0.1912	0.0000	595.9051
Total	0.2927	2.3676	2.6774	6.7300e-003		0.1069	0.1069		0.0983	0.0983	0.0000	591.1255	591.1255	0.1912	0.0000	595.9051

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	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883
Total	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883

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	0.0848	0.4495	3.6423	6.7300e-003		0.0110	0.0110		0.0110	0.0110	0.0000	591.1248	591.1248	0.1912	0.0000	595.9043

Total	0.0848	0.4495	3.6423	6.7300e-003		0.0110	0.0110		0.0110	0.0110	0.0000	591.1248	591.1248	0.1912	0.0000	595.9043
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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	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883
Total	6.1600e-003	3.4800e-003	0.0392	1.4000e-004	0.0168	1.0000e-004	0.0169	4.4600e-003	1.0000e-004	4.5600e-003	0.0000	12.4821	12.4821	2.5000e-004	0.0000	12.4883

3.8 Track Work - 2026

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	0.1438	1.1635	1.3158	3.3100e-003		0.0525	0.0525		0.0483	0.0483	0.0000	290.4960	290.4960	0.0940	0.0000	292.8448
Total	0.1438	1.1635	1.3158	3.3100e-003		0.0525	0.0525		0.0483	0.0483	0.0000	290.4960	290.4960	0.0940	0.0000	292.8448

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	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223
Total	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223

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	0.0417	0.2209	1.7899	3.3100e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	290.4956	290.4956	0.0940	0.0000	292.8444
Total	0.0417	0.2209	1.7899	3.3100e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	290.4956	290.4956	0.0940	0.0000	292.8444

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	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223
Total	2.8600e-003	1.5600e-003	0.0180	7.0000e-005	8.2500e-003	5.0000e-005	8.3000e-003	2.1900e-003	5.0000e-005	2.2400e-003	0.0000	5.9195	5.9195	1.1000e-004	0.0000	5.9223

3.9 Roadway Work - 2025

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	0.0196	0.1433	0.1654	4.9000e-004		5.6800e-003	5.6800e-003		5.3500e-003	5.3500e-003	0.0000	42.0019	42.0019	0.0126	0.0000	42.3159
Total	0.0196	0.1433	0.1654	4.9000e-004		5.6800e-003	5.6800e-003		5.3500e-003	5.3500e-003	0.0000	42.0019	42.0019	0.0126	0.0000	42.3159

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	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571
Total	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571

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	5.2300e-003	0.0227	0.2224	4.9000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	42.0019	42.0019	0.0126	0.0000	42.3158
Total	5.2300e-003	0.0227	0.2224	4.9000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	42.0019	42.0019	0.0126	0.0000	42.3158

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	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571
Total	1.2600e-003	7.1000e-004	8.0200e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5559	2.5559	5.0000e-005	0.0000	2.5571

3.9 Roadway Work - 2026

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	0.0393	0.2866	0.3308	9.8000e-004		0.0114	0.0114		0.0107	0.0107	0.0000	84.0039	84.0039	0.0251	0.0000	84.6317

Total	0.0393	0.2866	0.3308	9.8000e-004		0.0114	0.0114		0.0107	0.0107	0.0000	84.0039	84.0039	0.0251	0.0000	84.6317
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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	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353
Total	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353

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	0.0105	0.0453	0.4448	9.8000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	84.0038	84.0038	0.0251	0.0000	84.6316
Total	0.0105	0.0453	0.4448	9.8000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	84.0038	84.0038	0.0251	0.0000	84.6316

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	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353
Total	2.3800e-003	1.3000e-003	0.0150	5.0000e-005	6.8800e-003	4.0000e-005	6.9200e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	4.9329	4.9329	9.0000e-005	0.0000	4.9353

3.10 Signal Work 2 - 2026

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	0.0676	0.5116	0.6168	1.8800e-003		0.0204	0.0204		0.0188	0.0188	0.0000	165.3703	165.3703	0.0535	0.0000	166.7074
Total	0.0676	0.5116	0.6168	1.8800e-003		0.0204	0.0204		0.0188	0.0188	0.0000	165.3703	165.3703	0.0535	0.0000	166.7074

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	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547
Total	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547

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	0.0231	0.1001	0.9567	1.8800e-003		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003	0.0000	165.3701	165.3701	0.0535	0.0000	166.7072
Total	0.0231	0.1001	0.9567	1.8800e-003		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003	0.0000	165.3701	165.3701	0.0535	0.0000	166.7072

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	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547
Total	1.6700e-003	9.1000e-004	0.0105	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4531	3.4531	6.0000e-005	0.0000	3.4547

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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 Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-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 Non-Asphalt Surfaces	0.534593	0.029957	0.175680	0.101283	0.012799	0.004084	0.020526	0.111620	0.001754	0.001343	0.004908	0.000890	0.000563

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	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	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	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000							

Mitigated

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

5.3 Energy by Land Use - Electricity

Unmitigated

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

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
Unmitigated	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0954					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8600e-003	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
Total	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0954					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8600e-003	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870
Total	0.3948	3.8000e-004	0.0419	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.0817	0.0817	2.1000e-004	0.0000	0.0870

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

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

Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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