

Verdi Undercrossing Construction Only - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Verdi Undercrossing Construction Only  
San Diego County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1.00	User Defined Unit	3.62	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2026
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	539.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Assume 1/2025 as the earliest potential start date.

Land Use - Pedestrian Crossing

Construction Phase - approximately 6 month schedule

Off-road Equipment - Suggested equipment from data needs template

Off-road Equipment - Suggested equipment from data needs template

Off-road Equipment - Suggested equipment from data needs template

Grading - 3400 cy of export

Trips and VMT - Default worker and haul trips used. An additional 2 vendor trips per day added for misc. material deliveries. Water truck counted as off-highway truck in equipment list.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	21.00

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tblConstructionPhase	NumDays	8.00	42.00
tblConstructionPhase	NumDays	18.00	65.00
tblConstructionPhase	PhaseEndDate	1/5/2026	3/31/2025
tblConstructionPhase	PhaseEndDate	2/17/2025	2/28/2025
tblConstructionPhase	PhaseEndDate	1/29/2026	6/30/2025
tblConstructionPhase	PhaseStartDate	2/18/2025	3/1/2025
tblConstructionPhase	PhaseStartDate	2/6/2025	1/2/2025
tblConstructionPhase	PhaseStartDate	1/6/2026	4/1/2025
tblGrading	MaterialExported	0.00	3,400.00
tblLandUse	LotAcreage	0.00	3.62
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

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tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00

**2.0 Emissions Summary**

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

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.5745	24.2965	23.7861	0.0587	13.4955	0.9715	14.4670	6.8392	0.8942	7.7334	0.0000	5,775.6965	5,775.6965	1.6387	0.1129	5,850.2942
Maximum	2.5745	24.2965	23.7861	0.0587	13.4955	0.9715	14.4670	6.8392	0.8942	7.7334	0.0000	5,775.6965	5,775.6965	1.6387	0.1129	5,850.2942

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.5745	24.2965	23.7861	0.0587	13.4955	0.9715	14.4670	6.8392	0.8942	7.7334	0.0000	5,775.6965	5,775.6965	1.6387	0.1129	5,850.2942
Maximum	2.5745	24.2965	23.7861	0.0587	13.4955	0.9715	14.4670	6.8392	0.8942	7.7334	0.0000	5,775.6965	5,775.6965	1.6387	0.1129	5,850.2942



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**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/2/2025	2/28/2025	5	42	
2	Bridge construction	Building Construction	3/1/2025	3/31/2025	5	21	
3	Civil Improvements	Paving	4/1/2025	6/30/2025	5	65	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 42**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Skid Steer Loaders	2	8.00	65	0.37
Civil Improvements	Cement and Mortar Mixers	0	6.00	9	0.56
Grading	Off-Highway Trucks	1	8.00	402	0.38
Bridge construction	Cranes	1	7.00	231	0.29
Civil Improvements	Skid Steer Loaders	2	8.00	65	0.37
Grading	Excavators	2	8.00	158	0.38
Bridge construction	Forklifts	0	8.00	89	0.20
Bridge construction	Generator Sets	0	8.00	84	0.74

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Grading	Graders	0	8.00	187	0.41
Civil Improvements	Pavers	0	8.00	130	0.42
Civil Improvements	Paving Equipment	0	6.00	132	0.36
Civil Improvements	Rollers	0	6.00	80	0.38
Civil Improvements	Off-Highway Trucks	1	8.00	402	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Bridge construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Civil Improvements	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Bridge construction	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
Grading	9	23.00	2.00	425.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bridge construction	3	0.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Civil Improvements	4	10.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

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**3.2 Grading - 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	lb/day										lb/day					
Fugitive Dust					13.1161	0.0000	13.1161	6.7367	0.0000	6.7367			0.0000			0.0000
Off-Road	2.4908	22.8260	22.9174	0.0510		0.9588	0.9588		0.8821	0.8821		4,939.3330	4,939.3330	1.5975		4,979.2700
<b>Total</b>	<b>2.4908</b>	<b>22.8260</b>	<b>22.9174</b>	<b>0.0510</b>	<b>13.1161</b>	<b>0.9588</b>	<b>14.0748</b>	<b>6.7367</b>	<b>0.8821</b>	<b>7.6187</b>		<b>4,939.3330</b>	<b>4,939.3330</b>	<b>1.5975</b>		<b>4,979.2700</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0210	1.3468	0.3785	5.8000e-003	0.1770	0.0113	0.1883	0.0485	0.0108	0.0593		644.6849	644.6849	0.0358	0.1027	676.1787
Vendor	2.1600e-003	0.0879	0.0306	3.9000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6738	42.6738	1.4000e-003	6.1800e-003	44.5505
Worker	0.0606	0.0357	0.4597	1.4700e-003	0.1889	9.2000e-004	0.1899	0.0501	8.5000e-004	0.0510		149.0048	149.0048	4.0500e-003	3.9900e-003	150.2950
<b>Total</b>	<b>0.0837</b>	<b>1.4704</b>	<b>0.8687</b>	<b>7.6600e-003</b>	<b>0.3795</b>	<b>0.0127</b>	<b>0.3922</b>	<b>0.1025</b>	<b>0.0121</b>	<b>0.1147</b>		<b>836.3634</b>	<b>836.3634</b>	<b>0.0412</b>	<b>0.1129</b>	<b>871.0242</b>



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**3.2 Grading - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.1161	0.0000	13.1161	6.7367	0.0000	6.7367			0.0000			0.0000
Off-Road	2.4908	22.8260	22.9174	0.0510		0.9588	0.9588		0.8821	0.8821	0.0000	4,939.333 0	4,939.333 0	1.5975		4,979.270 0
<b>Total</b>	<b>2.4908</b>	<b>22.8260</b>	<b>22.9174</b>	<b>0.0510</b>	<b>13.1161</b>	<b>0.9588</b>	<b>14.0748</b>	<b>6.7367</b>	<b>0.8821</b>	<b>7.6187</b>	<b>0.0000</b>	<b>4,939.333 0</b>	<b>4,939.333 0</b>	<b>1.5975</b>		<b>4,979.270 0</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0210	1.3468	0.3785	5.8000e-003	0.1770	0.0113	0.1883	0.0485	0.0108	0.0593		644.6849	644.6849	0.0358	0.1027	676.1787
Vendor	2.1600e-003	0.0879	0.0306	3.9000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6738	42.6738	1.4000e-003	6.1800e-003	44.5505
Worker	0.0606	0.0357	0.4597	1.4700e-003	0.1889	9.2000e-004	0.1899	0.0501	8.5000e-004	0.0510		149.0048	149.0048	4.0500e-003	3.9900e-003	150.2950
<b>Total</b>	<b>0.0837</b>	<b>1.4704</b>	<b>0.8687</b>	<b>7.6600e-003</b>	<b>0.3795</b>	<b>0.0127</b>	<b>0.3922</b>	<b>0.1025</b>	<b>0.0121</b>	<b>0.1147</b>		<b>836.3634</b>	<b>836.3634</b>	<b>0.0412</b>	<b>0.1129</b>	<b>871.0242</b>

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**3.3 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	lb/day										lb/day					
Off-Road	0.5049	5.1084	5.4213	0.0105		0.2125	0.2125		0.1955	0.1955		1,017.5707	1,017.5707	0.3291		1,025.7983
<b>Total</b>	<b>0.5049</b>	<b>5.1084</b>	<b>5.4213</b>	<b>0.0105</b>		<b>0.2125</b>	<b>0.2125</b>		<b>0.1955</b>	<b>0.1955</b>		<b>1,017.5707</b>	<b>1,017.5707</b>	<b>0.3291</b>		<b>1,025.7983</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1600e-003	0.0879	0.0306	3.9000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6738	42.6738	1.4000e-003	6.1800e-003	44.5505
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1600e-003</b>	<b>0.0879</b>	<b>0.0306</b>	<b>3.9000e-004</b>	<b>0.0136</b>	<b>5.3000e-004</b>	<b>0.0141</b>	<b>3.9000e-003</b>	<b>5.0000e-004</b>	<b>4.4000e-003</b>		<b>42.6738</b>	<b>42.6738</b>	<b>1.4000e-003</b>	<b>6.1800e-003</b>	<b>44.5505</b>

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**3.3 Bridge construction - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5049	5.1084	5.4213	0.0105		0.2125	0.2125		0.1955	0.1955	0.0000	1,017.5707	1,017.5707	0.3291		1,025.7983
<b>Total</b>	<b>0.5049</b>	<b>5.1084</b>	<b>5.4213</b>	<b>0.0105</b>		<b>0.2125</b>	<b>0.2125</b>		<b>0.1955</b>	<b>0.1955</b>	<b>0.0000</b>	<b>1,017.5707</b>	<b>1,017.5707</b>	<b>0.3291</b>		<b>1,025.7983</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1600e-003	0.0879	0.0306	3.9000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6738	42.6738	1.4000e-003	6.1800e-003	44.5505
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1600e-003</b>	<b>0.0879</b>	<b>0.0306</b>	<b>3.9000e-004</b>	<b>0.0136</b>	<b>5.3000e-004</b>	<b>0.0141</b>	<b>3.9000e-003</b>	<b>5.0000e-004</b>	<b>4.4000e-003</b>		<b>42.6738</b>	<b>42.6738</b>	<b>1.4000e-003</b>	<b>6.1800e-003</b>	<b>44.5505</b>

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**3.4 Civil Improvements - 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	lb/day										lb/day					
Off-Road	0.7302	5.7932	8.1783	0.0205		0.2049	0.2049		0.1885	0.1885		1,987.454 1	1,987.454 1	0.6428		2,003.523 7
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7302</b>	<b>5.7932</b>	<b>8.1783</b>	<b>0.0205</b>		<b>0.2049</b>	<b>0.2049</b>		<b>0.1885</b>	<b>0.1885</b>		<b>1,987.454 1</b>	<b>1,987.454 1</b>	<b>0.6428</b>		<b>2,003.523 7</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1600e-003	0.0879	0.0306	3.9000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6738	42.6738	1.4000e-003	6.1800e-003	44.5505
Worker	0.0263	0.0155	0.1999	6.4000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.7847	64.7847	1.7600e-003	1.7300e-003	65.3457
<b>Total</b>	<b>0.0285</b>	<b>0.1034</b>	<b>0.2305</b>	<b>1.0300e-003</b>	<b>0.0957</b>	<b>9.3000e-004</b>	<b>0.0966</b>	<b>0.0257</b>	<b>8.7000e-004</b>	<b>0.0266</b>		<b>107.4585</b>	<b>107.4585</b>	<b>3.1600e-003</b>	<b>7.9100e-003</b>	<b>109.8961</b>

Verdi Undercrossing Construction Only - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Civil Improvements - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7302	5.7932	8.1783	0.0205		0.2049	0.2049		0.1885	0.1885	0.0000	1,987.454 1	1,987.454 1	0.6428		2,003.523 7
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7302</b>	<b>5.7932</b>	<b>8.1783</b>	<b>0.0205</b>		<b>0.2049</b>	<b>0.2049</b>		<b>0.1885</b>	<b>0.1885</b>	<b>0.0000</b>	<b>1,987.454 1</b>	<b>1,987.454 1</b>	<b>0.6428</b>		<b>2,003.523 7</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1600e-003	0.0879	0.0306	3.9000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6738	42.6738	1.4000e-003	6.1800e-003	44.5505
Worker	0.0263	0.0155	0.1999	6.4000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.7847	64.7847	1.7600e-003	1.7300e-003	65.3457
<b>Total</b>	<b>0.0285</b>	<b>0.1034</b>	<b>0.2305</b>	<b>1.0300e-003</b>	<b>0.0957</b>	<b>9.3000e-004</b>	<b>0.0966</b>	<b>0.0257</b>	<b>8.7000e-004</b>	<b>0.0266</b>		<b>107.4585</b>	<b>107.4585</b>	<b>3.1600e-003</b>	<b>7.9100e-003</b>	<b>109.8961</b>

Verdi Undercrossing Construction Only - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Recreational	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Recreational	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
User Defined Recreational	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559

Verdi Undercrossing Construction Only - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Recreational	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Verdi Undercrossing Construction Only - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Recreational	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004



Verdi Undercrossing Construction Only - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

Verdi Undercrossing Construction Only - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Verdi Undercrossing Construction Only - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Verdi Undercrossing Construction Only**  
**San Diego County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1.00	User Defined Unit	3.62	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2026
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MW hr)</b>	539.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Assume 1/2025 as the earliest potential start date.

Land Use - Pedestrian Crossing

Construction Phase - approximately 6 month schedule

Off-road Equipment - Suggested equipment from data needs template

Off-road Equipment - Suggested equipment from data needs template

Off-road Equipment - Suggested equipment from data needs template

Grading - 3400 cy of export

Trips and VMT - Default worker and haul trips used. An additional 2 vendor trips per day added for misc. material deliveries. Water truck counted as off-highway truck in equipment list.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	21.00

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstructionPhase	NumDays	8.00	42.00
tblConstructionPhase	NumDays	18.00	65.00
tblConstructionPhase	PhaseEndDate	1/5/2026	3/31/2025
tblConstructionPhase	PhaseEndDate	2/17/2025	2/28/2025
tblConstructionPhase	PhaseEndDate	1/29/2026	6/30/2025
tblConstructionPhase	PhaseStartDate	2/18/2025	3/1/2025
tblConstructionPhase	PhaseStartDate	2/6/2025	1/2/2025
tblConstructionPhase	PhaseStartDate	1/6/2026	4/1/2025
tblGrading	MaterialExported	0.00	3,400.00
tblLandUse	LotAcreage	0.00	3.62
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00

**2.0 Emissions Summary**

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

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.5710	24.2365	23.8031	0.0588	13.4955	0.9715	14.4670	6.8392	0.8942	7.7334	0.0000	5,783.6128	5,783.6128	1.6385	0.1124	5,858.0809
<b>Maximum</b>	<b>2.5710</b>	<b>24.2365</b>	<b>23.8031</b>	<b>0.0588</b>	<b>13.4955</b>	<b>0.9715</b>	<b>14.4670</b>	<b>6.8392</b>	<b>0.8942</b>	<b>7.7334</b>	<b>0.0000</b>	<b>5,783.6128</b>	<b>5,783.6128</b>	<b>1.6385</b>	<b>0.1124</b>	<b>5,858.0809</b>

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.5710	24.2365	23.8031	0.0588	13.4955	0.9715	14.4670	6.8392	0.8942	7.7334	0.0000	5,783.6128	5,783.6128	1.6385	0.1124	5,858.0809
<b>Maximum</b>	<b>2.5710</b>	<b>24.2365</b>	<b>23.8031</b>	<b>0.0588</b>	<b>13.4955</b>	<b>0.9715</b>	<b>14.4670</b>	<b>6.8392</b>	<b>0.8942</b>	<b>7.7334</b>	<b>0.0000</b>	<b>5,783.6128</b>	<b>5,783.6128</b>	<b>1.6385</b>	<b>0.1124</b>	<b>5,858.0809</b>



Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>



Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/2/2025	2/28/2025	5	42	
2	Bridge construction	Building Construction	3/1/2025	3/31/2025	5	21	
3	Civil Improvements	Paving	4/1/2025	6/30/2025	5	65	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 42**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Skid Steer Loaders	2	8.00	65	0.37
Civil Improvements	Cement and Mortar Mixers	0	6.00	9	0.56
Grading	Off-Highway Trucks	1	8.00	402	0.38
Bridge construction	Cranes	1	7.00	231	0.29
Civil Improvements	Skid Steer Loaders	2	8.00	65	0.37
Grading	Excavators	2	8.00	158	0.38
Bridge construction	Forklifts	0	8.00	89	0.20
Bridge construction	Generator Sets	0	8.00	84	0.74

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading	Graders	0	8.00	187	0.41
Civil Improvements	Pavers	0	8.00	130	0.42
Civil Improvements	Paving Equipment	0	6.00	132	0.36
Civil Improvements	Rollers	0	6.00	80	0.38
Civil Improvements	Off-Highway Trucks	1	8.00	402	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Bridge construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Civil Improvements	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Bridge construction	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
Grading	9	23.00	2.00	425.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bridge construction	3	0.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Civil Improvements	4	10.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 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	lb/day										lb/day					
Fugitive Dust					13.1161	0.0000	13.1161	6.7367	0.0000	6.7367			0.0000			0.0000
Off-Road	2.4908	22.8260	22.9174	0.0510		0.9588	0.9588		0.8821	0.8821		4,939.3330	4,939.3330	1.5975		4,979.2700
<b>Total</b>	<b>2.4908</b>	<b>22.8260</b>	<b>22.9174</b>	<b>0.0510</b>	<b>13.1161</b>	<b>0.9588</b>	<b>14.0748</b>	<b>6.7367</b>	<b>0.8821</b>	<b>7.6187</b>		<b>4,939.3330</b>	<b>4,939.3330</b>	<b>1.5975</b>		<b>4,979.2700</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0224	1.2944	0.3740	5.8000e-003	0.1770	0.0113	0.1883	0.0485	0.0108	0.0593		644.0376	644.0376	0.0359	0.1026	675.5016
Vendor	2.2300e-003	0.0843	0.0297	3.9000e-004	0.0136	5.2000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6100	42.6100	1.4100e-003	6.1700e-003	44.4826
Worker	0.0556	0.0318	0.4821	1.5600e-003	0.1889	9.2000e-004	0.1899	0.0501	8.5000e-004	0.0510		157.6321	157.6321	3.7900e-003	3.6900e-003	158.8266
<b>Total</b>	<b>0.0802</b>	<b>1.4104</b>	<b>0.8857</b>	<b>7.7500e-003</b>	<b>0.3795</b>	<b>0.0127</b>	<b>0.3922</b>	<b>0.1025</b>	<b>0.0121</b>	<b>0.1147</b>		<b>844.2797</b>	<b>844.2797</b>	<b>0.0411</b>	<b>0.1124</b>	<b>878.8108</b>

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.1161	0.0000	13.1161	6.7367	0.0000	6.7367			0.0000			0.0000
Off-Road	2.4908	22.8260	22.9174	0.0510		0.9588	0.9588		0.8821	0.8821	0.0000	4,939.333 0	4,939.333 0	1.5975		4,979.270 0
<b>Total</b>	<b>2.4908</b>	<b>22.8260</b>	<b>22.9174</b>	<b>0.0510</b>	<b>13.1161</b>	<b>0.9588</b>	<b>14.0748</b>	<b>6.7367</b>	<b>0.8821</b>	<b>7.6187</b>	<b>0.0000</b>	<b>4,939.333 0</b>	<b>4,939.333 0</b>	<b>1.5975</b>		<b>4,979.270 0</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0224	1.2944	0.3740	5.8000e-003	0.1770	0.0113	0.1883	0.0485	0.0108	0.0593		644.0376	644.0376	0.0359	0.1026	675.5016
Vendor	2.2300e-003	0.0843	0.0297	3.9000e-004	0.0136	5.2000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6100	42.6100	1.4100e-003	6.1700e-003	44.4826
Worker	0.0556	0.0318	0.4821	1.5600e-003	0.1889	9.2000e-004	0.1899	0.0501	8.5000e-004	0.0510		157.6321	157.6321	3.7900e-003	3.6900e-003	158.8266
<b>Total</b>	<b>0.0802</b>	<b>1.4104</b>	<b>0.8857</b>	<b>7.7500e-003</b>	<b>0.3795</b>	<b>0.0127</b>	<b>0.3922</b>	<b>0.1025</b>	<b>0.0121</b>	<b>0.1147</b>		<b>844.2797</b>	<b>844.2797</b>	<b>0.0411</b>	<b>0.1124</b>	<b>878.8108</b>

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 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	lb/day										lb/day					
Off-Road	0.5049	5.1084	5.4213	0.0105		0.2125	0.2125		0.1955	0.1955		1,017.5707	1,017.5707	0.3291		1,025.7983
<b>Total</b>	<b>0.5049</b>	<b>5.1084</b>	<b>5.4213</b>	<b>0.0105</b>		<b>0.2125</b>	<b>0.2125</b>		<b>0.1955</b>	<b>0.1955</b>		<b>1,017.5707</b>	<b>1,017.5707</b>	<b>0.3291</b>		<b>1,025.7983</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2300e-003	0.0843	0.0297	3.9000e-004	0.0136	5.2000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6100	42.6100	1.4100e-003	6.1700e-003	44.4826
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.2300e-003</b>	<b>0.0843</b>	<b>0.0297</b>	<b>3.9000e-004</b>	<b>0.0136</b>	<b>5.2000e-004</b>	<b>0.0141</b>	<b>3.9000e-003</b>	<b>5.0000e-004</b>	<b>4.4000e-003</b>		<b>42.6100</b>	<b>42.6100</b>	<b>1.4100e-003</b>	<b>6.1700e-003</b>	<b>44.4826</b>

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Bridge construction - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5049	5.1084	5.4213	0.0105		0.2125	0.2125		0.1955	0.1955	0.0000	1,017.5707	1,017.5707	0.3291		1,025.7983
<b>Total</b>	<b>0.5049</b>	<b>5.1084</b>	<b>5.4213</b>	<b>0.0105</b>		<b>0.2125</b>	<b>0.2125</b>		<b>0.1955</b>	<b>0.1955</b>	<b>0.0000</b>	<b>1,017.5707</b>	<b>1,017.5707</b>	<b>0.3291</b>		<b>1,025.7983</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2300e-003	0.0843	0.0297	3.9000e-004	0.0136	5.2000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6100	42.6100	1.4100e-003	6.1700e-003	44.4826
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.2300e-003</b>	<b>0.0843</b>	<b>0.0297</b>	<b>3.9000e-004</b>	<b>0.0136</b>	<b>5.2000e-004</b>	<b>0.0141</b>	<b>3.9000e-003</b>	<b>5.0000e-004</b>	<b>4.4000e-003</b>		<b>42.6100</b>	<b>42.6100</b>	<b>1.4100e-003</b>	<b>6.1700e-003</b>	<b>44.4826</b>

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Civil Improvements - 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	lb/day										lb/day					
Off-Road	0.7302	5.7932	8.1783	0.0205		0.2049	0.2049		0.1885	0.1885		1,987.454 1	1,987.454 1	0.6428		2,003.523 7
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7302</b>	<b>5.7932</b>	<b>8.1783</b>	<b>0.0205</b>		<b>0.2049</b>	<b>0.2049</b>		<b>0.1885</b>	<b>0.1885</b>		<b>1,987.454 1</b>	<b>1,987.454 1</b>	<b>0.6428</b>		<b>2,003.523 7</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2300e-003	0.0843	0.0297	3.9000e-004	0.0136	5.2000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6100	42.6100	1.4100e-003	6.1700e-003	44.4826
Worker	0.0242	0.0138	0.2096	6.8000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.5357	68.5357	1.6500e-003	1.6000e-003	69.0551
<b>Total</b>	<b>0.0264</b>	<b>0.0981</b>	<b>0.2393</b>	<b>1.0700e-003</b>	<b>0.0957</b>	<b>9.2000e-004</b>	<b>0.0966</b>	<b>0.0257</b>	<b>8.7000e-004</b>	<b>0.0266</b>		<b>111.1457</b>	<b>111.1457</b>	<b>3.0600e-003</b>	<b>7.7700e-003</b>	<b>113.5377</b>

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Civil Improvements - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7302	5.7932	8.1783	0.0205		0.2049	0.2049		0.1885	0.1885	0.0000	1,987.454 1	1,987.454 1	0.6428		2,003.523 7
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7302</b>	<b>5.7932</b>	<b>8.1783</b>	<b>0.0205</b>		<b>0.2049</b>	<b>0.2049</b>		<b>0.1885</b>	<b>0.1885</b>	<b>0.0000</b>	<b>1,987.454 1</b>	<b>1,987.454 1</b>	<b>0.6428</b>		<b>2,003.523 7</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2300e-003	0.0843	0.0297	3.9000e-004	0.0136	5.2000e-004	0.0141	3.9000e-003	5.0000e-004	4.4000e-003		42.6100	42.6100	1.4100e-003	6.1700e-003	44.4826
Worker	0.0242	0.0138	0.2096	6.8000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.5357	68.5357	1.6500e-003	1.6000e-003	69.0551
<b>Total</b>	<b>0.0264</b>	<b>0.0981</b>	<b>0.2393</b>	<b>1.0700e-003</b>	<b>0.0957</b>	<b>9.2000e-004</b>	<b>0.0966</b>	<b>0.0257</b>	<b>8.7000e-004</b>	<b>0.0266</b>		<b>111.1457</b>	<b>111.1457</b>	<b>3.0600e-003</b>	<b>7.7700e-003</b>	<b>113.5377</b>



Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Recreational	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Recreational	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
User Defined Recreational	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Recreational	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Verdi Undercrossing Construction Only - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Recreational	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

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**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1.00	User Defined Unit	3.62	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2026
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	539.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Assume 1/2025 as the earliest potential start date.

Land Use - Pedestrian Crossing

Construction Phase - approximately 6 month schedule

Off-road Equipment - Suggested equipment from data needs template

Off-road Equipment - Suggested equipment from data needs template

Off-road Equipment - Suggested equipment from data needs template

Grading - 3400 cy of export

Trips and VMT - Default worker and haul trips used. An additional 2 vendor trips per day added for misc. material deliveries. Water truck counted as off-highway truck in equipment list.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	21.00

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstructionPhase	NumDays	8.00	42.00
tblConstructionPhase	NumDays	18.00	65.00
tblConstructionPhase	PhaseEndDate	1/5/2026	3/31/2025
tblConstructionPhase	PhaseEndDate	2/17/2025	2/28/2025
tblConstructionPhase	PhaseEndDate	1/29/2026	6/30/2025
tblConstructionPhase	PhaseStartDate	2/18/2025	3/1/2025
tblConstructionPhase	PhaseStartDate	2/6/2025	1/2/2025
tblConstructionPhase	PhaseStartDate	1/6/2026	4/1/2025
tblGrading	MaterialExported	0.00	3,400.00
tblLandUse	LotAcreage	0.00	3.62
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00

**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					
2025	0.0839	0.7563	0.8299	2.0500e-003	0.2864	0.0293	0.3157	0.1444	0.0270	0.1714	0.0000	181.9293	181.9293	0.0534	2.4400e-003	183.9914
<b>Maximum</b>	<b>0.0839</b>	<b>0.7563</b>	<b>0.8299</b>	<b>2.0500e-003</b>	<b>0.2864</b>	<b>0.0293</b>	<b>0.3157</b>	<b>0.1444</b>	<b>0.0270</b>	<b>0.1714</b>	<b>0.0000</b>	<b>181.9293</b>	<b>181.9293</b>	<b>0.0534</b>	<b>2.4400e-003</b>	<b>183.9914</b>

**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					
2025	0.0839	0.7563	0.8299	2.0500e-003	0.2864	0.0293	0.3157	0.1444	0.0270	0.1714	0.0000	181.9292	181.9292	0.0534	2.4400e-003	183.9912
<b>Maximum</b>	<b>0.0839</b>	<b>0.7563</b>	<b>0.8299</b>	<b>2.0500e-003</b>	<b>0.2864</b>	<b>0.0293</b>	<b>0.3157</b>	<b>0.1444</b>	<b>0.0270</b>	<b>0.1714</b>	<b>0.0000</b>	<b>181.9292</b>	<b>181.9292</b>	<b>0.0534</b>	<b>2.4400e-003</b>	<b>183.9912</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2025	4-1-2025	0.6221	0.6221
2	4-2-2025	7-1-2025	0.2137	0.2137
		Highest	0.6221	0.6221

**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	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/2/2025	2/28/2025	5	42	
2	Bridge construction	Building Construction	3/1/2025	3/31/2025	5	21	
3	Civil Improvements	Paving	4/1/2025	6/30/2025	5	65	

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 42**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Skid Steer Loaders	2	8.00	65	0.37
Civil Improvements	Cement and Mortar Mixers	0	6.00	9	0.56
Grading	Off-Highway Trucks	1	8.00	402	0.38
Bridge construction	Cranes	1	7.00	231	0.29
Civil Improvements	Skid Steer Loaders	2	8.00	65	0.37
Grading	Excavators	2	8.00	158	0.38
Bridge construction	Forklifts	0	8.00	89	0.20
Bridge construction	Generator Sets	0	8.00	84	0.74
Grading	Graders	0	8.00	187	0.41
Civil Improvements	Pavers	0	8.00	130	0.42
Civil Improvements	Paving Equipment	0	6.00	132	0.36
Civil Improvements	Rollers	0	6.00	80	0.38
Civil Improvements	Off-Highway Trucks	1	8.00	402	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Bridge construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Civil Improvements	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Bridge construction	Welders	0	8.00	46	0.45

**Trips and VMT**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	9	23.00	2.00	425.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bridge construction	3	0.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Civil Improvements	4	10.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Grading - 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					0.2754	0.0000	0.2754	0.1415	0.0000	0.1415	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0523	0.4794	0.4813	1.0700e-003		0.0201	0.0201		0.0185	0.0185	0.0000	94.0986	94.0986	0.0304	0.0000	94.8595
<b>Total</b>	<b>0.0523</b>	<b>0.4794</b>	<b>0.4813</b>	<b>1.0700e-003</b>	<b>0.2754</b>	<b>0.0201</b>	<b>0.2956</b>	<b>0.1415</b>	<b>0.0185</b>	<b>0.1600</b>	<b>0.0000</b>	<b>94.0986</b>	<b>94.0986</b>	<b>0.0304</b>	<b>0.0000</b>	<b>94.8595</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2025**

**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	4.6000e-004	0.0282	7.8900e-003	1.2000e-004	3.6400e-003	2.4000e-004	3.8800e-003	1.0000e-003	2.3000e-004	1.2300e-003	0.0000	12.2747	12.2747	6.8000e-004	1.9600e-003	12.8743
Vendor	5.0000e-005	1.8300e-003	6.3000e-004	1.0000e-005	2.8000e-004	1.0000e-005	2.9000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.8123	0.8123	3.0000e-005	1.2000e-004	0.8480
Worker	1.1600e-003	7.4000e-004	9.6400e-003	3.0000e-005	3.8700e-003	2.0000e-005	3.8900e-003	1.0300e-003	2.0000e-005	1.0500e-003	0.0000	2.8637	2.8637	8.0000e-005	7.0000e-005	2.8880
<b>Total</b>	<b>1.6700e-003</b>	<b>0.0308</b>	<b>0.0182</b>	<b>1.6000e-004</b>	<b>7.7900e-003</b>	<b>2.7000e-004</b>	<b>8.0600e-003</b>	<b>2.1100e-003</b>	<b>2.6000e-004</b>	<b>2.3700e-003</b>	<b>0.0000</b>	<b>15.9506</b>	<b>15.9506</b>	<b>7.9000e-004</b>	<b>2.1500e-003</b>	<b>16.6103</b>

**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					0.2754	0.0000	0.2754	0.1415	0.0000	0.1415	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0523	0.4794	0.4813	1.0700e-003		0.0201	0.0201		0.0185	0.0185	0.0000	94.0985	94.0985	0.0304	0.0000	94.8594
<b>Total</b>	<b>0.0523</b>	<b>0.4794</b>	<b>0.4813</b>	<b>1.0700e-003</b>	<b>0.2754</b>	<b>0.0201</b>	<b>0.2956</b>	<b>0.1415</b>	<b>0.0185</b>	<b>0.1600</b>	<b>0.0000</b>	<b>94.0985</b>	<b>94.0985</b>	<b>0.0304</b>	<b>0.0000</b>	<b>94.8594</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2025**

**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	4.6000e-004	0.0282	7.8900e-003	1.2000e-004	3.6400e-003	2.4000e-004	3.8800e-003	1.0000e-003	2.3000e-004	1.2300e-003	0.0000	12.2747	12.2747	6.8000e-004	1.9600e-003	12.8743
Vendor	5.0000e-005	1.8300e-003	6.3000e-004	1.0000e-005	2.8000e-004	1.0000e-005	2.9000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.8123	0.8123	3.0000e-005	1.2000e-004	0.8480
Worker	1.1600e-003	7.4000e-004	9.6400e-003	3.0000e-005	3.8700e-003	2.0000e-005	3.8900e-003	1.0300e-003	2.0000e-005	1.0500e-003	0.0000	2.8637	2.8637	8.0000e-005	7.0000e-005	2.8880
<b>Total</b>	<b>1.6700e-003</b>	<b>0.0308</b>	<b>0.0182</b>	<b>1.6000e-004</b>	<b>7.7900e-003</b>	<b>2.7000e-004</b>	<b>8.0600e-003</b>	<b>2.1100e-003</b>	<b>2.6000e-004</b>	<b>2.3700e-003</b>	<b>0.0000</b>	<b>15.9506</b>	<b>15.9506</b>	<b>7.9000e-004</b>	<b>2.1500e-003</b>	<b>16.6103</b>

**3.3 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	5.3000e-003	0.0536	0.0569	1.1000e-004		2.2300e-003	2.2300e-003		2.0500e-003	2.0500e-003	0.0000	9.6928	9.6928	3.1300e-003	0.0000	9.7712
<b>Total</b>	<b>5.3000e-003</b>	<b>0.0536</b>	<b>0.0569</b>	<b>1.1000e-004</b>		<b>2.2300e-003</b>	<b>2.2300e-003</b>		<b>2.0500e-003</b>	<b>2.0500e-003</b>	<b>0.0000</b>	<b>9.6928</b>	<b>9.6928</b>	<b>3.1300e-003</b>	<b>0.0000</b>	<b>9.7712</b>

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**3.3 Bridge construction - 2025**

**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	2.0000e-005	9.2000e-004	3.2000e-004	0.0000	1.4000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4061	0.4061	1.0000e-005	6.0000e-005	0.4240
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.0000e-005</b>	<b>9.2000e-004</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>1.0000e-005</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.4061</b>	<b>0.4061</b>	<b>1.0000e-005</b>	<b>6.0000e-005</b>	<b>0.4240</b>

**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	5.3000e-003	0.0536	0.0569	1.1000e-004		2.2300e-003	2.2300e-003		2.0500e-003	2.0500e-003	0.0000	9.6928	9.6928	3.1300e-003	0.0000	9.7712
<b>Total</b>	<b>5.3000e-003</b>	<b>0.0536</b>	<b>0.0569</b>	<b>1.1000e-004</b>		<b>2.2300e-003</b>	<b>2.2300e-003</b>		<b>2.0500e-003</b>	<b>2.0500e-003</b>	<b>0.0000</b>	<b>9.6928</b>	<b>9.6928</b>	<b>3.1300e-003</b>	<b>0.0000</b>	<b>9.7712</b>



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**3.3 Bridge construction - 2025**

**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	2.0000e-005	9.2000e-004	3.2000e-004	0.0000	1.4000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4061	0.4061	1.0000e-005	6.0000e-005	0.4240
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.0000e-005</b>	<b>9.2000e-004</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>1.0000e-005</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.4061</b>	<b>0.4061</b>	<b>1.0000e-005</b>	<b>6.0000e-005</b>	<b>0.4240</b>

**3.4 Civil Improvements - 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	0.0237	0.1883	0.2658	6.7000e-004		6.6600e-003	6.6600e-003		6.1300e-003	6.1300e-003	0.0000	58.5971	58.5971	0.0190	0.0000	59.0709
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0237</b>	<b>0.1883</b>	<b>0.2658</b>	<b>6.7000e-004</b>		<b>6.6600e-003</b>	<b>6.6600e-003</b>		<b>6.1300e-003</b>	<b>6.1300e-003</b>	<b>0.0000</b>	<b>58.5971</b>	<b>58.5971</b>	<b>0.0190</b>	<b>0.0000</b>	<b>59.0709</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Civil Improvements - 2025**

**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	7.0000e-005	2.8400e-003	9.8000e-004	1.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.2571	1.2571	4.0000e-005	1.8000e-004	1.3124
Worker	7.8000e-004	4.9000e-004	6.4900e-003	2.0000e-005	2.6100e-003	1.0000e-005	2.6200e-003	6.9000e-004	1.0000e-005	7.0000e-004	0.0000	1.9269	1.9269	5.0000e-005	5.0000e-005	1.9432
<b>Total</b>	<b>8.5000e-004</b>	<b>3.3300e-003</b>	<b>7.4700e-003</b>	<b>3.0000e-005</b>	<b>3.0400e-003</b>	<b>3.0000e-005</b>	<b>3.0700e-003</b>	<b>8.1000e-004</b>	<b>3.0000e-005</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>3.1840</b>	<b>3.1840</b>	<b>9.0000e-005</b>	<b>2.3000e-004</b>	<b>3.2556</b>

**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	0.0237	0.1883	0.2658	6.7000e-004		6.6600e-003	6.6600e-003		6.1300e-003	6.1300e-003	0.0000	58.5970	58.5970	0.0190	0.0000	59.0708
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0237</b>	<b>0.1883</b>	<b>0.2658</b>	<b>6.7000e-004</b>		<b>6.6600e-003</b>	<b>6.6600e-003</b>		<b>6.1300e-003</b>	<b>6.1300e-003</b>	<b>0.0000</b>	<b>58.5970</b>	<b>58.5970</b>	<b>0.0190</b>	<b>0.0000</b>	<b>59.0708</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Civil Improvements - 2025**

**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	7.0000e-005	2.8400e-003	9.8000e-004	1.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.2571	1.2571	4.0000e-005	1.8000e-004	1.3124
Worker	7.8000e-004	4.9000e-004	6.4900e-003	2.0000e-005	2.6100e-003	1.0000e-005	2.6200e-003	6.9000e-004	1.0000e-005	7.0000e-004	0.0000	1.9269	1.9269	5.0000e-005	5.0000e-005	1.9432
<b>Total</b>	<b>8.5000e-004</b>	<b>3.3300e-003</b>	<b>7.4700e-003</b>	<b>3.0000e-005</b>	<b>3.0400e-003</b>	<b>3.0000e-005</b>	<b>3.0700e-003</b>	<b>8.1000e-004</b>	<b>3.0000e-005</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>3.1840</b>	<b>3.1840</b>	<b>9.0000e-005</b>	<b>2.3000e-004</b>	<b>3.2556</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Recreational	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Recreational	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
User Defined Recreational	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

**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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>



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**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	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			
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**7.2 Water by Land Use**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Category/Year

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

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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