

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Annual

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	190.80	1000sqft	4.38	190,800.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,800.00	11
Single Family Housing	46.00	Dwelling Unit	14.94	163,300.00	132

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294. <https://www.pgecurrents.com/2018/03/26/independent-registry-confirms-record-low-carbon-emissions-for-pge/>

Land Use - 46 lots in Phase I, anticipate 4 secondary units(apartments, single family average size 3,550, apartment average size 1,200
190,800 of internal roadway system

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Trips and VMT -

Grading - rock volume to be imported = 8,200 yds

Architectural Coating -

Area Coating -

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - only Natural Gas and low VOC paint

Energy Mitigation - CEC - 2019 Building Energy Efficiency Standard will reduce residential energy use by 7% or 53 % with rooftop solar

Water Mitigation -

Fleet Mix -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	300.00
tblConstructionPhase	NumDays	20.00	300.00
tblGrading	MaterialImported	0.00	8,200.00
tblLandUse	LandUseSquareFeet	4,000.00	4,800.00
tblLandUse	LandUseSquareFeet	82,800.00	163,300.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294

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tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-9-2020	4-8-2020	1.3624	0.6395
2	4-9-2020	7-8-2020	2.0349	1.5240
3	7-9-2020	10-8-2020	2.0576	1.5411
4	10-9-2020	1-8-2021	2.0504	1.5436
5	1-9-2021	4-8-2021	1.8896	1.4937
6	4-9-2021	7-8-2021	1.0061	0.7949
		Highest	2.0576	1.5436

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	4.0871	0.0656	4.2461	7.0400e-003		0.5450	0.5450		0.5450	0.5450	51.6479	22.2702	73.9181	0.0483	4.0600e-003	76.3351
Energy	6.7900e-003	0.0580	0.0247	3.7000e-004		4.6900e-003	4.6900e-003		4.6900e-003	4.6900e-003	0.0000	123.4340	123.4340	6.8400e-003	2.3800e-003	124.3140
Mobile	0.2107	1.9015	2.3562	9.7500e-003	0.6351	0.0104	0.6454	0.1710	9.7700e-003	0.1808	0.0000	901.2991	901.2991	0.0509	0.0000	902.5724
Waste						0.0000	0.0000		0.0000	0.0000	7.0722	0.0000	7.0722	0.4180	0.0000	17.5211
Water						0.0000	0.0000		0.0000	0.0000	1.0335	3.3093	4.3428	0.1065	2.5700e-003	7.7719
Total	4.3046	2.0251	6.6270	0.0172	0.6351	0.5601	1.1952	0.1710	0.5595	0.7305	59.7536	1,050.3126	1,110.0662	0.6305	9.0100e-003	1,128.5144

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7377	0.0349	0.3864	2.2000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	36.0541	36.0541	1.2700e-003	6.5000e-004	36.2796
Energy	6.3800e-003	0.0546	0.0232	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003	0.0000	118.9720	118.9720	6.7100e-003	2.3000e-003	119.8243
Mobile	0.2107	1.9015	2.3562	9.7500e-003	0.6351	0.0104	0.6454	0.1710	9.7700e-003	0.1808	0.0000	901.2991	901.2991	0.0509	0.0000	902.5724
Waste						0.0000	0.0000		0.0000	0.0000	7.0722	0.0000	7.0722	0.4180	0.0000	17.5211
Water						0.0000	0.0000		0.0000	0.0000	0.8268	2.7807	3.6075	0.0852	2.0600e-003	6.3519
Total	0.9548	1.9910	2.7659	0.0103	0.6351	0.0193	0.6544	0.1710	0.0187	0.1897	7.8990	1,059.1058	1,067.0048	0.5621	5.0100e-003	1,082.5492

	ROG	NOx	CO	SO2	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	77.82	1.68	58.26	39.86	0.00	96.56	45.25	0.00	96.66	74.03	86.78	-0.84	3.88	10.85	44.40	4.07

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2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	- 3,696.300 0
Total	- 3,696.300 0

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/6/2020	2/19/2020	5	10	
2	Grading	Grading	2/20/2020	4/1/2020	5	30	
3	Building Construction	Building Construction	4/2/2020	5/26/2021	5	300	
4	Paving	Paving	4/2/2020	5/26/2021	5	300	
5	Architectural Coating	Architectural Coating	4/2/2020	5/26/2021	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.38

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Residential Indoor: 340,403; Residential Outdoor: 113,468; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 11,448 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,025.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	100.00	37.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e-004	0.0903	0.0110	0.1013	0.0497	0.0101	0.0598	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

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3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.4000e-004	4.1100e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0027	1.0027	3.0000e-005	0.0000	1.0035
Total	5.2000e-004	4.4000e-004	4.1100e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0027	1.0027	3.0000e-005	0.0000	1.0035

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4800e-003	0.0608	0.1148	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	3.4800e-003	0.0608	0.1148	1.9000e-004	0.0903	3.1000e-004	0.0906	0.0497	3.1000e-004	0.0500	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

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3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.4000e-004	4.1100e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	1.0027	1.0027	3.0000e-005	0.0000	1.0035
Total	5.2000e-004	4.4000e-004	4.1100e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	1.0027	1.0027	3.0000e-005	0.0000	1.0035

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1307	0.0000	0.1307	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872
Total	0.0668	0.7530	0.4794	9.3000e-004	0.1307	0.0326	0.1633	0.0540	0.0300	0.0840	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872

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3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0900e-003	0.1444	0.0204	4.1000e-004	8.6000e-003	5.6000e-004	9.1500e-003	2.3700e-003	5.3000e-004	2.9000e-003	0.0000	39.3342	39.3342	2.1800e-003	0.0000	39.3886
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7300e-003	1.4800e-003	0.0137	4.0000e-005	3.6400e-003	3.0000e-005	3.6700e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	3.3423	3.3423	1.1000e-004	0.0000	3.3451
Total	5.8200e-003	0.1458	0.0341	4.5000e-004	0.0122	5.9000e-004	0.0128	3.3400e-003	5.5000e-004	3.8900e-003	0.0000	42.6765	42.6765	2.2900e-003	0.0000	42.7337

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					0.1307	0.0000	0.1307	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.2891	0.5508	9.3000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871
Total	0.0152	0.2891	0.5508	9.3000e-004	0.1307	1.5200e-003	0.1322	0.0540	1.5200e-003	0.0556	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871

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3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0900e-003	0.1444	0.0204	4.1000e-004	8.2100e-003	5.6000e-004	8.7700e-003	2.2700e-003	5.3000e-004	2.8100e-003	0.0000	39.3342	39.3342	2.1800e-003	0.0000	39.3886
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7300e-003	1.4800e-003	0.0137	4.0000e-005	3.4600e-003	3.0000e-005	3.4800e-003	9.2000e-004	2.0000e-005	9.5000e-004	0.0000	3.3423	3.3423	1.1000e-004	0.0000	3.3451
Total	5.8200e-003	0.1458	0.0341	4.5000e-004	0.0117	5.9000e-004	0.0123	3.1900e-003	5.5000e-004	3.7600e-003	0.0000	42.6765	42.6765	2.2900e-003	0.0000	42.7337

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2077	1.8802	1.6512	2.6400e-003		0.1095	0.1095		0.1029	0.1029	0.0000	226.9778	226.9778	0.0554	0.0000	228.3622
Total	0.2077	1.8802	1.6512	2.6400e-003		0.1095	0.1095		0.1029	0.1029	0.0000	226.9778	226.9778	0.0554	0.0000	228.3622

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.4257	0.0948	9.8000e-004	0.0213	2.2400e-003	0.0236	6.1800e-003	2.1500e-003	8.3300e-003	0.0000	92.5261	92.5261	8.0300e-003	0.0000	92.7268
Worker	0.0565	0.0482	0.4470	1.2100e-003	0.1191	8.5000e-004	0.1199	0.0317	7.9000e-004	0.0325	0.0000	109.1822	109.1822	3.6400e-003	0.0000	109.2732
Total	0.0714	0.4739	0.5418	2.1900e-003	0.1404	3.0900e-003	0.1435	0.0379	2.9400e-003	0.0408	0.0000	201.7083	201.7083	0.0117	0.0000	202.0000

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	0.0523	1.0694	1.7516	2.6400e-003		8.2900e-003	8.2900e-003		8.2900e-003	8.2900e-003	0.0000	226.9775	226.9775	0.0554	0.0000	228.3619
Total	0.0523	1.0694	1.7516	2.6400e-003		8.2900e-003	8.2900e-003		8.2900e-003	8.2900e-003	0.0000	226.9775	226.9775	0.0554	0.0000	228.3619

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.4257	0.0948	9.8000e-004	0.0204	2.2400e-003	0.0227	5.9600e-003	2.1500e-003	8.1100e-003	0.0000	92.5261	92.5261	8.0300e-003	0.0000	92.7268
Worker	0.0565	0.0482	0.4470	1.2100e-003	0.1129	8.5000e-004	0.1138	0.0302	7.9000e-004	0.0310	0.0000	109.1822	109.1822	3.6400e-003	0.0000	109.2732
Total	0.0714	0.4739	0.5418	2.1900e-003	0.1333	3.0900e-003	0.1364	0.0361	2.9400e-003	0.0391	0.0000	201.7083	201.7083	0.0117	0.0000	202.0000

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0989	0.9065	0.8619	1.4000e-003		0.0499	0.0499		0.0469	0.0469	0.0000	120.4514	120.4514	0.0291	0.0000	121.1779
Total	0.0989	0.9065	0.8619	1.4000e-003		0.0499	0.0499		0.0469	0.0469	0.0000	120.4514	120.4514	0.0291	0.0000	121.1779

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3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.6200e-003	0.2066	0.0442	5.1000e-004	0.0113	6.1000e-004	0.0119	3.2800e-003	5.8000e-004	3.8600e-003	0.0000	48.6828	48.6828	4.1100e-003	0.0000	48.7857
Worker	0.0277	0.0227	0.2144	6.2000e-004	0.0632	4.4000e-004	0.0636	0.0168	4.0000e-004	0.0172	0.0000	55.9236	55.9236	1.7000e-003	0.0000	55.9662
Total	0.0344	0.2293	0.2586	1.1300e-003	0.0745	1.0500e-003	0.0756	0.0201	9.8000e-004	0.0211	0.0000	104.6064	104.6064	5.8100e-003	0.0000	104.7519

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	0.0277	0.5674	0.9294	1.4000e-003		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	120.4512	120.4512	0.0291	0.0000	121.1777
Total	0.0277	0.5674	0.9294	1.4000e-003		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	120.4512	120.4512	0.0291	0.0000	121.1777

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3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.6200e-003	0.2066	0.0442	5.1000e-004	0.0109	6.1000e-004	0.0115	3.1600e-003	5.8000e-004	3.7500e-003	0.0000	48.6828	48.6828	4.1100e-003	0.0000	48.7857
Worker	0.0277	0.0227	0.2144	6.2000e-004	0.0599	4.4000e-004	0.0604	0.0160	4.0000e-004	0.0164	0.0000	55.9236	55.9236	1.7000e-003	0.0000	55.9662
Total	0.0344	0.2293	0.2586	1.1300e-003	0.0708	1.0500e-003	0.0718	0.0192	9.8000e-004	0.0202	0.0000	104.6064	104.6064	5.8100e-003	0.0000	104.7519

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1329	1.3784	1.4359	2.2300e-003		0.0738	0.0738		0.0679	0.0679	0.0000	196.2766	196.2766	0.0635	0.0000	197.8636
Paving	3.7500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1367	1.3784	1.4359	2.2300e-003		0.0738	0.0738		0.0679	0.0679	0.0000	196.2766	196.2766	0.0635	0.0000	197.8636

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3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4800e-003	7.2300e-003	0.0671	1.8000e-004	0.0179	1.3000e-004	0.0180	4.7500e-003	1.2000e-004	4.8700e-003	0.0000	16.3773	16.3773	5.5000e-004	0.0000	16.3910
Total	8.4800e-003	7.2300e-003	0.0671	1.8000e-004	0.0179	1.3000e-004	0.0180	4.7500e-003	1.2000e-004	4.8700e-003	0.0000	16.3773	16.3773	5.5000e-004	0.0000	16.3910

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	0.0327	0.9839	1.6950	2.2300e-003		3.6600e-003	3.6600e-003		3.6600e-003	3.6600e-003	0.0000	196.2763	196.2763	0.0635	0.0000	197.8633
Paving	3.7500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0365	0.9839	1.6950	2.2300e-003		3.6600e-003	3.6600e-003		3.6600e-003	3.6600e-003	0.0000	196.2763	196.2763	0.0635	0.0000	197.8633

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3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4800e-003	7.2300e-003	0.0671	1.8000e-004	0.0169	1.3000e-004	0.0171	4.5300e-003	1.2000e-004	4.6500e-003	0.0000	16.3773	16.3773	5.5000e-004	0.0000	16.3910
Total	8.4800e-003	7.2300e-003	0.0671	1.8000e-004	0.0169	1.3000e-004	0.0171	4.5300e-003	1.2000e-004	4.6500e-003	0.0000	16.3773	16.3773	5.5000e-004	0.0000	16.3910

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0653	0.6718	0.7620	1.1900e-003		0.0352	0.0352		0.0324	0.0324	0.0000	104.1221	104.1221	0.0337	0.0000	104.9640
Paving	1.9900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0673	0.6718	0.7620	1.1900e-003		0.0352	0.0352		0.0324	0.0324	0.0000	104.1221	104.1221	0.0337	0.0000	104.9640

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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	4.1600e-003	3.4000e-003	0.0322	9.0000e-005	9.4800e-003	7.0000e-005	9.5400e-003	2.5200e-003	6.0000e-005	2.5800e-003	0.0000	8.3885	8.3885	2.6000e-004	0.0000	8.3949
Total	4.1600e-003	3.4000e-003	0.0322	9.0000e-005	9.4800e-003	7.0000e-005	9.5400e-003	2.5200e-003	6.0000e-005	2.5800e-003	0.0000	8.3885	8.3885	2.6000e-004	0.0000	8.3949

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	0.5221	0.8994	1.1900e-003		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	104.1220	104.1220	0.0337	0.0000	104.9639
Paving	1.9900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0194	0.5221	0.8994	1.1900e-003		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	104.1220	104.1220	0.0337	0.0000	104.9639

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3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1600e-003	3.4000e-003	0.0322	9.0000e-005	8.9900e-003	7.0000e-005	9.0500e-003	2.4000e-003	6.0000e-005	2.4600e-003	0.0000	8.3885	8.3885	2.6000e-004	0.0000	8.3949
Total	4.1600e-003	3.4000e-003	0.0322	9.0000e-005	8.9900e-003	7.0000e-005	9.0500e-003	2.4000e-003	6.0000e-005	2.4600e-003	0.0000	8.3885	8.3885	2.6000e-004	0.0000	8.3949

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7614					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1650	0.1795	2.9000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	25.0219	25.0219	1.9400e-003	0.0000	25.0703
Total	1.7851	0.1650	0.1795	2.9000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	25.0219	25.0219	1.9400e-003	0.0000	25.0703

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3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0113	9.6400e-003	0.0894	2.4000e-004	0.0238	1.7000e-004	0.0240	6.3400e-003	1.6000e-004	6.5000e-003	0.0000	21.8364	21.8364	7.3000e-004	0.0000	21.8546
Total	0.0113	9.6400e-003	0.0894	2.4000e-004	0.0238	1.7000e-004	0.0240	6.3400e-003	1.6000e-004	6.5000e-003	0.0000	21.8364	21.8364	7.3000e-004	0.0000	21.8546

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7614					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3400e-003	0.1039	0.1796	2.9000e-004		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	25.0219	25.0219	1.9400e-003	0.0000	25.0703
Total	1.7667	0.1039	0.1796	2.9000e-004		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	25.0219	25.0219	1.9400e-003	0.0000	25.0703

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3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0113	9.6400e-003	0.0894	2.4000e-004	0.0226	1.7000e-004	0.0228	6.0400e-003	1.6000e-004	6.1900e-003	0.0000	21.8364	21.8364	7.3000e-004	0.0000	21.8546
Total	0.0113	9.6400e-003	0.0894	2.4000e-004	0.0226	1.7000e-004	0.0228	6.0400e-003	1.6000e-004	6.1900e-003	0.0000	21.8364	21.8364	7.3000e-004	0.0000	21.8546

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9346					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.0794	0.0945	1.5000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003	0.0000	13.2769	13.2769	9.1000e-004	0.0000	13.2997
Total	0.9460	0.0794	0.0945	1.5000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003	0.0000	13.2769	13.2769	9.1000e-004	0.0000	13.2997

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3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5500e-003	4.5300e-003	0.0429	1.2000e-004	0.0126	9.0000e-005	0.0127	3.3600e-003	8.0000e-005	3.4400e-003	0.0000	11.1847	11.1847	3.4000e-004	0.0000	11.1932
Total	5.5500e-003	4.5300e-003	0.0429	1.2000e-004	0.0126	9.0000e-005	0.0127	3.3600e-003	8.0000e-005	3.4400e-003	0.0000	11.1847	11.1847	3.4000e-004	0.0000	11.1932

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9346					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8300e-003	0.0551	0.0953	1.5000e-004		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	13.2769	13.2769	9.1000e-004	0.0000	13.2997
Total	0.9374	0.0551	0.0953	1.5000e-004		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	13.2769	13.2769	9.1000e-004	0.0000	13.2997

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3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5500e-003	4.5300e-003	0.0429	1.2000e-004	0.0120	9.0000e-005	0.0121	3.2000e-003	8.0000e-005	3.2800e-003	0.0000	11.1847	11.1847	3.4000e-004	0.0000	11.1932
Total	5.5500e-003	4.5300e-003	0.0429	1.2000e-004	0.0120	9.0000e-005	0.0121	3.2000e-003	8.0000e-005	3.2800e-003	0.0000	11.1847	11.1847	3.4000e-004	0.0000	11.1932

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2107	1.9015	2.3562	9.7500e-003	0.6351	0.0104	0.6454	0.1710	9.7700e-003	0.1808	0.0000	901.2991	901.2991	0.0509	0.0000	902.5724
Unmitigated	0.2107	1.9015	2.3562	9.7500e-003	0.6351	0.0104	0.6454	0.1710	9.7700e-003	0.1808	0.0000	901.2991	901.2991	0.0509	0.0000	902.5724

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	26.36	28.64	24.28	97,795	97,795
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	437.92	455.86	396.52	1,610,493	1,610,493
Total	464.28	484.50	420.80	1,708,288	1,708,288

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.523272	0.032530	0.181768	0.106196	0.031705	0.006508	0.012974	0.094129	0.001340	0.001253	0.005657	0.001294	0.001375
Other Asphalt Surfaces	0.523272	0.032530	0.181768	0.106196	0.031705	0.006508	0.012974	0.094129	0.001340	0.001253	0.005657	0.001294	0.001375
Single Family Housing	0.523272	0.032530	0.181768	0.106196	0.031705	0.006508	0.012974	0.094129	0.001340	0.001253	0.005657	0.001294	0.001375

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	55.7833	55.7833	5.5000e-003	1.1400e-003	56.2601
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	56.2368	56.2368	5.5500e-003	1.1500e-003	56.7175
NaturalGas Mitigated	6.3800e-003	0.0546	0.0232	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003	0.0000	63.1887	63.1887	1.2100e-003	1.1600e-003	63.5642
NaturalGas Unmitigated	6.7900e-003	0.0580	0.0247	3.7000e-004		4.6900e-003	4.6900e-003		4.6900e-003	4.6900e-003	0.0000	67.1971	67.1971	1.2900e-003	1.2300e-003	67.5965

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	56545.8	3.0000e-004	2.6100e-003	1.1100e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	3.0175	3.0175	6.0000e-005	6.0000e-005	3.0354
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.20268e+006	6.4900e-003	0.0554	0.0236	3.5000e-004		4.4800e-003	4.4800e-003		4.4800e-003	4.4800e-003	0.0000	64.1796	64.1796	1.2300e-003	1.1800e-003	64.5610
Total		6.7900e-003	0.0580	0.0247	3.7000e-004		4.6900e-003	4.6900e-003		4.6900e-003	4.6900e-003	0.0000	67.1971	67.1971	1.2900e-003	1.2400e-003	67.5965

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	53630.1	2.9000e-004	2.4700e-003	1.0500e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8619	2.8619	5.0000e-005	5.0000e-005	2.8789
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.13048e+006	6.1000e-003	0.0521	0.0222	3.3000e-004		4.2100e-003	4.2100e-003		4.2100e-003	4.2100e-003	0.0000	60.3268	60.3268	1.1600e-003	1.1100e-003	60.6853
Total		6.3900e-003	0.0546	0.0232	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003	0.0000	63.1887	63.1887	1.2100e-003	1.1600e-003	63.5642

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	18710.1	2.4951	2.5000e-004	5.0000e-005	2.5164
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	402994	53.7417	5.3000e-003	1.1000e-003	54.2011
Total		56.2368	5.5500e-003	1.1500e-003	56.7175

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	18515.6	2.4692	2.4000e-004	5.0000e-005	2.4903
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	399787	53.3141	5.2600e-003	1.0900e-003	53.7698
Total		55.7833	5.5000e-003	1.1400e-003	56.2601

6.0 Area Detail

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6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.7377	0.0349	0.3864	2.2000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	36.0541	36.0541	1.2700e-003	6.5000e-004	36.2796
Unmitigated	4.0871	0.0656	4.2461	7.0400e-003		0.5450	0.5450		0.5450	0.5450	51.6479	22.2702	73.9181	0.0483	4.0600e-003	76.3351

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6689					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.1373	0.0613	3.8727	7.0200e-003		0.5430	0.5430		0.5430	0.5430	51.6479	21.6604	73.3083	0.0477	4.0600e-003	75.7104
Landscaping	0.0114	4.3000e-003	0.3734	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6099	0.6099	5.9000e-004	0.0000	0.6247
Total	4.0871	0.0656	4.2461	7.0400e-003		0.5450	0.5450		0.5450	0.5450	51.6479	22.2702	73.9181	0.0483	4.0600e-003	76.3351

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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	0.0539					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6689					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.5800e-003	0.0306	0.0130	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4442	35.4442	6.8000e-004	6.5000e-004	35.6549
Landscaping	0.0114	4.3000e-003	0.3734	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6099	0.6099	5.9000e-004	0.0000	0.6247
Total	0.7377	0.0349	0.3864	2.2000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	36.0541	36.0541	1.2700e-003	6.5000e-004	36.2796

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.6075	0.0852	2.0600e-003	6.3519
Unmitigated	4.3428	0.1065	2.5700e-003	7.7719

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.260616 / 0.164301	0.3474	8.5200e-003	2.1000e-004	0.6218
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.99709 / 1.88947	3.9954	0.0980	2.3700e-003	7.1501
Total		4.3428	0.1065	2.5800e-003	7.7719

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.208493 / 0.154279	0.2886	6.8200e-003	1.6000e-004	0.5082
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.39767 / 1.77421	3.3189	0.0784	1.9000e-003	5.8437
Total		3.6075	0.0852	2.0600e-003	6.3519

8.0 Waste Detail**8.1 Mitigation Measures Waste**

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.0722	0.4180	0.0000	17.5211
Unmitigated	7.0722	0.4180	0.0000	17.5211

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.84	0.3735	0.0221	0.0000	0.9253
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	33	6.6987	0.3959	0.0000	16.5958
Total		7.0722	0.4180	0.0000	17.5211

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.84	0.3735	0.0221	0.0000	0.9253
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	33	6.6987	0.3959	0.0000	16.5958
Total		7.0722	0.4180	0.0000	17.5211

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

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11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	- 3,696.300 0	0.0000	0.0000	- 3,696.300 0

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Trees	82.9 / 49.6	- 3,696.300 0	0.0000	0.0000	- 3,696.300 0
Total		- 3,696.300 0	0.0000	0.0000	- 3,696.300 0

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

Tierra Robles - Phase I Construction Only
Shasta County AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	190.80	1000sqft	4.38	190,800.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,800.00	11
Single Family Housing	46.00	Dwelling Unit	14.94	163,300.00	132

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294. <https://www.pgecurrents.com/2018/03/26/independent-registry-confirms-record-low-carbon-emissions-for-pge/>

Land Use - 46 lots in Phase I, anticipate 4 secondary units(apartments, single family average size 3,550, apartment average size 1,200
190,800 of internal roadway system

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Trips and VMT -

Grading - rock volume to be imported = 8,200 yds

Architectural Coating -

Area Coating -

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - only Natural Gas and low VOC paint

Energy Mitigation - CEC - 2019 Building Energy Efficiency Standard will reduce residential energy use by 7% or 53 % with rooftop solar

Water Mitigation -

Fleet Mix -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	300.00
tblConstructionPhase	NumDays	20.00	300.00
tblGrading	MaterialImported	0.00	8,200.00
tblLandUse	LandUseSquareFeet	4,000.00	4,800.00
tblLandUse	LandUseSquareFeet	82,800.00	163,300.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

2.0 Emissions Summary

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	81.7884	1.5422	98.6043	0.1714		13.2664	13.2664		13.2664	13.2664	1,388.5865	589.8223	1,978.4089	1.2887	0.1092	2,043.1750
Energy	0.0372	0.3179	0.1353	2.0300e-003		0.0257	0.0257		0.0257	0.0257		405.8749	405.8749	7.7800e-003	7.4400e-003	408.2868
Mobile	1.5129	10.7147	15.5174	0.0602	3.8508	0.0594	3.9102	1.0323	0.0561	1.0884		6,126.0956	6,126.0956	0.3249		6,134.2169
Total	83.3386	12.5748	114.2570	0.2336	3.8508	13.3515	17.2023	1.0323	13.3482	14.3805	1,388.5865	7,121.7928	8,510.3793	1.6213	0.1167	8,585.6787

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1743	0.7943	4.4667	4.9800e-003		0.0832	0.0832		0.0832	0.0832	0.0000	960.4106	960.4106	0.0255	0.0175	966.2553
Energy	0.0350	0.2990	0.1272	1.9100e-003		0.0242	0.0242		0.0242	0.0242		381.6637	381.6637	7.3200e-003	7.0000e-003	383.9317
Mobile	1.5129	10.7147	15.5174	0.0602	3.8508	0.0594	3.9102	1.0323	0.0561	1.0884		6,126.0956	6,126.0956	0.3249		6,134.2169
Total	5.7222	11.8079	20.1113	0.0671	3.8508	0.1668	4.0176	1.0323	0.1635	1.1958	0.0000	7,468.1698	7,468.1698	0.3577	0.0245	7,484.4039

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	93.13	6.10	82.40	71.27	0.00	98.75	76.64	0.00	98.78	91.68	100.00	-4.86	12.25	77.94	79.02	12.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/6/2020	2/19/2020	5	10	
2	Grading	Grading	2/20/2020	4/1/2020	5	30	
3	Building Construction	Building Construction	4/2/2020	5/26/2021	5	300	
4	Paving	Paving	4/2/2020	5/26/2021	5	300	
5	Architectural Coating	Architectural Coating	4/2/2020	5/26/2021	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.38

Residential Indoor: 340,403; Residential Outdoor: 113,468; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 11,448 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,025.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	100.00	37.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1206	0.0825	1.0049	2.4800e-003	0.2299	1.5700e-003	0.2315	0.0610	1.4500e-003	0.0624		246.9076	246.9076	8.5400e-003		247.1210
Total	0.1206	0.0825	1.0049	2.4800e-003	0.2299	1.5700e-003	0.2315	0.0610	1.4500e-003	0.0624		246.9076	246.9076	8.5400e-003		247.1210

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	0.6967	12.1620	22.9600	0.0380	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1206	0.0825	1.0049	2.4800e-003	0.2179	1.5700e-003	0.2195	0.0580	1.4500e-003	0.0595		246.9076	246.9076	8.5400e-003		247.1210
Total	0.1206	0.0825	1.0049	2.4800e-003	0.2179	1.5700e-003	0.2195	0.0580	1.4500e-003	0.0595		246.9076	246.9076	8.5400e-003		247.1210

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7137	0.0000	8.7137	3.6026	0.0000	3.6026			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.7137	2.1739	10.8876	3.6026	2.0000	5.6026		6,005.8653	6,005.8653	1.9424		6,054.4257

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2684	9.3730	1.2868	0.0279	0.5984	0.0367	0.6351	0.1641	0.0351	0.1992		2,918.9859	2,918.9859	0.1516		2,922.7748
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1340	0.0916	1.1166	2.7600e-003	0.2555	1.7400e-003	0.2572	0.0678	1.6100e-003	0.0694		274.3418	274.3418	9.4800e-003		274.5789
Total	0.4023	9.4647	2.4034	0.0306	0.8539	0.0384	0.8923	0.2319	0.0367	0.2686		3,193.3277	3,193.3277	0.1610		3,197.3536

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					8.7137	0.0000	8.7137	3.6026	0.0000	3.6026			0.0000			0.0000
Off-Road	1.0110	19.2707	36.7226	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	1.0110	19.2707	36.7226	0.0620	8.7137	0.1015	8.8152	3.6026	0.1015	3.7042	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2684	9.3730	1.2868	0.0279	0.5713	0.0367	0.6080	0.1575	0.0351	0.1926		2,918.9859	2,918.9859	0.1516		2,922.7748
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1340	0.0916	1.1166	2.7600e-003	0.2421	1.7400e-003	0.2439	0.0645	1.6100e-003	0.0661		274.3418	274.3418	9.4800e-003		274.5789
Total	0.4023	9.4647	2.4034	0.0306	0.8135	0.0384	0.8519	0.2219	0.0367	0.2587		3,193.3277	3,193.3277	0.1610		3,197.3536

3.4 Building Construction - 2020

Unmitigated Construction On-Site

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

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1500	4.2745	0.8898	0.0101	0.2268	0.0227	0.2495	0.0653	0.0217	0.0870		1,056.4909	1,056.4909	0.0856		1,058.6313
Worker	0.6697	0.4581	5.5829	0.0138	1.2773	8.7200e-003	1.2860	0.3387	8.0400e-003	0.3468		1,371.7088	1,371.7088	0.0474		1,372.8943
Total	0.8198	4.7326	6.4727	0.0239	1.5041	0.0314	1.5355	0.4041	0.0297	0.4338		2,428.1997	2,428.1997	0.1330		2,431.5256

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	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1500	4.2745	0.8898	0.0101	0.2171	0.0227	0.2398	0.0629	0.0217	0.0846		1,056.4909	1,056.4909	0.0856		1,058.6313
Worker	0.6697	0.4581	5.5829	0.0138	1.2107	8.7200e-003	1.2194	0.3224	8.0400e-003	0.3304		1,371.7088	1,371.7088	0.0474		1,372.8943
Total	0.8198	4.7326	6.4727	0.0239	1.4278	0.0314	1.4592	0.3853	0.0297	0.4150		2,428.1997	2,428.1997	0.1330		2,431.5256

3.4 Building Construction - 2021

Unmitigated Construction On-Site

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

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1251	3.9189	0.7776	0.0100	0.2268	0.0115	0.2383	0.0653	0.0110	0.0763		1,047.7099	1,047.7099	0.0825		1,049.7733
Worker	0.6181	0.4064	5.0586	0.0133	1.2773	8.4400e-003	1.2858	0.3387	7.7800e-003	0.3465		1,324.1083	1,324.1083	0.0419		1,325.1545
Total	0.7432	4.3253	5.8361	0.0233	1.5041	0.0199	1.5240	0.4041	0.0188	0.4228		2,371.8182	2,371.8182	0.1244		2,374.9277

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	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1251	3.9189	0.7776	0.0100	0.2171	0.0115	0.2286	0.0629	0.0110	0.0739		1,047.7099	1,047.7099	0.0825		1,049.7733
Worker	0.6181	0.4064	5.0586	0.0133	1.2107	8.4400e-003	1.2191	0.3224	7.7800e-003	0.3302		1,324.1083	1,324.1083	0.0419		1,325.1545
Total	0.7432	4.3253	5.8361	0.0233	1.4278	0.0199	1.4477	0.3853	0.0188	0.4041		2,371.8182	2,371.8182	0.1244		2,374.9277

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3948	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1005	0.0687	0.8374	2.0700e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		205.7563	205.7563	7.1100e-003		205.9341
Total	0.1005	0.0687	0.8374	2.0700e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		205.7563	205.7563	7.1100e-003		205.9341

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3723	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1005	0.0687	0.8374	2.0700e-003	0.1816	1.3100e-003	0.1829	0.0484	1.2100e-003	0.0496		205.7563	205.7563	7.1100e-003		205.9341
Total	0.1005	0.0687	0.8374	2.0700e-003	0.1816	1.3100e-003	0.1829	0.0484	1.2100e-003	0.0496		205.7563	205.7563	7.1100e-003		205.9341

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2938	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0927	0.0610	0.7588	1.9900e-003	0.1916	1.2700e-003	0.1929	0.0508	1.1700e-003	0.0520		198.6163	198.6163	6.2800e-003		198.7732
Total	0.0927	0.0610	0.7588	1.9900e-003	0.1916	1.2700e-003	0.1929	0.0508	1.1700e-003	0.0520		198.6163	198.6163	6.2800e-003		198.7732

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3723	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0927	0.0610	0.7588	1.9900e-003	0.1816	1.2700e-003	0.1829	0.0484	1.1700e-003	0.0495		198.6163	198.6163	6.2800e-003		198.7732
Total	0.0927	0.0610	0.7588	1.9900e-003	0.1816	1.2700e-003	0.1829	0.0484	1.1700e-003	0.0495		198.6163	198.6163	6.2800e-003		198.7732

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.9730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	18.2151	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1340	0.0916	1.1166	2.7600e-003	0.2555	1.7400e-003	0.2572	0.0678	1.6100e-003	0.0694		274.3418	274.3418	9.4800e-003		274.5789
Total	0.1340	0.0916	1.1166	2.7600e-003	0.2555	1.7400e-003	0.2572	0.0678	1.6100e-003	0.0694		274.3418	274.3418	9.4800e-003		274.5789

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.9730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	18.0274	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1340	0.0916	1.1166	2.7600e-003	0.2421	1.7400e-003	0.2439	0.0645	1.6100e-003	0.0661		274.3418	274.3418	9.4800e-003		274.5789
Total	0.1340	0.0916	1.1166	2.7600e-003	0.2421	1.7400e-003	0.2439	0.0645	1.6100e-003	0.0661		274.3418	274.3418	9.4800e-003		274.5789

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.9730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	18.1919	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1236	0.0813	1.0117	2.6600e-003	0.2555	1.6900e-003	0.2572	0.0678	1.5600e-003	0.0693		264.8217	264.8217	8.3700e-003		265.0309
Total	0.1236	0.0813	1.0117	2.6600e-003	0.2555	1.6900e-003	0.2572	0.0678	1.5600e-003	0.0693		264.8217	264.8217	8.3700e-003		265.0309

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.9730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0193		281.9309
Total	18.0274	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0193		281.9309

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1236	0.0813	1.0117	2.6600e-003	0.2421	1.6900e-003	0.2438	0.0645	1.5600e-003	0.0660		264.8217	264.8217	8.3700e-003		265.0309
Total	0.1236	0.0813	1.0117	2.6600e-003	0.2421	1.6900e-003	0.2438	0.0645	1.5600e-003	0.0660		264.8217	264.8217	8.3700e-003		265.0309

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5129	10.7147	15.5174	0.0602	3.8508	0.0594	3.9102	1.0323	0.0561	1.0884		6,126.0956	6,126.0956	0.3249		6,134.2169
Unmitigated	1.5129	10.7147	15.5174	0.0602	3.8508	0.0594	3.9102	1.0323	0.0561	1.0884		6,126.0956	6,126.0956	0.3249		6,134.2169

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	26.36	28.64	24.28	97,795	97,795
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	437.92	455.86	396.52	1,610,493	1,610,493
Total	464.28	484.50	420.80	1,708,288	1,708,288

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.523272	0.032530	0.181768	0.106196	0.031705	0.006508	0.012974	0.094129	0.001340	0.001253	0.005657	0.001294	0.001375
Other Asphalt Surfaces	0.523272	0.032530	0.181768	0.106196	0.031705	0.006508	0.012974	0.094129	0.001340	0.001253	0.005657	0.001294	0.001375
Single Family Housing	0.523272	0.032530	0.181768	0.106196	0.031705	0.006508	0.012974	0.094129	0.001340	0.001253	0.005657	0.001294	0.001375

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0350	0.2990	0.1272	1.9100e-003		0.0242	0.0242		0.0242	0.0242		381.6637	381.6637	7.3200e-003	7.0000e-003	383.9317
NaturalGas Unmitigated	0.0372	0.3179	0.1353	2.0300e-003		0.0257	0.0257		0.0257	0.0257		405.8749	405.8749	7.7800e-003	7.4400e-003	408.2868

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	154.92	1.6700e-003	0.0143	6.0800e-003	9.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003		18.2259	18.2259	3.5000e-004	3.3000e-004	18.3342
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3295.02	0.0355	0.3037	0.1292	1.9400e-003		0.0246	0.0246		0.0246	0.0246		387.6490	387.6490	7.4300e-003	7.1100e-003	389.9526
Total		0.0372	0.3179	0.1353	2.0300e-003		0.0257	0.0257		0.0257	0.0257		405.8749	405.8749	7.7800e-003	7.4400e-003	408.2868

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.146932	1.5800e-003	0.0135	5.7600e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		17.2861	17.2861	3.3000e-004	3.2000e-004	17.3888
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.09721	0.0334	0.2854	0.1215	1.8200e-003		0.0231	0.0231		0.0231	0.0231		364.3776	364.3776	6.9800e-003	6.6800e-003	366.5429
Total		0.0350	0.2990	0.1272	1.9100e-003		0.0242	0.0242		0.0242	0.0242		381.6637	381.6637	7.3100e-003	7.0000e-003	383.9317

6.0 Area Detail

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.1743	0.7943	4.4667	4.9800e-003		0.0832	0.0832		0.0832	0.0832	0.0000	960.4106	960.4106	0.0255	0.0175	966.2553
Unmitigated	81.7884	1.5422	98.6043	0.1714		13.2664	13.2664		13.2664	13.2664	1,388.5865	589.8223	1,978.4089	1.2887	0.1092	2,043.1750

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	76.5198	1.4943	94.4553	0.1711		13.2435	13.2435		13.2435	13.2435	1,388.5865	582.3529	1,970.9395	1.2814	0.1092	2,035.5238
Landscaping	0.1265	0.0478	4.1490	2.2000e-004		0.0229	0.0229		0.0229	0.0229		7.4694	7.4694	7.2800e-003		7.6513
Total	81.7884	1.5421	98.6043	0.1714		13.2664	13.2664		13.2664	13.2664	1,388.5865	589.8223	1,978.4089	1.2887	0.1092	2,043.1750

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2955					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0874	0.7465	0.3177	4.7600e-003		0.0604	0.0604		0.0604	0.0604	0.0000	952.9412	952.9412	0.0183	0.0175	958.6040
Landscaping	0.1265	0.0478	4.1490	2.2000e-004		0.0229	0.0229		0.0229	0.0229		7.4694	7.4694	7.2800e-003		7.6513
Total	4.1743	0.7943	4.4667	4.9800e-003		0.0832	0.0832		0.0832	0.0832	0.0000	960.4106	960.4106	0.0255	0.0175	966.2553

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Summer

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

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

Tierra Robles - Phase I Construction Only
Shasta County AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	190.80	1000sqft	4.38	190,800.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,800.00	11
Single Family Housing	46.00	Dwelling Unit	14.94	163,300.00	132

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294. <https://www.pgecurrents.com/2018/03/26/independent-registry-confirms-record-low-carbon-emissions-for-pge/>

Land Use - 46 lots in Phase I, anticipate 4 secondary units(apartments, single family average size 3,550, apartment average size 1,200
190,800 of internal roadway system

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Trips and VMT -

Grading - rock volume to be imported = 8,200 yds

Architectural Coating -

Area Coating -

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - only Natural Gas and low VOC paint

Energy Mitigation - CEC - 2019 Building Energy Efficiency Standard will reduce residential energy use by 7% or 53 % with rooftop solar

Water Mitigation -

Fleet Mix -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	300.00
tblConstructionPhase	NumDays	20.00	300.00
tblGrading	MaterialImported	0.00	8,200.00
tblLandUse	LandUseSquareFeet	4,000.00	4,800.00
tblLandUse	LandUseSquareFeet	82,800.00	163,300.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

2.0 Emissions Summary

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	81.7884	1.5422	98.6043	0.1714		13.2664	13.2664		13.2664	13.2664	1,388.5865	589.8223	1,978.4089	1.2887	0.1092	2,043.1750
Energy	0.0372	0.3179	0.1353	2.0300e-003		0.0257	0.0257		0.0257	0.0257		405.8749	405.8749	7.7800e-003	7.4400e-003	408.2868
Mobile	1.1760	11.1395	13.9253	0.0550	3.8508	0.0605	3.9113	1.0323	0.0571	1.0895		5,596.6955	5,596.6955	0.3391		5,605.1718
Total	83.0017	12.9996	112.6649	0.2283	3.8508	13.3526	17.2034	1.0323	13.3493	14.3816	1,388.5865	6,592.3927	7,980.9793	1.6355	0.1167	8,056.6336

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1743	0.7943	4.4667	4.9800e-003		0.0832	0.0832		0.0832	0.0832	0.0000	960.4106	960.4106	0.0255	0.0175	966.2553
Energy	0.0350	0.2990	0.1272	1.9100e-003		0.0242	0.0242		0.0242	0.0242		381.6637	381.6637	7.3200e-003	7.0000e-003	383.9317
Mobile	1.1760	11.1395	13.9253	0.0550	3.8508	0.0605	3.9113	1.0323	0.0571	1.0895		5,596.6955	5,596.6955	0.3391		5,605.1718
Total	5.3853	12.2328	18.5192	0.0618	3.8508	0.1679	4.0187	1.0323	0.1645	1.1969	0.0000	6,938.7697	6,938.7697	0.3719	0.0245	6,955.3588

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	93.51	5.90	83.56	72.92	0.00	98.74	76.64	0.00	98.77	91.68	100.00	-5.25	13.06	77.26	79.02	13.67

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/6/2020	2/19/2020	5	10	
2	Grading	Grading	2/20/2020	4/1/2020	5	30	
3	Building Construction	Building Construction	4/2/2020	5/26/2021	5	300	
4	Paving	Paving	4/2/2020	5/26/2021	5	300	
5	Architectural Coating	Architectural Coating	4/2/2020	5/26/2021	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.38

Residential Indoor: 340,403; Residential Outdoor: 113,468; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 11,448 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,025.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	100.00	37.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1122	0.0986	0.8097	2.1500e-003	0.2299	1.5700e-003	0.2315	0.0610	1.4500e-003	0.0624		213.8879	213.8879	7.1700e-003		214.0670
Total	0.1122	0.0986	0.8097	2.1500e-003	0.2299	1.5700e-003	0.2315	0.0610	1.4500e-003	0.0624		213.8879	213.8879	7.1700e-003		214.0670

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	0.6967	12.1620	22.9600	0.0380	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1122	0.0986	0.8097	2.1500e-003	0.2179	1.5700e-003	0.2195	0.0580	1.4500e-003	0.0595		213.8879	213.8879	7.1700e-003		214.0670
Total	0.1122	0.0986	0.8097	2.1500e-003	0.2179	1.5700e-003	0.2195	0.0580	1.4500e-003	0.0595		213.8879	213.8879	7.1700e-003		214.0670

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7137	0.0000	8.7137	3.6026	0.0000	3.6026			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.7137	2.1739	10.8876	3.6026	2.0000	5.6026		6,005.8653	6,005.8653	1.9424		6,054.4257

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2783	9.6717	1.4675	0.0272	0.5984	0.0376	0.6360	0.1641	0.0360	0.2001		2,851.3310	2,851.3310	0.1713		2,855.6141
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1247	0.1095	0.8997	2.3900e-003	0.2555	1.7400e-003	0.2572	0.0678	1.6100e-003	0.0694		237.6532	237.6532	7.9600e-003		237.8523
Total	0.4029	9.7812	2.3672	0.0296	0.8539	0.0393	0.8932	0.2319	0.0376	0.2694		3,088.9842	3,088.9842	0.1793		3,093.4664

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					8.7137	0.0000	8.7137	3.6026	0.0000	3.6026			0.0000			0.0000
Off-Road	1.0110	19.2707	36.7226	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	1.0110	19.2707	36.7226	0.0620	8.7137	0.1015	8.8152	3.6026	0.1015	3.7042	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2783	9.6717	1.4675	0.0272	0.5713	0.0376	0.6089	0.1575	0.0360	0.1934		2,851.3310	2,851.3310	0.1713		2,855.6141
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1247	0.1095	0.8997	2.3900e-003	0.2421	1.7400e-003	0.2439	0.0645	1.6100e-003	0.0661		237.6532	237.6532	7.9600e-003		237.8523
Total	0.4029	9.7812	2.3672	0.0296	0.8135	0.0393	0.8528	0.2219	0.0376	0.2595		3,088.9842	3,088.9842	0.1793		3,093.4664

3.4 Building Construction - 2020

Unmitigated Construction On-Site

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

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1579	4.3418	1.0640	9.7500e-003	0.2268	0.0232	0.2500	0.0653	0.0222	0.0876		1,019.0033	1,019.0033	0.0967		1,021.4212
Worker	0.6233	0.5477	4.4984	0.0119	1.2773	8.7200e-003	1.2860	0.3387	8.0400e-003	0.3468		1,188.2660	1,188.2660	0.0398		1,189.2613
Total	0.7812	4.8895	5.5624	0.0217	1.5041	0.0320	1.5361	0.4041	0.0303	0.4343		2,207.2693	2,207.2693	0.1365		2,210.6825

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	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1579	4.3418	1.0640	9.7500e-003	0.2171	0.0232	0.2404	0.0629	0.0222	0.0852		1,019.0033	1,019.0033	0.0967		1,021.4212
Worker	0.6233	0.5477	4.4984	0.0119	1.2107	8.7200e-003	1.2194	0.3224	8.0400e-003	0.3304		1,188.2660	1,188.2660	0.0398		1,189.2613
Total	0.7812	4.8895	5.5624	0.0217	1.4278	0.0320	1.4598	0.3853	0.0303	0.4156		2,207.2693	2,207.2693	0.1365		2,210.6825

3.4 Building Construction - 2021

Unmitigated Construction On-Site

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

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1325	3.9669	0.9402	9.6700e-003	0.2268	0.0120	0.2388	0.0653	0.0115	0.0768		1,010.3027	1,010.3027	0.0935		1,012.6396
Worker	0.5772	0.4854	4.0579	0.0115	1.2773	8.4400e-003	1.2858	0.3387	7.7800e-003	0.3465		1,147.0458	1,147.0458	0.0351		1,147.9230
Total	0.7097	4.4523	4.9981	0.0212	1.5041	0.0204	1.5246	0.4041	0.0193	0.4233		2,157.3485	2,157.3485	0.1286		2,160.5626

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	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1325	3.9669	0.9402	9.6700e-003	0.2171	0.0120	0.2291	0.0629	0.0115	0.0744		1,010.3027	1,010.3027	0.0935		1,012.6396
Worker	0.5772	0.4854	4.0579	0.0115	1.2107	8.4400e-003	1.2191	0.3224	7.7800e-003	0.3302		1,147.0458	1,147.0458	0.0351		1,147.9230
Total	0.7097	4.4523	4.9981	0.0212	1.4278	0.0204	1.4482	0.3853	0.0193	0.4046		2,157.3485	2,157.3485	0.1286		2,160.5626

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3948	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0935	0.0822	0.6748	1.7900e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		178.2399	178.2399	5.9700e-003		178.3892
Total	0.0935	0.0822	0.6748	1.7900e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		178.2399	178.2399	5.9700e-003		178.3892

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3723	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0935	0.0822	0.6748	1.7900e-003	0.1816	1.3100e-003	0.1829	0.0484	1.2100e-003	0.0496		178.2399	178.2399	5.9700e-003		178.3892
Total	0.0935	0.0822	0.6748	1.7900e-003	0.1816	1.3100e-003	0.1829	0.0484	1.2100e-003	0.0496		178.2399	178.2399	5.9700e-003		178.3892

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2938	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0866	0.0728	0.6087	1.7300e-003	0.1916	1.2700e-003	0.1929	0.0508	1.1700e-003	0.0520		172.0569	172.0569	5.2600e-003		172.1885
Total	0.0866	0.0728	0.6087	1.7300e-003	0.1916	1.2700e-003	0.1929	0.0508	1.1700e-003	0.0520		172.0569	172.0569	5.2600e-003		172.1885

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3723	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0866	0.0728	0.6087	1.7300e-003	0.1816	1.2700e-003	0.1829	0.0484	1.1700e-003	0.0495		172.0569	172.0569	5.2600e-003		172.1885
Total	0.0866	0.0728	0.6087	1.7300e-003	0.1816	1.2700e-003	0.1829	0.0484	1.1700e-003	0.0495		172.0569	172.0569	5.2600e-003		172.1885

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.9730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	18.2151	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1247	0.1095	0.8997	2.3900e-003	0.2555	1.7400e-003	0.2572	0.0678	1.6100e-003	0.0694		237.6532	237.6532	7.9600e-003		237.8523
Total	0.1247	0.1095	0.8997	2.3900e-003	0.2555	1.7400e-003	0.2572	0.0678	1.6100e-003	0.0694		237.6532	237.6532	7.9600e-003		237.8523

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.9730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	18.0274	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1247	0.1095	0.8997	2.3900e-003	0.2421	1.7400e-003	0.2439	0.0645	1.6100e-003	0.0661		237.6532	237.6532	7.9600e-003		237.8523
Total	0.1247	0.1095	0.8997	2.3900e-003	0.2421	1.7400e-003	0.2439	0.0645	1.6100e-003	0.0661		237.6532	237.6532	7.9600e-003		237.8523

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.9730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	18.1919	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1154	0.0971	0.8116	2.3000e-003	0.2555	1.6900e-003	0.2572	0.0678	1.5600e-003	0.0693		229.4092	229.4092	7.0200e-003		229.5846
Total	0.1154	0.0971	0.8116	2.3000e-003	0.2555	1.6900e-003	0.2572	0.0678	1.5600e-003	0.0693		229.4092	229.4092	7.0200e-003		229.5846

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.9730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0193		281.9309
Total	18.0274	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0193		281.9309

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1154	0.0971	0.8116	2.3000e-003	0.2421	1.6900e-003	0.2438	0.0645	1.5600e-003	0.0660		229.4092	229.4092	7.0200e-003		229.5846
Total	0.1154	0.0971	0.8116	2.3000e-003	0.2421	1.6900e-003	0.2438	0.0645	1.5600e-003	0.0660		229.4092	229.4092	7.0200e-003		229.5846

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1760	11.1395	13.9253	0.0550	3.8508	0.0605	3.9113	1.0323	0.0571	1.0895		5,596.6955	5,596.6955	0.3391		5,605.1718
Unmitigated	1.1760	11.1395	13.9253	0.0550	3.8508	0.0605	3.9113	1.0323	0.0571	1.0895		5,596.6955	5,596.6955	0.3391		5,605.1718

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	26.36	28.64	24.28	97,795	97,795
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	437.92	455.86	396.52	1,610,493	1,610,493
Total	464.28	484.50	420.80	1,708,288	1,708,288

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.523272	0.032530	0.181768	0.106196	0.031705	0.006508	0.012974	0.094129	0.001340	0.001253	0.005657	0.001294	0.001375
Other Asphalt Surfaces	0.523272	0.032530	0.181768	0.106196	0.031705	0.006508	0.012974	0.094129	0.001340	0.001253	0.005657	0.001294	0.001375
Single Family Housing	0.523272	0.032530	0.181768	0.106196	0.031705	0.006508	0.012974	0.094129	0.001340	0.001253	0.005657	0.001294	0.001375

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0350	0.2990	0.1272	1.9100e-003		0.0242	0.0242		0.0242	0.0242		381.6637	381.6637	7.3200e-003	7.0000e-003	383.9317
NaturalGas Unmitigated	0.0372	0.3179	0.1353	2.0300e-003		0.0257	0.0257		0.0257	0.0257		405.8749	405.8749	7.7800e-003	7.4400e-003	408.2868

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5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	154.92	1.6700e-003	0.0143	6.0800e-003	9.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003		18.2259	18.2259	3.5000e-004	3.3000e-004	18.3342
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3295.02	0.0355	0.3037	0.1292	1.9400e-003		0.0246	0.0246		0.0246	0.0246		387.6490	387.6490	7.4300e-003	7.1100e-003	389.9526
Total		0.0372	0.3179	0.1353	2.0300e-003		0.0257	0.0257		0.0257	0.0257		405.8749	405.8749	7.7800e-003	7.4400e-003	408.2868

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.146932	1.5800e-003	0.0135	5.7600e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		17.2861	17.2861	3.3000e-004	3.2000e-004	17.3888
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.09721	0.0334	0.2854	0.1215	1.8200e-003		0.0231	0.0231		0.0231	0.0231		364.3776	364.3776	6.9800e-003	6.6800e-003	366.5429
Total		0.0350	0.2990	0.1272	1.9100e-003		0.0242	0.0242		0.0242	0.0242		381.6637	381.6637	7.3100e-003	7.0000e-003	383.9317

6.0 Area Detail

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6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.1743	0.7943	4.4667	4.9800e-003		0.0832	0.0832		0.0832	0.0832	0.0000	960.4106	960.4106	0.0255	0.0175	966.2553
Unmitigated	81.7884	1.5422	98.6043	0.1714		13.2664	13.2664		13.2664	13.2664	1,388.5865	589.8223	1,978.4089	1.2887	0.1092	2,043.1750

Tierra Robles - Phase I Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	76.5198	1.4943	94.4553	0.1711		13.2435	13.2435		13.2435	13.2435	1,388.5865	582.3529	1,970.9395	1.2814	0.1092	2,035.5238
Landscaping	0.1265	0.0478	4.1490	2.2000e-004		0.0229	0.0229		0.0229	0.0229		7.4694	7.4694	7.2800e-003		7.6513
Total	81.7884	1.5421	98.6043	0.1714		13.2664	13.2664		13.2664	13.2664	1,388.5865	589.8223	1,978.4089	1.2887	0.1092	2,043.1750

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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	lb/day										lb/day					
Architectural Coating	0.2955					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0874	0.7465	0.3177	4.7600e-003		0.0604	0.0604		0.0604	0.0604	0.0000	952.9412	952.9412	0.0183	0.0175	958.6040
Landscaping	0.1265	0.0478	4.1490	2.2000e-004		0.0229	0.0229		0.0229	0.0229		7.4694	7.4694	7.2800e-003		7.6513
Total	4.1743	0.7943	4.4667	4.9800e-003		0.0832	0.0832		0.0832	0.0832	0.0000	960.4106	960.4106	0.0255	0.0175	966.2553

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

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9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	101.60	1000sqft	2.33	101,600.00	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,400.00	6
Single Family Housing	19.00	Dwelling Unit	6.17	67,450.00	54

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 2 includes 19 DU, anticipate 2 secondary units (apartments), 101,600 sf includes internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - 4,400 yds of rock material imported

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 standard will save 7% for residential or 53% with rooftop solar

Water Mitigation -

Stationary Sources - User Defined -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	230.00
tblConstructionPhase	NumDays	20.00	230.00
tblGrading	MaterialImported	0.00	4,400.00
tblLandUse	LandUseSquareFeet	2,000.00	2,400.00
tblLandUse	LandUseSquareFeet	34,200.00	67,450.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

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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					
2022	1.5664	3.9326	4.4109	8.3700e-003	0.2828	0.1868	0.4695	0.1174	0.1746	0.2920	0.0000	737.4368	737.4368	0.1623	0.0000	741.4933
Maximum	1.5664	3.9326	4.4109	8.3700e-003	0.2828	0.1868	0.4695	0.1174	0.1746	0.2920	0.0000	737.4368	737.4368	0.1623	0.0000	741.4933

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	1.2992	3.0169	4.9525	8.3700e-003	0.2764	0.0168	0.2932	0.1159	0.0167	0.1326	0.0000	737.4361	737.4361	0.1623	0.0000	741.4926
Maximum	1.2992	3.0169	4.9525	8.3700e-003	0.2764	0.0168	0.2932	0.1159	0.0167	0.1326	0.0000	737.4361	737.4361	0.1623	0.0000	741.4926

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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	17.06	23.28	-12.28	0.00	2.26	90.98	37.55	1.34	90.41	54.59	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	1-1-2022	3-31-2022	1.2280	0.8504
2	4-1-2022	6-30-2022	1.4194	1.1520
3	7-1-2022	9-30-2022	1.4350	1.1646
		Highest	1.4350	1.1646

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	1.7146	0.0275	1.7833	2.9600e-003		0.2289	0.2289		0.2289	0.2289	21.6921	9.3539	31.0460	0.0203	1.7100e-003	32.0611
Energy	2.8300e-003	0.0242	0.0103	1.5000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	51.4630	51.4630	2.8500e-003	9.9000e-004	51.8299
Mobile	0.0720	0.6214	0.8210	3.8500e-003	0.2653	3.0500e-003	0.2683	0.0714	2.8700e-003	0.0742	0.0000	356.2736	356.2736	0.0161	0.0000	356.6754
Waste						0.0000	0.0000		0.0000	0.0000	2.9271	0.0000	2.9271	0.1730	0.0000	7.2518
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.3899	1.8240	0.0447	1.0800e-003	3.2642
Total	1.7894	0.6732	2.6146	6.9600e-003	0.2653	0.2339	0.4992	0.0714	0.2338	0.3051	25.0533	418.4804	443.5337	0.2569	3.7800e-003	451.0824

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3082	0.0147	0.1623	9.0000e-005		1.9100e-003	1.9100e-003		1.9100e-003	1.9100e-003	0.0000	15.1431	15.1431	5.3000e-004	2.7000e-004	15.2378
Energy	2.6600e-003	0.0228	9.6800e-003	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	49.6042	49.6042	2.8000e-003	9.6000e-004	49.9595
Mobile	0.0720	0.6214	0.8210	3.8500e-003	0.2653	3.0500e-003	0.2683	0.0714	2.8700e-003	0.0742	0.0000	356.2736	356.2736	0.0161	0.0000	356.6754
Waste						0.0000	0.0000		0.0000	0.0000	2.9271	0.0000	2.9271	0.1730	0.0000	7.2518
Water						0.0000	0.0000		0.0000	0.0000	0.3473	1.1679	1.5152	0.0358	8.7000e-004	2.6678
Total	0.3828	0.6588	0.9930	4.0900e-003	0.2653	6.8000e-003	0.2721	0.0714	6.6200e-003	0.0780	3.2744	422.1888	425.4632	0.2282	2.1000e-003	431.7923

	ROG	NOx	CO	SO2	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	78.61	2.13	62.02	41.24	0.00	97.09	45.50	0.00	97.17	74.44	86.93	-0.89	4.07	11.18	44.44	4.28

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2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	- 1,343.100 0
Total	- 1,343.100 0

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/11/2022	5	20	
3	Building Construction	Building Construction	2/12/2022	12/30/2022	5	230	
4	Paving	Paving	2/12/2022	12/30/2022	5	230	
5	Architectural Coating	Architectural Coating	2/12/2022	12/30/2022	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.33

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Residential Indoor: 141,446; Residential Outdoor: 47,149; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,096 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	550.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	51.00	19.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e-004	0.0903	8.0600e-003	0.0984	0.0497	7.4200e-003	0.0571	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549

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3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.5000e-004	3.3700e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9329	0.9329	3.0000e-005	0.0000	0.9335
Total	4.5000e-004	3.5000e-004	3.3700e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9329	0.9329	3.0000e-005	0.0000	0.9335

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4800e-003	0.0608	0.1148	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	3.4800e-003	0.0608	0.1148	1.9000e-004	0.0903	3.1000e-004	0.0906	0.0497	3.1000e-004	0.0500	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549

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3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.5000e-004	3.3700e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9329	0.9329	3.0000e-005	0.0000	0.9335
Total	4.5000e-004	3.5000e-004	3.3700e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9329	0.9329	3.0000e-005	0.0000	0.9335

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0659	0.0000	0.0659	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.2086	0.1527	3.0000e-004		9.4100e-003	9.4100e-003		8.6600e-003	8.6600e-003	0.0000	26.0548	26.0548	8.4300e-003	0.0000	26.2654
Total	0.0195	0.2086	0.1527	3.0000e-004	0.0659	9.4100e-003	0.0753	0.0337	8.6600e-003	0.0424	0.0000	26.0548	26.0548	8.4300e-003	0.0000	26.2654

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3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9200e-003	0.0646	0.0100	2.2000e-004	4.6100e-003	2.2000e-004	4.8300e-003	1.2700e-003	2.1000e-004	1.4800e-003	0.0000	20.6100	20.6100	1.1000e-003	0.0000	20.6374
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	5.8000e-004	5.6200e-003	2.0000e-005	1.8200e-003	1.0000e-005	1.8300e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5547	1.5547	4.0000e-005	0.0000	1.5558
Total	2.6600e-003	0.0652	0.0156	2.4000e-004	6.4300e-003	2.3000e-004	6.6600e-003	1.7600e-003	2.2000e-004	1.9800e-003	0.0000	22.1647	22.1647	1.1400e-003	0.0000	22.1933

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					0.0659	0.0000	0.0659	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-003	0.1033	0.1899	3.0000e-004		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	26.0547	26.0547	8.4300e-003	0.0000	26.2654
Total	5.2000e-003	0.1033	0.1899	3.0000e-004	0.0659	4.8000e-004	0.0663	0.0337	4.8000e-004	0.0342	0.0000	26.0547	26.0547	8.4300e-003	0.0000	26.2654

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3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9200e-003	0.0646	0.0100	2.2000e-004	4.4100e-003	2.2000e-004	4.6300e-003	1.2200e-003	2.1000e-004	1.4300e-003	0.0000	20.6100	20.6100	1.1000e-003	0.0000	20.6374
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	5.8000e-004	5.6200e-003	2.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.5547	1.5547	4.0000e-005	0.0000	1.5558
Total	2.6600e-003	0.0652	0.0156	2.4000e-004	6.1400e-003	2.3000e-004	6.3700e-003	1.6800e-003	2.2000e-004	1.9000e-003	0.0000	22.1647	22.1647	1.1400e-003	0.0000	22.1933

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1962	1.7958	1.8818	3.1000e-003		0.0930	0.0930		0.0875	0.0875	0.0000	266.4840	266.4840	0.0638	0.0000	268.0801
Total	0.1962	1.7958	1.8818	3.1000e-003		0.0930	0.0930		0.0875	0.0875	0.0000	266.4840	266.4840	0.0638	0.0000	268.0801

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3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-003	0.2219	0.0463	5.8000e-004	0.0129	6.0000e-004	0.0135	3.7300e-003	5.8000e-004	4.3000e-003	0.0000	54.8117	54.8117	4.4800e-003	0.0000	54.9237
Worker	0.0291	0.0228	0.2197	6.7000e-004	0.0713	4.8000e-004	0.0717	0.0190	4.4000e-004	0.0194	0.0000	60.7905	60.7905	1.7000e-003	0.0000	60.8330
Total	0.0361	0.2447	0.2659	1.2500e-003	0.0841	1.0800e-003	0.0852	0.0227	1.0200e-003	0.0237	0.0000	115.6022	115.6022	6.1800e-003	0.0000	115.7567

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	0.0614	1.2549	2.0555	3.1000e-003		9.7300e-003	9.7300e-003		9.7300e-003	9.7300e-003	0.0000	266.4837	266.4837	0.0638	0.0000	268.0798
Total	0.0614	1.2549	2.0555	3.1000e-003		9.7300e-003	9.7300e-003		9.7300e-003	9.7300e-003	0.0000	266.4837	266.4837	0.0638	0.0000	268.0798

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3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-003	0.2219	0.0463	5.8000e-004	0.0123	6.0000e-004	0.0129	3.5900e-003	5.8000e-004	4.1700e-003	0.0000	54.8117	54.8117	4.4800e-003	0.0000	54.9237
Worker	0.0291	0.0228	0.2197	6.7000e-004	0.0676	4.8000e-004	0.0681	0.0181	4.4000e-004	0.0185	0.0000	60.7905	60.7905	1.7000e-003	0.0000	60.8330
Total	0.0361	0.2447	0.2659	1.2500e-003	0.0799	1.0800e-003	0.0810	0.0217	1.0200e-003	0.0227	0.0000	115.6022	115.6022	6.1800e-003	0.0000	115.7567

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1268	1.2794	1.6768	2.6200e-003		0.0653	0.0653		0.0601	0.0601	0.0000	230.3169	230.3169	0.0745	0.0000	232.1791
Paving	3.0500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1299	1.2794	1.6768	2.6200e-003		0.0653	0.0653		0.0601	0.0601	0.0000	230.3169	230.3169	0.0745	0.0000	232.1791

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3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5600e-003	6.7000e-003	0.0646	2.0000e-004	0.0210	1.4000e-004	0.0211	5.5800e-003	1.3000e-004	5.7100e-003	0.0000	17.8796	17.8796	5.0000e-004	0.0000	17.8921
Total	8.5600e-003	6.7000e-003	0.0646	2.0000e-004	0.0210	1.4000e-004	0.0211	5.5800e-003	1.3000e-004	5.7100e-003	0.0000	17.8796	17.8796	5.0000e-004	0.0000	17.8921

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	0.0384	1.1545	1.9890	2.6200e-003		4.3000e-003	4.3000e-003		4.3000e-003	4.3000e-003	0.0000	230.3166	230.3166	0.0745	0.0000	232.1789
Paving	3.0500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0415	1.1545	1.9890	2.6200e-003		4.3000e-003	4.3000e-003		4.3000e-003	4.3000e-003	0.0000	230.3166	230.3166	0.0745	0.0000	232.1789

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3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5600e-003	6.7000e-003	0.0646	2.0000e-004	0.0199	1.4000e-004	0.0200	5.3100e-003	1.3000e-004	5.4400e-003	0.0000	17.8796	17.8796	5.0000e-004	0.0000	17.8921
Total	8.5600e-003	6.7000e-003	0.0646	2.0000e-004	0.0199	1.4000e-004	0.0200	5.3100e-003	1.3000e-004	5.4400e-003	0.0000	17.8796	17.8796	5.0000e-004	0.0000	17.8921

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1280					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0235	0.1620	0.2086	3.4000e-004		9.4000e-003	9.4000e-003		9.4000e-003	9.4000e-003	0.0000	29.3624	29.3624	1.9100e-003	0.0000	29.4102
Total	1.1515	0.1620	0.2086	3.4000e-004		9.4000e-003	9.4000e-003		9.4000e-003	9.4000e-003	0.0000	29.3624	29.3624	1.9100e-003	0.0000	29.4102

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3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7100e-003	4.4600e-003	0.0431	1.3000e-004	0.0140	9.0000e-005	0.0141	3.7200e-003	9.0000e-005	3.8100e-003	0.0000	11.9197	11.9197	3.3000e-004	0.0000	11.9280
Total	5.7100e-003	4.4600e-003	0.0431	1.3000e-004	0.0140	9.0000e-005	0.0141	3.7200e-003	9.0000e-005	3.8100e-003	0.0000	11.9197	11.9197	3.3000e-004	0.0000	11.9280

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1280					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2600e-003	0.1219	0.2107	3.4000e-004		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	29.3624	29.3624	1.9100e-003	0.0000	29.4102
Total	1.1343	0.1219	0.2107	3.4000e-004		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	29.3624	29.3624	1.9100e-003	0.0000	29.4102

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3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7100e-003	4.4600e-003	0.0431	1.3000e-004	0.0133	9.0000e-005	0.0133	3.5400e-003	9.0000e-005	3.6300e-003	0.0000	11.9197	11.9197	3.3000e-004	0.0000	11.9280
Total	5.7100e-003	4.4600e-003	0.0431	1.3000e-004	0.0133	9.0000e-005	0.0133	3.5400e-003	9.0000e-005	3.6300e-003	0.0000	11.9197	11.9197	3.3000e-004	0.0000	11.9280

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0720	0.6214	0.8210	3.8500e-003	0.2653	3.0500e-003	0.2683	0.0714	2.8700e-003	0.0742	0.0000	356.2736	356.2736	0.0161	0.0000	356.6754
Unmitigated	0.0720	0.6214	0.8210	3.8500e-003	0.2653	3.0500e-003	0.2683	0.0714	2.8700e-003	0.0742	0.0000	356.2736	356.2736	0.0161	0.0000	356.6754

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	13.18	14.32	12.14	48,897	48,897
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	180.88	188.29	163.78	665,204	665,204
Total	194.06	202.61	175.92	714,101	714,101

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.538831	0.031280	0.180238	0.098915	0.025981	0.005683	0.012706	0.096234	0.001312	0.001172	0.005254	0.001260	0.001133
Other Asphalt Surfaces	0.538831	0.031280	0.180238	0.098915	0.025981	0.005683	0.012706	0.096234	0.001312	0.001172	0.005254	0.001260	0.001133
Single Family Housing	0.538831	0.031280	0.180238	0.098915	0.025981	0.005683	0.012706	0.096234	0.001312	0.001172	0.005254	0.001260	0.001133

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	23.2556	23.2556	2.2900e-003	4.7000e-004	23.4544
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	23.4452	23.4452	2.3100e-003	4.8000e-004	23.6456
NaturalGas Mitigated	2.6600e-003	0.0228	9.6800e-003	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.3485	26.3485	5.1000e-004	4.8000e-004	26.5051
NaturalGas Unmitigated	2.8300e-003	0.0242	0.0103	1.5000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	28.0177	28.0177	5.4000e-004	5.1000e-004	28.1842

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	28272.9	1.5000e-004	1.3000e-003	5.5000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5088	1.5088	3.0000e-005	3.0000e-005	1.5177
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	496760	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.5090	26.5090	5.1000e-004	4.9000e-004	26.6665
Total		2.8300e-003	0.0242	0.0103	1.6000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	28.0177	28.0177	5.4000e-004	5.2000e-004	28.1842

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	26815	1.4000e-004	1.2400e-003	5.3000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4310	1.4310	3.0000e-005	3.0000e-005	1.4395
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	466938	2.5200e-003	0.0215	9.1600e-003	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.9176	24.9176	4.8000e-004	4.6000e-004	25.0657
Total		2.6600e-003	0.0228	9.6900e-003	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.3485	26.3485	5.1000e-004	4.9000e-004	26.5051

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9355.04	1.2476	1.2000e-004	3.0000e-005	1.2582
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	166454	22.1977	2.1900e-003	4.5000e-004	22.3874
Total		23.4452	2.3100e-003	4.8000e-004	23.6456

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9257.82	1.2346	1.2000e-004	3.0000e-005	1.2451
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	165129	22.0210	2.1700e-003	4.5000e-004	22.2093
Total		23.2556	2.2900e-003	4.8000e-004	23.4544

6.0 Area Detail

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6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3082	0.0147	0.1623	9.0000e-005		1.9100e-003	1.9100e-003		1.9100e-003	1.9100e-003	0.0000	15.1431	15.1431	5.3000e-004	2.7000e-004	15.2378
Unmitigated	1.7146	0.0275	1.7833	2.9600e-003		0.2289	0.2289		0.2289	0.2289	21.6921	9.3539	31.0460	0.0203	1.7100e-003	32.0611

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1128					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.3177	0.0257	1.6265	2.9500e-003		0.2281	0.2281		0.2281	0.2281	21.6921	9.0974	30.7895	0.0200	1.7100e-003	31.7984
Landscaping	4.7700e-003	1.8000e-003	0.1568	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	0.2565	0.2565	2.5000e-004	0.0000	0.2628
Total	1.7146	0.0275	1.7833	2.9600e-003		0.2289	0.2289		0.2289	0.2289	21.6921	9.3539	31.0460	0.0203	1.7100e-003	32.0611

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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	0.0226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-003	0.0129	5.4700e-003	8.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003	0.0000	14.8866	14.8866	2.9000e-004	2.7000e-004	14.9750
Landscaping	4.7700e-003	1.8000e-003	0.1568	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	0.2565	0.2565	2.5000e-004	0.0000	0.2628
Total	0.3082	0.0147	0.1623	9.0000e-005		1.9100e-003	1.9100e-003		1.9100e-003	1.9100e-003	0.0000	15.1431	15.1431	5.4000e-004	2.7000e-004	15.2378

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.5152	0.0358	8.7000e-004	2.6678
Unmitigated	1.8240	0.0447	1.0800e-003	3.2642

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.130308 / 0.0821507	0.1737	4.2600e-003	1.0000e-004	0.3109
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.23793 / 0.780432	1.6503	0.0405	9.8000e-004	2.9533
Total		1.8240	0.0447	1.0800e-003	3.2642

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.104246 / 0.0771395	0.1443	3.4100e-003	8.0000e-005	0.2541
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.990341 / 0.732826	1.3709	0.0324	7.8000e-004	2.4137
Total		1.5152	0.0358	8.6000e-004	2.6678

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.9271	0.1730	0.0000	7.2518
Unmitigated	2.9271	0.1730	0.0000	7.2518

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	0.92	0.1868	0.0110	0.0000	0.4627
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	13.5	2.7404	0.1620	0.0000	6.7892
Total		2.9271	0.1730	0.0000	7.2518

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	0.92	0.1868	0.0110	0.0000	0.4627
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	13.5	2.7404	0.1620	0.0000	6.7892
Total		2.9271	0.1730	0.0000	7.2518

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

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11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	- 1,343.100 0	0.0000	0.0000	- 1,343.100 0

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Trees	37.6 / 25.5	- 1,343.100 0	0.0000	0.0000	- 1,343.100 0
Total		- 1,343.100 0	0.0000	0.0000	- 1,343.100 0

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	101.60	1000sqft	2.33	101,600.00	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,400.00	6
Single Family Housing	19.00	Dwelling Unit	6.17	67,450.00	54

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 2 includes 19 DU, anticipate 2 secondary units (apartments), 101,600 sf includes internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - 4,400 yds of rock material imported

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 standard will save 7% for residential or 53% with rooftop solar

Water Mitigation -

Stationary Sources - User Defined -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	230.00
tblConstructionPhase	NumDays	20.00	230.00
tblGrading	MaterialImported	0.00	4,400.00
tblLandUse	LandUseSquareFeet	2,000.00	2,400.00
tblLandUse	LandUseSquareFeet	34,200.00	67,450.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

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					
2022	13.3443	33.1487	36.6264	0.0675	18.2962	1.6141	19.9102	9.9917	1.4849	11.4766	0.0000	6,546.7247	6,546.7247	1.4130	0.0000	6,582.0498
Maximum	13.3443	33.1487	36.6264	0.0675	18.2962	1.6141	19.9102	9.9917	1.4849	11.4766	0.0000	6,546.7247	6,546.7247	1.4130	0.0000	6,582.0498

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	11.2528	24.1924	40.8708	0.0675	18.2842	0.1373	18.3477	9.9887	0.1366	10.0522	0.0000	6,546.7247	6,546.7247	1.4130	0.0000	6,582.0498
Maximum	11.2528	24.1924	40.8708	0.0675	18.2842	0.1373	18.3477	9.9887	0.1366	10.0522	0.0000	6,546.7247	6,546.7247	1.4130	0.0000	6,582.0498

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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	15.67	27.02	-11.59	0.00	0.07	91.49	7.85	0.03	90.80	12.41	0.00	0.00	0.00	0.00	0.00	0.00

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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	34.3402	0.6477	41.4134	0.0720		5.5719	5.5719		5.5719	5.5719	583.2064	247.7301	830.9364	0.5413	0.0459	858.1381
Energy	0.0155	0.1326	0.0564	8.5000e-004		0.0107	0.0107		0.0107	0.0107		169.2288	169.2288	3.2400e-003	3.1000e-003	170.2345
Mobile	0.5223	3.5135	5.4367	0.0238	1.6090	0.0176	1.6267	0.4311	0.0166	0.4477		2,419.8864	2,419.8864	0.1027		2,422.4542
Total	34.8780	4.2938	46.9065	0.0966	1.6090	5.6003	7.2093	0.4311	5.5992	6.0303	583.2064	2,836.8453	3,420.0516	0.6472	0.0490	3,450.8268

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	1.7441	0.3336	1.8756	2.0900e-003		0.0350	0.0350		0.0350	0.0350	0.0000	403.3771	403.3771	0.0107	7.3400e-003	405.8318
Energy	0.0146	0.1247	0.0531	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.1468	159.1468	3.0500e-003	2.9200e-003	160.0926
Mobile	0.5223	3.5135	5.4367	0.0238	1.6090	0.0176	1.6267	0.4311	0.0166	0.4477		2,419.8864	2,419.8864	0.1027		2,422.4542
Total	2.2810	3.9718	7.3653	0.0267	1.6090	0.0627	1.6717	0.4311	0.0616	0.4927	0.0000	2,982.4103	2,982.4103	0.1165	0.0103	2,988.3786

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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	N20	CO2e
Percent Reduction	93.46	7.50	84.30	72.41	0.00	98.88	76.81	0.00	98.90	91.83	100.00	-5.13	12.80	82.00	79.05	13.40

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/11/2022	5	20	
3	Building Construction	Building Construction	2/12/2022	12/30/2022	5	230	
4	Paving	Paving	2/12/2022	12/30/2022	5	230	
5	Architectural Coating	Architectural Coating	2/12/2022	12/30/2022	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.33

Residential Indoor: 141,446; Residential Outdoor: 47,149; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,096 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	550.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	51.00	19.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

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

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1032	0.0652	0.8293	2.3100e-003	0.2299	1.4800e-003	0.2314	0.0610	1.3600e-003	0.0623		229.6961	229.6961	6.6600e-003		229.8626
Total	0.1032	0.0652	0.8293	2.3100e-003	0.2299	1.4800e-003	0.2314	0.0610	1.3600e-003	0.0623		229.6961	229.6961	6.6600e-003		229.8626

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	0.6967	12.1620	22.9600	0.0380	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1032	0.0652	0.8293	2.3100e-003	0.2179	1.4800e-003	0.2194	0.0580	1.3600e-003	0.0594		229.6961	229.6961	6.6600e-003		229.8626
Total	0.1032	0.0652	0.8293	2.3100e-003	0.2179	1.4800e-003	0.2194	0.0580	1.3600e-003	0.0594		229.6961	229.6961	6.6600e-003		229.8626

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5848	0.0000	6.5848	3.3724	0.0000	3.3724			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5848	0.9409	7.5257	3.3724	0.8656	4.2380		2,872.0464	2,872.0464	0.9289		2,895.2684

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1891	6.3156	0.9453	0.0219	0.4817	0.0216	0.5033	0.1321	0.0207	0.1528		2,294.669 2	2,294.669 2	0.1145		2,297.531 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0860	0.0543	0.6911	1.9200e-003	0.1916	1.2300e-003	0.1928	0.0508	1.1300e-003	0.0519		191.4134	191.4134	5.5500e-003		191.5522
Total	0.2751	6.3699	1.6364	0.0238	0.6733	0.0229	0.6962	0.1829	0.0218	0.2047		2,486.082 6	2,486.082 6	0.1200		2,489.083 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5848	0.0000	6.5848	3.3724	0.0000	3.3724			0.0000			0.0000
Off-Road	0.5200	10.3327	18.9906	0.0297		0.0484	0.0484		0.0484	0.0484	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	0.5200	10.3327	18.9906	0.0297	6.5848	0.0484	6.6332	3.3724	0.0484	3.4208	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1891	6.3156	0.9453	0.0219	0.4599	0.0216	0.4815	0.1267	0.0207	0.1475		2,294.669 2	2,294.669 2	0.1145		2,297.531 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0860	0.0543	0.6911	1.9200e-003	0.1816	1.2300e-003	0.1828	0.0484	1.1300e-003	0.0495		191.4134	191.4134	5.5500e-003		191.5522
Total	0.2751	6.3699	1.6364	0.0238	0.6415	0.0229	0.6644	0.1751	0.0218	0.1969		2,486.082 6	2,486.082 6	0.1200		2,489.083 4

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0597	1.9057	0.3673	5.1000e-003	0.1165	5.1300e-003	0.1216	0.0335	4.9100e-003	0.0385		533.4550	533.4550	0.0406		534.4700
Worker	0.2925	0.1847	2.3498	6.5300e-003	0.6514	4.1800e-003	0.6556	0.1728	3.8500e-003	0.1766		650.8055	650.8055	0.0189		651.2774
Total	0.3522	2.0904	2.7171	0.0116	0.7679	9.3100e-003	0.7772	0.2063	8.7600e-003	0.2151		1,184.2605	1,184.2605	0.0595		1,185.7475

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	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0597	1.9057	0.3673	5.1000e-003	0.1115	5.1300e-003	0.1166	0.0323	4.9100e-003	0.0372		533.4550	533.4550	0.0406		534.4700
Worker	0.2925	0.1847	2.3498	6.5300e-003	0.6174	4.1800e-003	0.6216	0.1644	3.8500e-003	0.1683		650.8055	650.8055	0.0189		651.2774
Total	0.3522	2.0904	2.7171	0.0116	0.7289	9.3100e-003	0.7383	0.1967	8.7600e-003	0.2055		1,184.2605	1,184.2605	0.0595		1,185.7475

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1294	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0860	0.0543	0.6911	1.9200e-003	0.1916	1.2300e-003	0.1928	0.0508	1.1300e-003	0.0519		191.4134	191.4134	5.5500e-003		191.5522
Total	0.0860	0.0543	0.6911	1.9200e-003	0.1916	1.2300e-003	0.1928	0.0508	1.1300e-003	0.0519		191.4134	191.4134	5.5500e-003		191.5522

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3606	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0860	0.0543	0.6911	1.9200e-003	0.1816	1.2300e-003	0.1828	0.0484	1.1300e-003	0.0495		191.4134	191.4134	5.5500e-003		191.5522
Total	0.0860	0.0543	0.6911	1.9200e-003	0.1816	1.2300e-003	0.1828	0.0484	1.1300e-003	0.0495		191.4134	191.4134	5.5500e-003		191.5522

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.8086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	10.0132	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0574	0.0362	0.4608	1.2800e-003	0.1277	8.2000e-004	0.1286	0.0339	7.6000e-004	0.0346		127.6089	127.6089	3.7000e-003		127.7015
Total	0.0574	0.0362	0.4608	1.2800e-003	0.1277	8.2000e-004	0.1286	0.0339	7.6000e-004	0.0346		127.6089	127.6089	3.7000e-003		127.7015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.8086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062
Total	9.8631	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0574	0.0362	0.4608	1.2800e-003	0.1211	8.2000e-004	0.1219	0.0322	7.6000e-004	0.0330		127.6089	127.6089	3.7000e-003		127.7015
Total	0.0574	0.0362	0.4608	1.2800e-003	0.1211	8.2000e-004	0.1219	0.0322	7.6000e-004	0.0330		127.6089	127.6089	3.7000e-003		127.7015

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5223	3.5135	5.4367	0.0238	1.6090	0.0176	1.6267	0.4311	0.0166	0.4477		2,419.8864	2,419.8864	0.1027		2,422.4542
Unmitigated	0.5223	3.5135	5.4367	0.0238	1.6090	0.0176	1.6267	0.4311	0.0166	0.4477		2,419.8864	2,419.8864	0.1027		2,422.4542

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	13.18	14.32	12.14	48,897	48,897
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	180.88	188.29	163.78	665,204	665,204
Total	194.06	202.61	175.92	714,101	714,101

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.538831	0.031280	0.180238	0.098915	0.025981	0.005683	0.012706	0.096234	0.001312	0.001172	0.005254	0.001260	0.001133
Other Asphalt Surfaces	0.538831	0.031280	0.180238	0.098915	0.025981	0.005683	0.012706	0.096234	0.001312	0.001172	0.005254	0.001260	0.001133
Single Family Housing	0.538831	0.031280	0.180238	0.098915	0.025981	0.005683	0.012706	0.096234	0.001312	0.001172	0.005254	0.001260	0.001133

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0146	0.1247	0.0531	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.1468	159.1468	3.0500e-003	2.9200e-003	160.0926
NaturalGas Unmitigated	0.0155	0.1326	0.0564	8.5000e-004		0.0107	0.0107		0.0107	0.0107		169.2288	169.2288	3.2400e-003	3.1000e-003	170.2345

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	77.4601	8.4000e-004	7.1400e-003	3.0400e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		9.1130	9.1130	1.7000e-004	1.7000e-004	9.1671
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1360.99	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1159	160.1159	3.0700e-003	2.9400e-003	161.0674
Total		0.0155	0.1326	0.0564	8.5000e-004		0.0107	0.0107		0.0107	0.0107		169.2288	169.2288	3.2400e-003	3.1100e-003	170.2345

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.0734659	7.9000e-004	6.7700e-003	2.8800e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.6430	8.6430	1.7000e-004	1.6000e-004	8.6944
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.27928	0.0138	0.1179	0.0502	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003		150.5038	150.5038	2.8800e-003	2.7600e-003	151.3982
Total		0.0146	0.1247	0.0531	7.9000e-004		0.0101	0.0101		0.0101	0.0101		159.1468	159.1468	3.0500e-003	2.9200e-003	160.0926

6.0 Area Detail

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.7441	0.3336	1.8756	2.0900e-003		0.0350	0.0350		0.0350	0.0350	0.0000	403.3771	403.3771	0.0107	7.3400e-003	405.8318
Unmitigated	34.3402	0.6477	41.4134	0.0720		5.5719	5.5719		5.5719	5.5719	583.2064	247.7301	830.9364	0.5413	0.0459	858.1381

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6181					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	32.1383	0.6276	39.6712	0.0719		5.5623	5.5623		5.5623	5.5623	583.2064	244.5882	827.7946	0.5382	0.0459	854.9200
Landscaping	0.0530	0.0201	1.7422	9.0000e-005		9.6400e-003	9.6400e-003		9.6400e-003	9.6400e-003		3.1418	3.1418	3.0500e-003		3.2181
Total	34.3402	0.6477	41.4134	0.0720		5.5719	5.5719		5.5719	5.5719	583.2064	247.7301	830.9364	0.5413	0.0459	858.1381

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0367	0.3135	0.1334	2.0000e-003		0.0254	0.0254		0.0254	0.0254	0.0000	400.2353	400.2353	7.6700e-003	7.3400e-003	402.6137
Landscaping	0.0530	0.0201	1.7422	9.0000e-005		9.6400e-003	9.6400e-003		9.6400e-003	9.6400e-003		3.1418	3.1418	3.0500e-003		3.2181
Total	1.7441	0.3336	1.8756	2.0900e-003		0.0350	0.0350		0.0350	0.0350	0.0000	403.3771	403.3771	0.0107	7.3400e-003	405.8318

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Summer

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

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

Tierra Robles - Phase 2 Construction Only
Shasta County AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	101.60	1000sqft	2.33	101,600.00	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,400.00	6
Single Family Housing	19.00	Dwelling Unit	6.17	67,450.00	54

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 2 includes 19 DU, anticipate 2 secondary units (apartments), 101,600 sf includes internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - 4,400 yds of rock material imported

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 standard will save 7% for residential or 53% with rooftop solar

Water Mitigation -

Stationary Sources - User Defined -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	230.00
tblConstructionPhase	NumDays	20.00	230.00
tblGrading	MaterialImported	0.00	4,400.00
tblLandUse	LandUseSquareFeet	2,000.00	2,400.00
tblLandUse	LandUseSquareFeet	34,200.00	67,450.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

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					
2022	13.3210	33.1613	35.9972	0.0661	18.2962	1.6141	19.9102	9.9917	1.4849	11.4766	0.0000	6,397.8826	6,397.8826	1.4139	0.0000	6,433.2302
Maximum	13.3210	33.1613	35.9972	0.0661	18.2962	1.6141	19.9102	9.9917	1.4849	11.4766	0.0000	6,397.8826	6,397.8826	1.4139	0.0000	6,433.2302

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	11.2295	24.2654	40.2415	0.0661	18.2842	0.1376	18.3477	9.9887	0.1369	10.0522	0.0000	6,397.8826	6,397.8826	1.4139	0.0000	6,433.2302
Maximum	11.2295	24.2654	40.2415	0.0661	18.2842	0.1376	18.3477	9.9887	0.1369	10.0522	0.0000	6,397.8826	6,397.8826	1.4139	0.0000	6,433.2302

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	15.70	26.83	-11.79	0.00	0.07	91.48	7.85	0.03	90.78	12.41	0.00	0.00	0.00	0.00	0.00	0.00

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	34.3402	0.6477	41.4134	0.0720		5.5719	5.5719		5.5719	5.5719	583.2064	247.7301	830.9364	0.5413	0.0459	858.1381
Energy	0.0155	0.1326	0.0564	8.5000e-004		0.0107	0.0107		0.0107	0.0107		169.2288	169.2288	3.2400e-003	3.1000e-003	170.2345
Mobile	0.3993	3.6383	4.8310	0.0217	1.6090	0.0177	1.6268	0.4311	0.0167	0.4478		2,213.0714	2,213.0714	0.1068		2,215.7406
Total	34.7549	4.4185	46.3008	0.0945	1.6090	5.6004	7.2094	0.4311	5.5993	6.0304	583.2064	2,630.0303	3,213.2367	0.6513	0.0490	3,244.1132

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	1.7441	0.3336	1.8756	2.0900e-003		0.0350	0.0350		0.0350	0.0350	0.0000	403.3771	403.3771	0.0107	7.3400e-003	405.8318
Energy	0.0146	0.1247	0.0531	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.1468	159.1468	3.0500e-003	2.9200e-003	160.0926
Mobile	0.3993	3.6383	4.8310	0.0217	1.6090	0.0177	1.6268	0.4311	0.0167	0.4478		2,213.0714	2,213.0714	0.1068		2,215.7406
Total	2.1580	4.0966	6.7597	0.0246	1.6090	0.0628	1.6718	0.4311	0.0617	0.4928	0.0000	2,775.5954	2,775.5954	0.1205	0.0103	2,781.6650

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	93.79	7.29	85.40	73.98	0.00	98.88	76.81	0.00	98.90	91.83	100.00	-5.53	13.62	81.49	79.05	14.25

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/11/2022	5	20	
3	Building Construction	Building Construction	2/12/2022	12/30/2022	5	230	
4	Paving	Paving	2/12/2022	12/30/2022	5	230	
5	Architectural Coating	Architectural Coating	2/12/2022	12/30/2022	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.33

Residential Indoor: 141,446; Residential Outdoor: 47,149; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,096 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	550.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	51.00	19.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

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

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0969	0.0778	0.6618	2.0000e-003	0.2299	1.4800e-003	0.2314	0.0610	1.3600e-003	0.0623		198.9918	198.9918	5.5800e-003		199.1313
Total	0.0969	0.0778	0.6618	2.0000e-003	0.2299	1.4800e-003	0.2314	0.0610	1.3600e-003	0.0623		198.9918	198.9918	5.5800e-003		199.1313

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	0.6967	12.1620	22.9600	0.0380	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0969	0.0778	0.6618	2.0000e-003	0.2179	1.4800e-003	0.2194	0.0580	1.3600e-003	0.0594		198.9918	198.9918	5.5800e-003		199.1313
Total	0.0969	0.0778	0.6618	2.0000e-003	0.2179	1.4800e-003	0.2194	0.0580	1.3600e-003	0.0594		198.9918	198.9918	5.5800e-003		199.1313

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5848	0.0000	6.5848	3.3724	0.0000	3.3724			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5848	0.9409	7.5257	3.3724	0.8656	4.2380		2,872.0464	2,872.0464	0.9289		2,895.2684

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1963	6.4849	1.0778	0.0214	0.4817	0.0223	0.5040	0.1321	0.0213	0.1534		2,240.370 2	2,240.370 2	0.1298		2,243.614 9
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0807	0.0648	0.5515	1.6600e-003	0.1916	1.2300e-003	0.1928	0.0508	1.1300e-003	0.0519		165.8265	165.8265	4.6500e-003		165.9427
Total	0.2771	6.5497	1.6293	0.0230	0.6733	0.0235	0.6968	0.1829	0.0225	0.2054		2,406.196 7	2,406.196 7	0.1344		2,409.557 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5848	0.0000	6.5848	3.3724	0.0000	3.3724			0.0000			0.0000
Off-Road	0.5200	10.3327	18.9906	0.0297		0.0484	0.0484		0.0484	0.0484	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	0.5200	10.3327	18.9906	0.0297	6.5848	0.0484	6.6332	3.3724	0.0484	3.4208	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1963	6.4849	1.0778	0.0214	0.4599	0.0223	0.4822	0.1267	0.0213	0.1481		2,240.370 2	2,240.370 2	0.1298		2,243.614 9
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0807	0.0648	0.5515	1.6600e-003	0.1816	1.2300e-003	0.1828	0.0484	1.1300e-003	0.0495		165.8265	165.8265	4.6500e-003		165.9427
Total	0.2771	6.5497	1.6293	0.0230	0.6415	0.0235	0.6650	0.1751	0.0225	0.1976		2,406.196 7	2,406.196 7	0.1344		2,409.557 7

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0633	1.9255	0.4455	4.9200e-003	0.1165	5.3800e-003	0.1219	0.0335	5.1500e-003	0.0387		514.2530	514.2530	0.0461		515.4050
Worker	0.2744	0.2204	1.8750	5.6600e-003	0.6514	4.1800e-003	0.6556	0.1728	3.8500e-003	0.1766		563.8102	563.8102	0.0158		564.2053
Total	0.3377	2.1459	2.3206	0.0106	0.7679	9.5600e-003	0.7775	0.2063	9.0000e-003	0.2153		1,078.0631	1,078.0631	0.0619		1,079.6103

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	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	0.5335	10.9122	17.8738	0.0269		0.0846	0.0846		0.0846	0.0846	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0633	1.9255	0.4455	4.9200e-003	0.1115	5.3800e-003	0.1169	0.0323	5.1500e-003	0.0375		514.2530	514.2530	0.0461		515.4050
Worker	0.2744	0.2204	1.8750	5.6600e-003	0.6174	4.1800e-003	0.6216	0.1644	3.8500e-003	0.1683		563.8102	563.8102	0.0158		564.2053
Total	0.3377	2.1459	2.3206	0.0106	0.7289	9.5600e-003	0.7385	0.1967	9.0000e-003	0.2057		1,078.0631	1,078.0631	0.0619		1,079.6103

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1294	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0807	0.0648	0.5515	1.6600e-003	0.1916	1.2300e-003	0.1928	0.0508	1.1300e-003	0.0519		165.8265	165.8265	4.6500e-003		165.9427
Total	0.0807	0.0648	0.5515	1.6600e-003	0.1916	1.2300e-003	0.1928	0.0508	1.1300e-003	0.0519		165.8265	165.8265	4.6500e-003		165.9427

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3606	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0807	0.0648	0.5515	1.6600e-003	0.1816	1.2300e-003	0.1828	0.0484	1.1300e-003	0.0495		165.8265	165.8265	4.6500e-003		165.9427
Total	0.0807	0.0648	0.5515	1.6600e-003	0.1816	1.2300e-003	0.1828	0.0484	1.1300e-003	0.0495		165.8265	165.8265	4.6500e-003		165.9427

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.8086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	10.0132	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0538	0.0432	0.3677	1.1100e-003	0.1277	8.2000e-004	0.1286	0.0339	7.6000e-004	0.0346		110.5510	110.5510	3.1000e-003		110.6285
Total	0.0538	0.0432	0.3677	1.1100e-003	0.1277	8.2000e-004	0.1286	0.0339	7.6000e-004	0.0346		110.5510	110.5510	3.1000e-003		110.6285

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.8086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062
Total	9.8631	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0538	0.0432	0.3677	1.1100e-003	0.1211	8.2000e-004	0.1219	0.0322	7.6000e-004	0.0330		110.5510	110.5510	3.1000e-003		110.6285
Total	0.0538	0.0432	0.3677	1.1100e-003	0.1211	8.2000e-004	0.1219	0.0322	7.6000e-004	0.0330		110.5510	110.5510	3.1000e-003		110.6285

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3993	3.6383	4.8310	0.0217	1.6090	0.0177	1.6268	0.4311	0.0167	0.4478		2,213.071 4	2,213.071 4	0.1068		2,215.740 6
Unmitigated	0.3993	3.6383	4.8310	0.0217	1.6090	0.0177	1.6268	0.4311	0.0167	0.4478		2,213.071 4	2,213.071 4	0.1068		2,215.740 6

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	13.18	14.32	12.14	48,897	48,897
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	180.88	188.29	163.78	665,204	665,204
Total	194.06	202.61	175.92	714,101	714,101

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.538831	0.031280	0.180238	0.098915	0.025981	0.005683	0.012706	0.096234	0.001312	0.001172	0.005254	0.001260	0.001133
Other Asphalt Surfaces	0.538831	0.031280	0.180238	0.098915	0.025981	0.005683	0.012706	0.096234	0.001312	0.001172	0.005254	0.001260	0.001133
Single Family Housing	0.538831	0.031280	0.180238	0.098915	0.025981	0.005683	0.012706	0.096234	0.001312	0.001172	0.005254	0.001260	0.001133

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0146	0.1247	0.0531	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.1468	159.1468	3.0500e-003	2.9200e-003	160.0926
NaturalGas Unmitigated	0.0155	0.1326	0.0564	8.5000e-004		0.0107	0.0107		0.0107	0.0107		169.2288	169.2288	3.2400e-003	3.1000e-003	170.2345

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	77.4601	8.4000e-004	7.1400e-003	3.0400e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		9.1130	9.1130	1.7000e-004	1.7000e-004	9.1671
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1360.99	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1159	160.1159	3.0700e-003	2.9400e-003	161.0674
Total		0.0155	0.1326	0.0564	8.5000e-004		0.0107	0.0107		0.0107	0.0107		169.2288	169.2288	3.2400e-003	3.1100e-003	170.2345

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.0734659	7.9000e-004	6.7700e-003	2.8800e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.6430	8.6430	1.7000e-004	1.6000e-004	8.6944
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.27928	0.0138	0.1179	0.0502	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003		150.5038	150.5038	2.8800e-003	2.7600e-003	151.3982
Total		0.0146	0.1247	0.0531	7.9000e-004		0.0101	0.0101		0.0101	0.0101		159.1468	159.1468	3.0500e-003	2.9200e-003	160.0926

6.0 Area Detail

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6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.7441	0.3336	1.8756	2.0900e-003		0.0350	0.0350		0.0350	0.0350	0.0000	403.3771	403.3771	0.0107	7.3400e-003	405.8318
Unmitigated	34.3402	0.6477	41.4134	0.0720		5.5719	5.5719		5.5719	5.5719	583.2064	247.7301	830.9364	0.5413	0.0459	858.1381

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6181					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	32.1383	0.6276	39.6712	0.0719		5.5623	5.5623		5.5623	5.5623	583.2064	244.5882	827.7946	0.5382	0.0459	854.9200
Landscaping	0.0530	0.0201	1.7422	9.0000e-005		9.6400e-003	9.6400e-003		9.6400e-003	9.6400e-003		3.1418	3.1418	3.0500e-003		3.2181
Total	34.3402	0.6477	41.4134	0.0720		5.5719	5.5719		5.5719	5.5719	583.2064	247.7301	830.9364	0.5413	0.0459	858.1381

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0367	0.3135	0.1334	2.0000e-003		0.0254	0.0254		0.0254	0.0254	0.0000	400.2353	400.2353	7.6700e-003	7.3400e-003	402.6137
Landscaping	0.0530	0.0201	1.7422	9.0000e-005		9.6400e-003	9.6400e-003		9.6400e-003	9.6400e-003		3.1418	3.1418	3.0500e-003		3.2181
Total	1.7441	0.3336	1.8756	2.0900e-003		0.0350	0.0350		0.0350	0.0350	0.0000	403.3771	403.3771	0.0107	7.3400e-003	405.8318

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Phase 2 Construction Only - Shasta County AQMD Air District, Winter

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	101.10	1000sqft	2.32	101,100.00	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,400.00	6
Single Family Housing	24.00	Dwelling Unit	7.79	85,200.00	69

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 3 includes 24 DU, anticipates 2 secondary units (apartments) ,101,100 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - 4,380 cy of rock material imported

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 standards residential use 7 % less or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	300.00
tblConstructionPhase	NumDays	20.00	300.00
tblGrading	MaterialImported	0.00	4,380.00
tblLandUse	LandUseSquareFeet	2,000.00	2,400.00
tblLandUse	LandUseSquareFeet	43,200.00	85,200.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

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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					
2024	1.3811	3.4230	4.2817	8.3700e-003	0.3437	0.1483	0.4920	0.1367	0.1383	0.2750	0.0000	736.7903	736.7903	0.1658	0.0000	740.9362
2025	0.5373	1.0532	1.5432	2.8900e-003	0.0472	0.0442	0.0914	0.0127	0.0414	0.0540	0.0000	253.6554	253.6554	0.0550	0.0000	255.0308
Maximum	1.3811	3.4230	4.2817	8.3700e-003	0.3437	0.1483	0.4920	0.1367	0.1383	0.2750	0.0000	736.7903	736.7903	0.1658	0.0000	740.9362

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					
2024	1.1560	2.9208	4.9061	8.3700e-003	0.3375	0.0162	0.3536	0.1352	0.0161	0.1513	0.0000	736.7896	736.7896	0.1658	0.0000	740.9355
2025	0.4699	1.0450	1.7425	2.8900e-003	0.0448	5.8900e-003	0.0507	0.0121	5.8700e-003	0.0180	0.0000	253.6551	253.6551	0.0550	0.0000	255.0305
Maximum	1.1560	2.9208	4.9061	8.3700e-003	0.3375	0.0162	0.3536	0.1352	0.0161	0.1513	0.0000	736.7896	736.7896	0.1658	0.0000	740.9355

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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	15.25	11.40	-14.14	0.00	2.20	88.54	30.70	1.41	87.77	48.57	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	1-13-2024	4-12-2024	1.2150	0.8517
2	4-13-2024	7-12-2024	1.2485	1.1220
3	7-13-2024	10-12-2024	1.2624	1.1344
4	10-13-2024	1-12-2025	1.2538	1.1351
5	1-13-2025	4-12-2025	1.1634	1.1082
6	4-13-2025	7-12-2025	0.2583	0.2461
		Highest	1.2624	1.1351

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	2.1265	0.0341	2.2076	3.6600e-003		0.2834	0.2834		0.2834	0.2834	26.8569	11.5806	38.4375	0.0251	2.1100e-003	39.6943
Energy	3.5400e-003	0.0302	0.0129	1.9000e-004		2.4400e-003	2.4400e-003		2.4400e-003	2.4400e-003	0.0000	64.2805	64.2805	3.5600e-003	1.2400e-003	64.7388
Mobile	0.0789	0.7133	0.8877	4.5600e-003	0.3301	3.4000e-003	0.3335	0.0888	3.1900e-003	0.0920	0.0000	422.3352	422.3352	0.0191	0.0000	422.8118
Waste						0.0000	0.0000		0.0000	0.0000	3.6884	0.0000	3.6884	0.2180	0.0000	9.1377
Water						0.0000	0.0000		0.0000	0.0000	0.5374	1.7208	2.2583	0.0554	1.3400e-003	4.0414
Total	2.2089	0.7776	3.1081	8.4100e-003	0.3301	0.2893	0.6193	0.0888	0.2891	0.3778	31.0827	499.9171	530.9998	0.3211	4.6900e-003	540.4239

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3845	0.0181	0.2006	1.1000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	18.7482	18.7482	6.6000e-004	3.4000e-004	18.8654
Energy	3.3200e-003	0.0284	0.0121	1.8000e-004		2.3000e-003	2.3000e-003		2.3000e-003	2.3000e-003	0.0000	61.9564	61.9564	3.5000e-003	1.2000e-003	62.4003
Mobile	0.0789	0.7133	0.8877	4.5600e-003	0.3301	3.4000e-003	0.3335	0.0888	3.1900e-003	0.0920	0.0000	422.3352	422.3352	0.0191	0.0000	422.8118
Waste						0.0000	0.0000		0.0000	0.0000	3.6884	0.0000	3.6884	0.2180	0.0000	9.1377
Water						0.0000	0.0000		0.0000	0.0000	0.4299	1.4460	1.8759	0.0443	1.0700e-003	3.3030
Total	0.4667	0.7599	1.1003	4.8500e-003	0.3301	8.0600e-003	0.3381	0.0888	7.8500e-003	0.0966	4.1183	504.4858	508.6041	0.2855	2.6100e-003	516.5181

	ROG	NOx	CO	SO2	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	78.87	2.28	64.60	42.33	0.00	97.21	45.41	0.00	97.28	74.43	86.75	-0.91	4.22	11.08	44.35	4.42

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2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	-921.3000
Total	-921.3000

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/13/2024	1/26/2024	5	10	
2	Grading	Grading	1/27/2024	3/8/2024	5	30	
3	Building Construction	Building Construction	3/9/2024	5/2/2025	5	300	
4	Paving	Paving	3/9/2024	5/2/2025	5	300	
5	Architectural Coating	Architectural Coating	3/9/2024	5/2/2025	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 2.32

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Residential Indoor: 177,390; Residential Outdoor: 59,130; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,066 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	548.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	19.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6600e-003	5.6600e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	0.0133	0.1359	0.0917	1.9000e-004	0.0903	6.1500e-003	0.0965	0.0497	5.6600e-003	0.0553	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638

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3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.8000e-004	2.8300e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8627	0.8627	2.0000e-005	0.0000	0.8633
Total	3.9000e-004	2.8000e-004	2.8300e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8627	0.8627	2.0000e-005	0.0000	0.8633

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4800e-003	0.0608	0.1148	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	3.4800e-003	0.0608	0.1148	1.9000e-004	0.0903	3.1000e-004	0.0906	0.0497	3.1000e-004	0.0500	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638

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3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.8000e-004	2.8300e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.8627	0.8627	2.0000e-005	0.0000	0.8633
Total	3.9000e-004	2.8000e-004	2.8300e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.8627	0.8627	2.0000e-005	0.0000	0.8633

3.3 Grading - 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					0.1304	0.0000	0.1304	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0483	0.4857	0.4158	9.3000e-004		0.0200	0.0200		0.0184	0.0184	0.0000	81.7793	81.7793	0.0265	0.0000	82.4405
Total	0.0483	0.4857	0.4158	9.3000e-004	0.1304	0.0200	0.1505	0.0540	0.0184	0.0724	0.0000	81.7793	81.7793	0.0265	0.0000	82.4405

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3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3700e-003	0.0468	8.3200e-003	2.1000e-004	4.6000e-003	9.0000e-005	4.6900e-003	1.2700e-003	9.0000e-005	1.3600e-003	0.0000	19.8960	19.8960	7.6000e-004	0.0000	19.9151
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3100e-003	9.4000e-004	9.4500e-003	3.0000e-005	3.6400e-003	2.0000e-005	3.6700e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	2.8758	2.8758	7.0000e-005	0.0000	2.8775
Total	2.6800e-003	0.0477	0.0178	2.4000e-004	8.2400e-003	1.1000e-004	8.3600e-003	2.2400e-003	1.1000e-004	2.3500e-003	0.0000	22.7718	22.7718	8.3000e-004	0.0000	22.7926

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					0.1304	0.0000	0.1304	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.2891	0.5508	9.3000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	81.7792	81.7792	0.0265	0.0000	82.4404
Total	0.0152	0.2891	0.5508	9.3000e-004	0.1304	1.5200e-003	0.1319	0.0540	1.5200e-003	0.0555	0.0000	81.7792	81.7792	0.0265	0.0000	82.4404

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3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3700e-003	0.0468	8.3200e-003	2.1000e-004	4.3900e-003	9.0000e-005	4.4900e-003	1.2200e-003	9.0000e-005	1.3100e-003	0.0000	19.8960	19.8960	7.6000e-004	0.0000	19.9151
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3100e-003	9.4000e-004	9.4500e-003	3.0000e-005	3.4600e-003	2.0000e-005	3.4800e-003	9.2000e-004	2.0000e-005	9.5000e-004	0.0000	2.8758	2.8758	7.0000e-005	0.0000	2.8775
Total	2.6800e-003	0.0477	0.0178	2.4000e-004	7.8500e-003	1.1000e-004	7.9700e-003	2.1400e-003	1.1000e-004	2.2600e-003	0.0000	22.7718	22.7718	8.3000e-004	0.0000	22.7926

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1560	1.4250	1.7137	2.8600e-003		0.0650	0.0650		0.0612	0.0612	0.0000	245.7601	245.7601	0.0581	0.0000	247.2129
Total	0.1560	1.4250	1.7137	2.8600e-003		0.0650	0.0650		0.0612	0.0612	0.0000	245.7601	245.7601	0.0581	0.0000	247.2129

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3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6500e-003	0.1636	0.0340	5.2000e-004	0.0119	2.1000e-004	0.0121	3.4300e-003	2.0000e-004	3.6300e-003	0.0000	49.2696	49.2696	2.9000e-003	0.0000	49.3421
Worker	0.0245	0.0175	0.1769	6.0000e-004	0.0683	4.4000e-004	0.0687	0.0182	4.0000e-004	0.0186	0.0000	53.8538	53.8538	1.2900e-003	0.0000	53.8861
Total	0.0291	0.1811	0.2109	1.1200e-003	0.0801	6.5000e-004	0.0808	0.0216	6.0000e-004	0.0222	0.0000	103.1234	103.1234	4.1900e-003	0.0000	103.2282

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	0.0566	1.1567	1.8946	2.8600e-003		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003	0.0000	245.7598	245.7598	0.0581	0.0000	247.2126
Total	0.0566	1.1567	1.8946	2.8600e-003		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003	0.0000	245.7598	245.7598	0.0581	0.0000	247.2126

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3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6500e-003	0.1636	0.0340	5.2000e-004	0.0114	2.1000e-004	0.0116	3.3100e-003	2.0000e-004	3.5100e-003	0.0000	49.2696	49.2696	2.9000e-003	0.0000	49.3421
Worker	0.0245	0.0175	0.1769	6.0000e-004	0.0647	4.4000e-004	0.0652	0.0173	4.0000e-004	0.0177	0.0000	53.8538	53.8538	1.2900e-003	0.0000	53.8861
Total	0.0291	0.1811	0.2109	1.1200e-003	0.0761	6.5000e-004	0.0767	0.0206	6.0000e-004	0.0212	0.0000	103.1234	103.1234	4.1900e-003	0.0000	103.2282

3.4 Building 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	0.0602	0.5487	0.7077	1.1900e-003		0.0232	0.0232		0.0218	0.0218	0.0000	102.0446	102.0446	0.0240	0.0000	102.6443
Total	0.0602	0.5487	0.7077	1.1900e-003		0.0232	0.0232		0.0218	0.0218	0.0000	102.0446	102.0446	0.0240	0.0000	102.6443

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3.4 Building 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	1.8600e-003	0.0667	0.0134	2.1000e-004	4.9200e-003	8.0000e-005	5.0000e-003	1.4300e-003	8.0000e-005	1.5000e-003	0.0000	20.3017	20.3017	1.2100e-003	0.0000	20.3320
Worker	9.6100e-003	6.5700e-003	0.0678	2.4000e-004	0.0283	1.8000e-004	0.0285	7.5400e-003	1.6000e-004	7.7100e-003	0.0000	21.4617	21.4617	4.8000e-004	0.0000	21.4737
Total	0.0115	0.0733	0.0812	4.5000e-004	0.0333	2.6000e-004	0.0335	8.9700e-003	2.4000e-004	9.2100e-003	0.0000	41.7634	41.7634	1.6900e-003	0.0000	41.8057

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	0.0235	0.4801	0.7865	1.1900e-003		3.7200e-003	3.7200e-003		3.7200e-003	3.7200e-003	0.0000	102.0444	102.0444	0.0240	0.0000	102.6441
Total	0.0235	0.4801	0.7865	1.1900e-003		3.7200e-003	3.7200e-003		3.7200e-003	3.7200e-003	0.0000	102.0444	102.0444	0.0240	0.0000	102.6441

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3.4 Building 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	1.8600e-003	0.0667	0.0134	2.1000e-004	4.7100e-003	8.0000e-005	4.7900e-003	1.3700e-003	8.0000e-005	1.4500e-003	0.0000	20.3017	20.3017	1.2100e-003	0.0000	20.3320
Worker	9.6100e-003	6.5700e-003	0.0678	2.4000e-004	0.0269	1.8000e-004	0.0270	7.1800e-003	1.6000e-004	7.3500e-003	0.0000	21.4617	21.4617	4.8000e-004	0.0000	21.4737
Total	0.0115	0.0733	0.0812	4.5000e-004	0.0316	2.6000e-004	0.0318	8.5500e-003	2.4000e-004	8.8000e-003	0.0000	41.7634	41.7634	1.6900e-003	0.0000	41.8057

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1047	1.0096	1.5503	2.4200e-003		0.0497	0.0497		0.0457	0.0457	0.0000	212.2812	212.2812	0.0687	0.0000	213.9976
Paving	2.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1069	1.0096	1.5503	2.4200e-003		0.0497	0.0497		0.0457	0.0457	0.0000	212.2812	212.2812	0.0687	0.0000	213.9976

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3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9300e-003	4.9600e-003	0.0501	1.7000e-004	0.0193	1.2000e-004	0.0194	5.1400e-003	1.1000e-004	5.2600e-003	0.0000	15.2416	15.2416	3.7000e-004	0.0000	15.2508
Total	6.9300e-003	4.9600e-003	0.0501	1.7000e-004	0.0193	1.2000e-004	0.0194	5.1400e-003	1.1000e-004	5.2600e-003	0.0000	15.2416	15.2416	3.7000e-004	0.0000	15.2508

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	0.0354	1.0642	1.8333	2.4200e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	212.2810	212.2810	0.0687	0.0000	213.9974
Paving	2.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0376	1.0642	1.8333	2.4200e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	212.2810	212.2810	0.0687	0.0000	213.9974

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3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9300e-003	4.9600e-003	0.0501	1.7000e-004	0.0183	1.2000e-004	0.0184	4.9000e-003	1.1000e-004	5.0100e-003	0.0000	15.2416	15.2416	3.7000e-004	0.0000	15.2508
Total	6.9300e-003	4.9600e-003	0.0501	1.7000e-004	0.0183	1.2000e-004	0.0184	4.9000e-003	1.1000e-004	5.0100e-003	0.0000	15.2416	15.2416	3.7000e-004	0.0000	15.2508

3.5 Paving - 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	0.0403	0.3776	0.6414	1.0000e-003		0.0184	0.0184		0.0169	0.0169	0.0000	88.0847	88.0847	0.0285	0.0000	88.7969
Paving	8.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0412	0.3776	0.6414	1.0000e-003		0.0184	0.0184		0.0169	0.0169	0.0000	88.0847	88.0847	0.0285	0.0000	88.7969

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3.5 Paving - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7200e-003	1.8600e-003	0.0192	7.0000e-005	8.0200e-003	5.0000e-005	8.0700e-003	2.1300e-003	5.0000e-005	2.1800e-003	0.0000	6.0741	6.0741	1.4000e-004	0.0000	6.0775
Total	2.7200e-003	1.8600e-003	0.0192	7.0000e-005	8.0200e-003	5.0000e-005	8.0700e-003	2.1300e-003	5.0000e-005	2.1800e-003	0.0000	6.0741	6.0741	1.4000e-004	0.0000	6.0775

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	0.0147	0.4417	0.7610	1.0000e-003		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	88.0846	88.0846	0.0285	0.0000	88.7968
Paving	8.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0156	0.4417	0.7610	1.0000e-003		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	88.0846	88.0846	0.0285	0.0000	88.7968

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3.5 Paving - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7200e-003	1.8600e-003	0.0192	7.0000e-005	7.6000e-003	5.0000e-005	7.6500e-003	2.0300e-003	5.0000e-005	2.0800e-003	0.0000	6.0741	6.0741	1.4000e-004	0.0000	6.0775
Total	2.7200e-003	1.8600e-003	0.0192	7.0000e-005	7.6000e-003	5.0000e-005	7.6500e-003	2.0300e-003	5.0000e-005	2.0800e-003	0.0000	6.0741	6.0741	1.4000e-004	0.0000	6.0775

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9932					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0192	0.1292	0.1919	3.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003	0.0000	27.0645	27.0645	1.5200e-003	0.0000	27.1026
Total	1.0124	0.1292	0.1919	3.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003	0.0000	27.0645	27.0645	1.5200e-003	0.0000	27.1026

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3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0800e-003	3.6300e-003	0.0367	1.2000e-004	0.0142	9.0000e-005	0.0143	3.7700e-003	8.0000e-005	3.8600e-003	0.0000	11.1772	11.1772	2.7000e-004	0.0000	11.1839
Total	5.0800e-003	3.6300e-003	0.0367	1.2000e-004	0.0142	9.0000e-005	0.0143	3.7700e-003	8.0000e-005	3.8600e-003	0.0000	11.1772	11.1772	2.7000e-004	0.0000	11.1839

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9932					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7700e-003	0.1123	0.1942	3.1000e-004		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	27.0645	27.0645	1.5200e-003	0.0000	27.1026
Total	0.9990	0.1123	0.1942	3.1000e-004		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	27.0645	27.0645	1.5200e-003	0.0000	27.1026

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3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0800e-003	3.6300e-003	0.0367	1.2000e-004	0.0134	9.0000e-005	0.0135	3.5900e-003	8.0000e-005	3.6800e-003	0.0000	11.1772	11.1772	2.7000e-004	0.0000	11.1839
Total	5.0800e-003	3.6300e-003	0.0367	1.2000e-004	0.0134	9.0000e-005	0.0135	3.5900e-003	8.0000e-005	3.6800e-003	0.0000	11.1772	11.1772	2.7000e-004	0.0000	11.1839

3.6 Architectural Coating - 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					
Archit. Coating	0.4123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5200e-003	0.0504	0.0796	1.3000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	11.2343	11.2343	6.1000e-004	0.0000	11.2496
Total	0.4198	0.0504	0.0796	1.3000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	11.2343	11.2343	6.1000e-004	0.0000	11.2496

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3.6 Architectural Coating - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-003	1.3600e-003	0.0141	5.0000e-005	5.8800e-003	4.0000e-005	5.9200e-003	1.5700e-003	3.0000e-005	1.6000e-003	0.0000	4.4543	4.4543	1.0000e-004	0.0000	4.4568
Total	2.0000e-003	1.3600e-003	0.0141	5.0000e-005	5.8800e-003	4.0000e-005	5.9200e-003	1.5700e-003	3.0000e-005	1.6000e-003	0.0000	4.4543	4.4543	1.0000e-004	0.0000	4.4568

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4000e-003	0.0466	0.0806	1.3000e-004		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	11.2343	11.2343	6.1000e-004	0.0000	11.2496
Total	0.4147	0.0466	0.0806	1.3000e-004		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	11.2343	11.2343	6.1000e-004	0.0000	11.2496

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3.6 Architectural Coating - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-003	1.3600e-003	0.0141	5.0000e-005	5.5800e-003	4.0000e-005	5.6100e-003	1.4900e-003	3.0000e-005	1.5200e-003	0.0000	4.4543	4.4543	1.0000e-004	0.0000	4.4568
Total	2.0000e-003	1.3600e-003	0.0141	5.0000e-005	5.5800e-003	4.0000e-005	5.6100e-003	1.4900e-003	3.0000e-005	1.5200e-003	0.0000	4.4543	4.4543	1.0000e-004	0.0000	4.4568

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0789	0.7133	0.8877	4.5600e-003	0.3301	3.4000e-003	0.3335	0.0888	3.1900e-003	0.0920	0.0000	422.3352	422.3352	0.0191	0.0000	422.8118
Unmitigated	0.0789	0.7133	0.8877	4.5600e-003	0.3301	3.4000e-003	0.3335	0.0888	3.1900e-003	0.0920	0.0000	422.3352	422.3352	0.0191	0.0000	422.8118

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	13.18	14.32	12.14	48,897	48,897
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	228.48	237.84	206.88	840,257	840,257
Total	241.66	252.16	219.02	889,155	889,155

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550569	0.030337	0.179180	0.093645	0.021484	0.005033	0.012514	0.097714	0.001290	0.001118	0.004930	0.001233	0.000952
Other Asphalt Surfaces	0.550569	0.030337	0.179180	0.093645	0.021484	0.005033	0.012514	0.097714	0.001290	0.001118	0.004930	0.001233	0.000952
Single Family Housing	0.550569	0.030337	0.179180	0.093645	0.021484	0.005033	0.012514	0.097714	0.001290	0.001118	0.004930	0.001233	0.000952

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	29.0506	29.0506	2.8700e-003	5.9000e-004	29.2989
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	29.2867	29.2867	2.8900e-003	6.0000e-004	29.5371
NaturalGas Mitigated	3.3200e-003	0.0284	0.0121	1.8000e-004		2.3000e-003	2.3000e-003		2.3000e-003	2.3000e-003	0.0000	32.9058	32.9058	6.3000e-004	6.0000e-004	33.1013
NaturalGas Unmitigated	3.5400e-003	0.0302	0.0129	1.9000e-004		2.4400e-003	2.4400e-003		2.4400e-003	2.4400e-003	0.0000	34.9938	34.9938	6.7000e-004	6.4000e-004	35.2017

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	28272.9	1.5000e-004	1.3000e-003	5.5000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5088	1.5088	3.0000e-005	3.0000e-005	1.5177
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	627486	3.3800e-003	0.0289	0.0123	1.8000e-004		2.3400e-003	2.3400e-003		2.3400e-003	2.3400e-003	0.0000	33.4850	33.4850	6.4000e-004	6.1000e-004	33.6840
Total		3.5300e-003	0.0302	0.0129	1.9000e-004		2.4500e-003	2.4500e-003		2.4500e-003	2.4500e-003	0.0000	34.9938	34.9938	6.7000e-004	6.4000e-004	35.2017

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	26815	1.4000e-004	1.2400e-003	5.3000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4310	1.4310	3.0000e-005	3.0000e-005	1.4395
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	589816	3.1800e-003	0.0272	0.0116	1.7000e-004		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003	0.0000	31.4749	31.4749	6.0000e-004	5.8000e-004	31.6619
Total		3.3200e-003	0.0284	0.0121	1.8000e-004		2.3000e-003	2.3000e-003		2.3000e-003	2.3000e-003	0.0000	32.9058	32.9058	6.3000e-004	6.1000e-004	33.1014

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9355.04	1.2476	1.2000e-004	3.0000e-005	1.2582
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	210258	28.0392	2.7700e-003	5.7000e-004	28.2788
Total		29.2867	2.8900e-003	6.0000e-004	29.5371

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9257.82	1.2346	1.2000e-004	3.0000e-005	1.2451
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	208585	27.8160	2.7400e-003	5.7000e-004	28.0538
Total		29.0506	2.8600e-003	6.0000e-004	29.2989

6.0 Area Detail

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6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3845	0.0181	0.2006	1.1000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	18.7482	18.7482	6.6000e-004	3.4000e-004	18.8654
Unmitigated	2.1265	0.0341	2.2076	3.6600e-003		0.2834	0.2834		0.2834	0.2834	26.8569	11.5806	38.4375	0.0251	2.1100e-003	39.6943

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1406					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6314	0.0319	2.0138	3.6500e-003		0.2824	0.2824		0.2824	0.2824	26.8569	11.2634	38.1203	0.0248	2.1100e-003	39.3694
Landscaping	5.8800e-003	2.2300e-003	0.1938	1.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	0.3172	0.3172	3.1000e-004	0.0000	0.3248
Total	2.1265	0.0341	2.2076	3.6600e-003		0.2834	0.2834		0.2834	0.2834	26.8569	11.5806	38.4375	0.0251	2.1100e-003	39.6943

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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	0.0281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.8600e-003	0.0159	6.7700e-003	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4310	18.4310	3.5000e-004	3.4000e-004	18.5405
Landscaping	5.8800e-003	2.2300e-003	0.1938	1.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	0.3172	0.3172	3.1000e-004	0.0000	0.3248
Total	0.3845	0.0181	0.2006	1.1000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	18.7482	18.7482	6.6000e-004	3.4000e-004	18.8654

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Turf Reduction
- Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.8759	0.0443	1.0700e-003	3.3030
Unmitigated	2.2583	0.0554	1.3400e-003	4.0414

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.130308 / 0.0821507	0.1737	4.2600e-003	1.0000e-004	0.3109
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.5637 / 0.985809	2.0846	0.0511	1.2400e-003	3.7305
Total		2.2583	0.0554	1.3400e-003	4.0414

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.104246 / 0.0771395	0.1443	3.4100e-003	8.0000e-005	0.2541
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.25096 / 0.925674	1.7316	0.0409	9.9000e-004	3.0489
Total		1.8759	0.0443	1.0700e-003	3.3030

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.6884	0.2180	0.0000	9.1377
Unmitigated	3.6884	0.2180	0.0000	9.1377

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	0.92	0.1868	0.0110	0.0000	0.4627
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	17.25	3.5016	0.2069	0.0000	8.6751
Total		3.6883	0.2180	0.0000	9.1377

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	0.92	0.1868	0.0110	0.0000	0.4627
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	17.25	3.5016	0.2069	0.0000	8.6751
Total		3.6883	0.2180	0.0000	9.1377

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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Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Annual

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-921.3000	0.0000	0.0000	-921.3000

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Trees	62.1 / 53.8	-921.3000	0.0000	0.0000	-921.3000
Total		-921.3000	0.0000	0.0000	-921.3000

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

Tierra Robles Phase 3 - Construction Only
Shasta County AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	101.10	1000sqft	2.32	101,100.00	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,400.00	6
Single Family Housing	24.00	Dwelling Unit	7.79	85,200.00	69

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 3 includes 24 DU, anticipates 2 secondary units (apartments) ,101,100 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - 4,380 cy of rock material imported

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 standards residential use 7 % less or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	300.00
tblConstructionPhase	NumDays	20.00	300.00
tblGrading	MaterialImported	0.00	4,380.00
tblLandUse	LandUseSquareFeet	2,000.00	2,400.00
tblLandUse	LandUseSquareFeet	43,200.00	85,200.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

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					
2024	12.4695	35.4934	35.9708	0.0785	18.2962	1.3432	19.5269	9.9917	1.2360	11.1240	0.0000	7,722.5767	7,722.5767	2.0026	0.0000	7,772.6430
2025	12.2586	23.9081	35.5924	0.0666	1.1255	1.0055	2.1310	0.3011	0.9401	1.2413	0.0000	6,455.9485	6,455.9485	1.3794	0.0000	6,490.4335
Maximum	12.4695	35.4934	35.9708	0.0785	18.2962	1.3432	19.5269	9.9917	1.2360	11.1240	0.0000	7,722.5767	7,722.5767	2.0026	0.0000	7,772.6430

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					
2024	10.7511	23.7705	40.3699	0.0785	18.2842	0.1341	18.3477	9.9887	0.1335	10.0521	0.0000	7,722.5767	7,722.5767	2.0026	0.0000	7,772.6430
2025	10.7273	23.7228	40.1224	0.0666	1.0679	0.1338	1.2018	0.2870	0.1333	0.4203	0.0000	6,455.9485	6,455.9485	1.3794	0.0000	6,490.4335
Maximum	10.7511	23.7705	40.3699	0.0785	18.2842	0.1341	18.3477	9.9887	0.1335	10.0521	0.0000	7,722.5767	7,722.5767	2.0026	0.0000	7,772.6430

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	13.14	20.05	-12.48	0.00	0.36	88.59	9.74	0.17	87.74	15.31	0.00	0.00	0.00	0.00	0.00	0.00

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	42.5361	0.8018	51.2701	0.0891		6.8986	6.8986		6.8986	6.8986	722.0650	306.7080	1,028.7730	0.6701	0.0568	1,062.4507
Energy	0.0194	0.1656	0.0705	1.0600e-003		0.0134	0.0134		0.0134	0.0134		211.3646	211.3646	4.0500e-003	3.8800e-003	212.6206
Mobile	0.5738	4.0425	5.8792	0.0281	2.0013	0.0196	2.0209	0.5360	0.0184	0.5544		2,862.9861	2,862.9861	0.1208		2,866.0055
Total	43.1293	5.0099	57.2197	0.1182	2.0013	6.9316	8.9328	0.5360	6.9304	7.4663	722.0650	3,381.0588	4,103.1237	0.7949	0.0607	4,141.0769

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	2.1752	0.4129	2.3185	2.5900e-003		0.0433	0.0433		0.0433	0.0433	0.0000	499.4139	499.4139	0.0133	9.0800e-003	502.4525
Energy	0.0182	0.1557	0.0663	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.7531	198.7531	3.8100e-003	3.6400e-003	199.9342
Mobile	0.5738	4.0425	5.8792	0.0281	2.0013	0.0196	2.0209	0.5360	0.0184	0.5544		2,862.9861	2,862.9861	0.1208		2,866.0055
Total	2.7672	4.6111	8.2639	0.0317	2.0013	0.0755	2.0768	0.5360	0.0743	0.6103	0.0000	3,561.1531	3,561.1531	0.1378	0.0127	3,568.3922

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	93.58	7.96	85.56	73.22	0.00	98.91	76.75	0.00	98.93	91.83	100.00	-5.33	13.21	82.66	79.04	13.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/13/2024	1/26/2024	5	10	
2	Grading	Grading	1/27/2024	3/8/2024	5	30	
3	Building Construction	Building Construction	3/9/2024	5/2/2025	5	300	
4	Paving	Paving	3/9/2024	5/2/2025	5	300	
5	Architectural Coating	Architectural Coating	3/9/2024	5/2/2025	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 2.32

Residential Indoor: 177,390; Residential Outdoor: 59,130; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,066 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	548.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	19.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.010 0	3,688.010 0	1.1928		3,717.829 4
Total	2.6609	27.1760	18.3356	0.0381	18.0663	1.2294	19.2956	9.9307	1.1310	11.0617		3,688.010 0	3,688.010 0	1.1928		3,717.829 4

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0902	0.0524	0.7004	2.1300e-003	0.2299	1.4100e-003	0.2313	0.0610	1.3000e-003	0.0623		212.4073	212.4073	5.2700e-003		212.5390
Total	0.0902	0.0524	0.7004	2.1300e-003	0.2299	1.4100e-003	0.2313	0.0610	1.3000e-003	0.0623		212.4073	212.4073	5.2700e-003		212.5390

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	0.6967	12.1620	22.9600	0.0381	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0902	0.0524	0.7004	2.1300e-003	0.2179	1.4100e-003	0.2193	0.0580	1.3000e-003	0.0593		212.4073	212.4073	5.2700e-003		212.5390
Total	0.0902	0.0524	0.7004	2.1300e-003	0.2179	1.4100e-003	0.2193	0.0580	1.3000e-003	0.0593		212.4073	212.4073	5.2700e-003		212.5390

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6949	0.0000	8.6949	3.5998	0.0000	3.5998			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	3.2181	32.3770	27.7228	0.0621	8.6949	1.3354	10.0303	3.5998	1.2286	4.8283		6,009.7487	6,009.7487	1.9437		6,058.3405

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0901	3.0582	0.5290	0.0141	0.3200	6.2700e-003	0.3262	0.0878	5.9900e-003	0.0937		1,476.8199	1,476.8199	0.0531		1,478.1480
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1002	0.0582	0.7782	2.3700e-003	0.2555	1.5700e-003	0.2570	0.0678	1.4400e-003	0.0692		236.0081	236.0081	5.8500e-003		236.1545
Total	0.1903	3.1165	1.3072	0.0165	0.5754	7.8400e-003	0.5833	0.1555	7.4300e-003	0.1629		1,712.8281	1,712.8281	0.0590		1,714.3024

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					8.6949	0.0000	8.6949	3.5998	0.0000	3.5998			0.0000			0.0000
Off-Road	1.0110	19.2707	36.7226	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	1.0110	19.2707	36.7226	0.0621	8.6949	0.1015	8.7964	3.5998	0.1015	3.7013	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0901	3.0582	0.5290	0.0141	0.3055	6.2700e-003	0.3118	0.0842	5.9900e-003	0.0902		1,476.8199	1,476.8199	0.0531		1,478.1480
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1002	0.0582	0.7782	2.3700e-003	0.2421	1.5700e-003	0.2437	0.0645	1.4400e-003	0.0659		236.0081	236.0081	5.8500e-003		236.1545
Total	0.1903	3.1165	1.3072	0.0165	0.5476	7.8400e-003	0.5555	0.1487	7.4300e-003	0.1561		1,712.8281	1,712.8281	0.0590		1,714.3024

3.4 Building Construction - 2024

Unmitigated Construction On-Site

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

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0431	1.5290	0.2943	4.9700e-003	0.1165	1.9300e-003	0.1184	0.0335	1.8400e-003	0.0354		520.2040	520.2040	0.0285		520.9166
Worker	0.2655	0.1543	2.0622	6.2800e-003	0.6770	4.1500e-003	0.6811	0.1795	3.8200e-003	0.1834		625.4215	625.4215	0.0155		625.8094
Total	0.3087	1.6834	2.3564	0.0113	0.7934	6.0800e-003	0.7995	0.2131	5.6600e-003	0.2187		1,145.6255	1,145.6255	0.0440		1,146.7259

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0431	1.5290	0.2943	4.9700e-003	0.1115	1.9300e-003	0.1134	0.0323	1.8400e-003	0.0342		520.2040	520.2040	0.0285		520.9166
Worker	0.2655	0.1543	2.0622	6.2800e-003	0.6417	4.1500e-003	0.6458	0.1709	3.8200e-003	0.1747		625.4215	625.4215	0.0155		625.8094
Total	0.3087	1.6834	2.3564	0.0113	0.7532	6.0800e-003	0.7592	0.2032	5.6600e-003	0.2088		1,145.6255	1,145.6255	0.0440		1,146.7259

3.4 Building 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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.4 Building 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0416	1.5033	0.2785	4.9400e-003	0.1165	1.8200e-003	0.1183	0.0335	1.7400e-003	0.0353		516.3370	516.3370	0.0286		517.0525
Worker	0.2506	0.1396	1.9068	6.0200e-003	0.6770	4.0700e-003	0.6810	0.1795	3.7500e-003	0.1833		600.4054	600.4054	0.0139		600.7539
Total	0.2922	1.6429	2.1852	0.0110	0.7934	5.8900e-003	0.7993	0.2131	5.4900e-003	0.2186		1,116.7424	1,116.7424	0.0426		1,117.8063

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.4 Building 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0416	1.5033	0.2785	4.9400e-003	0.1115	1.8200e-003	0.1133	0.0323	1.7400e-003	0.0341		516.3370	516.3370	0.0286		517.0525
Worker	0.2506	0.1396	1.9068	6.0200e-003	0.6417	4.0700e-003	0.6457	0.1709	3.7500e-003	0.1746		600.4054	600.4054	0.0139		600.7539
Total	0.2922	1.6429	2.1852	0.0110	0.7532	5.8900e-003	0.7591	0.2032	5.4900e-003	0.2087		1,116.7424	1,116.7424	0.0426		1,117.8063

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0084	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0752	0.0437	0.5836	1.7800e-003	0.1916	1.1700e-003	0.1928	0.0508	1.0800e-003	0.0519		177.0061	177.0061	4.3900e-003		177.1159
Total	0.0752	0.0437	0.5836	1.7800e-003	0.1916	1.1700e-003	0.1928	0.0508	1.0800e-003	0.0519		177.0061	177.0061	4.3900e-003		177.1159

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3544	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0752	0.0437	0.5836	1.7800e-003	0.1816	1.1700e-003	0.1828	0.0484	1.0800e-003	0.0494		177.0061	177.0061	4.3900e-003		177.1159
Total	0.0752	0.0437	0.5836	1.7800e-003	0.1816	1.1700e-003	0.1828	0.0484	1.0800e-003	0.0494		177.0061	177.0061	4.3900e-003		177.1159

3.5 Paving - 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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9354	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0395	0.5397	1.7000e-003	0.1916	1.1500e-003	0.1928	0.0508	1.0600e-003	0.0519		169.9261	169.9261	3.9400e-003		170.0247
Total	0.0709	0.0395	0.5397	1.7000e-003	0.1916	1.1500e-003	0.1928	0.0508	1.0600e-003	0.0519		169.9261	169.9261	3.9400e-003		170.0247

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3544	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0395	0.5397	1.7000e-003	0.1816	1.1500e-003	0.1828	0.0484	1.0600e-003	0.0494		169.9261	169.9261	3.9400e-003		170.0247
Total	0.0709	0.0395	0.5397	1.7000e-003	0.1816	1.1500e-003	0.1828	0.0484	1.0600e-003	0.0494		169.9261	169.9261	3.9400e-003		170.0247

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.3699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	9.5506	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0551	0.0320	0.4280	1.3000e-003	0.1405	8.6000e-004	0.1414	0.0373	7.9000e-004	0.0381		129.8045	129.8045	3.2200e-003		129.8850
Total	0.0551	0.0320	0.4280	1.3000e-003	0.1405	8.6000e-004	0.1414	0.0373	7.9000e-004	0.0381		129.8045	129.8045	3.2200e-003		129.8850

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.3699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	9.4244	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0551	0.0320	0.4280	1.3000e-003	0.1332	8.6000e-004	0.1340	0.0355	7.9000e-004	0.0363		129.8045	129.8045	3.2200e-003		129.8850
Total	0.0551	0.0320	0.4280	1.3000e-003	0.1332	8.6000e-004	0.1340	0.0355	7.9000e-004	0.0363		129.8045	129.8045	3.2200e-003		129.8850

3.6 Architectural Coating - 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					
Archit. Coating	9.3699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	9.5407	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0520	0.0290	0.3957	1.2500e-003	0.1405	8.5000e-004	0.1414	0.0373	7.8000e-004	0.0380		124.6124	124.6124	2.8900e-003		124.6848
Total	0.0520	0.0290	0.3957	1.2500e-003	0.1405	8.5000e-004	0.1414	0.0373	7.8000e-004	0.0380		124.6124	124.6124	2.8900e-003		124.6848

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.3699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	9.4244	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0520	0.0290	0.3957	1.2500e-003	0.1332	8.5000e-004	0.1340	0.0355	7.8000e-004	0.0362		124.6124	124.6124	2.8900e-003		124.6848
Total	0.0520	0.0290	0.3957	1.2500e-003	0.1332	8.5000e-004	0.1340	0.0355	7.8000e-004	0.0362		124.6124	124.6124	2.8900e-003		124.6848

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5738	4.0425	5.8792	0.0281	2.0013	0.0196	2.0209	0.5360	0.0184	0.5544		2,862.986 1	2,862.986 1	0.1208		2,866.005 5
Unmitigated	0.5738	4.0425	5.8792	0.0281	2.0013	0.0196	2.0209	0.5360	0.0184	0.5544		2,862.986 1	2,862.986 1	0.1208		2,866.005 5

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	13.18	14.32	12.14	48,897	48,897
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	228.48	237.84	206.88	840,257	840,257
Total	241.66	252.16	219.02	889,155	889,155

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550569	0.030337	0.179180	0.093645	0.021484	0.005033	0.012514	0.097714	0.001290	0.001118	0.004930	0.001233	0.000952
Other Asphalt Surfaces	0.550569	0.030337	0.179180	0.093645	0.021484	0.005033	0.012514	0.097714	0.001290	0.001118	0.004930	0.001233	0.000952
Single Family Housing	0.550569	0.030337	0.179180	0.093645	0.021484	0.005033	0.012514	0.097714	0.001290	0.001118	0.004930	0.001233	0.000952

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0182	0.1557	0.0663	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.7531	198.7531	3.8100e-003	3.6400e-003	199.9342
NaturalGas Unmitigated	0.0194	0.1656	0.0705	1.0600e-003		0.0134	0.0134		0.0134	0.0134		211.3646	211.3646	4.0500e-003	3.8800e-003	212.6206

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	77.4601	8.4000e-004	7.1400e-003	3.0400e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		9.1130	9.1130	1.7000e-004	1.7000e-004	9.1671
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1719.14	0.0185	0.1584	0.0674	1.0100e-003		0.0128	0.0128		0.0128	0.0128		202.2517	202.2517	3.8800e-003	3.7100e-003	203.4535
Total		0.0194	0.1656	0.0705	1.0600e-003		0.0134	0.0134		0.0134	0.0134		211.3646	211.3646	4.0500e-003	3.8800e-003	212.6206

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					
Apartments Low Rise	0.0734659	7.9000e-004	6.7700e-003	2.8800e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.6430	8.6430	1.7000e-004	1.6000e-004	8.6944
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.61594	0.0174	0.1489	0.0634	9.5000e-004		0.0120	0.0120		0.0120	0.0120		190.1100	190.1100	3.6400e-003	3.4900e-003	191.2398
Total		0.0182	0.1557	0.0663	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.7531	198.7531	3.8100e-003	3.6500e-003	199.9342

6.0 Area Detail

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.1752	0.4129	2.3185	2.5900e-003		0.0433	0.0433		0.0433	0.0433	0.0000	499.4139	499.4139	0.0133	9.0800e-003	502.4525
Unmitigated	42.5361	0.8018	51.2701	0.0891		6.8986	6.8986		6.8986	6.8986	722.0650	306.7080	1,028.7730	0.6701	0.0568	1,062.4507

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.7701					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	1.9105					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Hearth	39.7903	0.7771	49.1168	0.0890		6.8866	6.8866		6.8866	6.8866	722.0650	302.8235	1,024.8885	0.6664	0.0568		1,058.4724
Landscaping	0.0653	0.0248	2.1533	1.1000e-004		0.0119	0.0119		0.0119	0.0119		3.8845	3.8845	3.7600e-003			3.9784
Total	42.5361	0.8018	51.2701	0.0891		6.8986	6.8986		6.8986	6.8986	722.0650	306.7080	1,028.7730	0.6701	0.0568		1,062.4507

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9105					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0454	0.3882	0.1652	2.4800e-003		0.0314	0.0314		0.0314	0.0314	0.0000	495.5294	495.5294	9.5000e-003	9.0800e-003	498.4741
Landscaping	0.0653	0.0248	2.1533	1.1000e-004		0.0119	0.0119		0.0119	0.0119		3.8845	3.8845	3.7600e-003		3.9784
Total	2.1752	0.4129	2.3185	2.5900e-003		0.0433	0.0433		0.0433	0.0433	0.0000	499.4139	499.4139	0.0133	9.0800e-003	502.4525

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Turf Reduction
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Summer

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

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

Tierra Robles Phase 3 - Construction Only
Shasta County AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	101.10	1000sqft	2.32	101,100.00	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,400.00	6
Single Family Housing	24.00	Dwelling Unit	7.79	85,200.00	69

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 3 includes 24 DU, anticipates 2 secondary units (apartments) ,101,100 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - 4,380 cy of rock material imported

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 standards residential use 7 % less or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	300.00
tblConstructionPhase	NumDays	20.00	300.00
tblGrading	MaterialImported	0.00	4,380.00
tblLandUse	LandUseSquareFeet	2,000.00	2,400.00
tblLandUse	LandUseSquareFeet	43,200.00	85,200.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

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					
2024	12.4515	35.5659	35.3871	0.0779	18.2962	1.3433	19.5269	9.9917	1.2361	11.1240	0.0000	7,656.0307	7,656.0307	2.0089	0.0000	7,706.2520
2025	12.2433	23.9561	35.0483	0.0653	1.1255	1.0055	2.1311	0.3011	0.9402	1.2413	0.0000	6,318.1138	6,318.1138	1.3799	0.0000	6,352.6114
Maximum	12.4515	35.5659	35.3871	0.0779	18.2962	1.3433	19.5269	9.9917	1.2361	11.1240	0.0000	7,656.0307	7,656.0307	2.0089	0.0000	7,706.2520

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					
2024	10.7331	23.8241	39.7863	0.0779	18.2842	0.1341	18.3477	9.9887	0.1335	10.0521	0.0000	7,656.0307	7,656.0307	2.0089	0.0000	7,706.2520
2025	10.7119	23.7708	39.5784	0.0653	1.0679	0.1339	1.2018	0.2870	0.1333	0.4203	0.0000	6,318.1138	6,318.1138	1.3799	0.0000	6,352.6114
Maximum	10.7331	23.8241	39.7863	0.0779	18.2842	0.1341	18.3477	9.9887	0.1335	10.0521	0.0000	7,656.0307	7,656.0307	2.0089	0.0000	7,706.2520

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	13.16	20.04	-12.68	0.00	0.36	88.59	9.74	0.17	87.74	15.31	0.00	0.00	0.00	0.00	0.00	0.00

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	42.5361	0.8018	51.2701	0.0891		6.8986	6.8986		6.8986	6.8986	722.0650	306.7080	1,028.7730	0.6701	0.0568	1,062.4507
Energy	0.0194	0.1656	0.0705	1.0600e-003		0.0134	0.0134		0.0134	0.0134		211.3646	211.3646	4.0500e-003	3.8800e-003	212.6206
Mobile	0.4365	4.1640	5.2164	0.0257	2.0013	0.0197	2.0210	0.5360	0.0185	0.5544		2,622.6869	2,622.6869	0.1271		2,625.8646
Total	42.9920	5.1314	56.5569	0.1159	2.0013	6.9317	8.9329	0.5360	6.9304	7.4664	722.0650	3,140.7595	3,862.8245	0.8013	0.0607	3,900.9360

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	2.1752	0.4129	2.3185	2.5900e-003		0.0433	0.0433		0.0433	0.0433	0.0000	499.4139	499.4139	0.0133	9.0800e-003	502.4525
Energy	0.0182	0.1557	0.0663	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.7531	198.7531	3.8100e-003	3.6400e-003	199.9342
Mobile	0.4365	4.1640	5.2164	0.0257	2.0013	0.0197	2.0210	0.5360	0.0185	0.5544		2,622.6869	2,622.6869	0.1271		2,625.8646
Total	2.6299	4.7326	7.6011	0.0293	2.0013	0.0756	2.0769	0.5360	0.0744	0.6103	0.0000	3,320.8539	3,320.8539	0.1442	0.0127	3,328.2512

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	93.88	7.77	86.56	74.73	0.00	98.91	76.75	0.00	98.93	91.83	100.00	-5.73	14.03	82.01	79.04	14.68

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/13/2024	1/26/2024	5	10	
2	Grading	Grading	1/27/2024	3/8/2024	5	30	
3	Building Construction	Building Construction	3/9/2024	5/2/2025	5	300	
4	Paving	Paving	3/9/2024	5/2/2025	5	300	
5	Architectural Coating	Architectural Coating	3/9/2024	5/2/2025	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 2.32

Residential Indoor: 177,390; Residential Outdoor: 59,130; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,066 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	548.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	19.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.010 0	3,688.010 0	1.1928		3,717.829 4
Total	2.6609	27.1760	18.3356	0.0381	18.0663	1.2294	19.2956	9.9307	1.1310	11.0617		3,688.010 0	3,688.010 0	1.1928		3,717.829 4

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0855	0.0624	0.5540	1.8500e-003	0.2299	1.4100e-003	0.2313	0.0610	1.3000e-003	0.0623		184.0426	184.0426	4.4000e-003		184.1526
Total	0.0855	0.0624	0.5540	1.8500e-003	0.2299	1.4100e-003	0.2313	0.0610	1.3000e-003	0.0623		184.0426	184.0426	4.4000e-003		184.1526

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	0.6967	12.1620	22.9600	0.0381	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0855	0.0624	0.5540	1.8500e-003	0.2179	1.4100e-003	0.2193	0.0580	1.3000e-003	0.0593		184.0426	184.0426	4.4000e-003		184.1526
Total	0.0855	0.0624	0.5540	1.8500e-003	0.2179	1.4100e-003	0.2193	0.0580	1.3000e-003	0.0593		184.0426	184.0426	4.4000e-003		184.1526

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6949	0.0000	8.6949	3.5998	0.0000	3.5998			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	3.2181	32.3770	27.7228	0.0621	8.6949	1.3354	10.0303	3.5998	1.2286	4.8283		6,009.7487	6,009.7487	1.9437		6,058.3405

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0933	3.1196	0.5899	0.0138	0.3200	6.3500e-003	0.3263	0.0878	6.0700e-003	0.0938		1,441.7903	1,441.7903	0.0603		1,443.2975
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0950	0.0694	0.6156	2.0500e-003	0.2555	1.5700e-003	0.2570	0.0678	1.4400e-003	0.0692		204.4918	204.4918	4.8900e-003		204.6140
Total	0.1883	3.1890	1.2055	0.0158	0.5754	7.9200e-003	0.5834	0.1555	7.5100e-003	0.1630		1,646.2820	1,646.2820	0.0652		1,647.9115

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					8.6949	0.0000	8.6949	3.5998	0.0000	3.5998			0.0000			0.0000
Off-Road	1.0110	19.2707	36.7226	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	1.0110	19.2707	36.7226	0.0621	8.6949	0.1015	8.7964	3.5998	0.1015	3.7013	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0933	3.1196	0.5899	0.0138	0.3055	6.3500e-003	0.3118	0.0842	6.0700e-003	0.0903		1,441.7903	1,441.7903	0.0603		1,443.2975
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0950	0.0694	0.6156	2.0500e-003	0.2421	1.5700e-003	0.2437	0.0645	1.4400e-003	0.0659		204.4918	204.4918	4.8900e-003		204.6140
Total	0.1883	3.1890	1.2055	0.0158	0.5476	7.9200e-003	0.5555	0.1487	7.5100e-003	0.1562		1,646.2820	1,646.2820	0.0652		1,647.9115

3.4 Building Construction - 2024

Unmitigated Construction On-Site

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

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0458	1.5387	0.3529	4.8000e-003	0.1165	1.9700e-003	0.1184	0.0335	1.8800e-003	0.0354		501.5406	501.5406	0.0324		502.3508
Worker	0.2517	0.1838	1.6313	5.4400e-003	0.6770	4.1500e-003	0.6811	0.1795	3.8200e-003	0.1834		541.9032	541.9032	0.0130		542.2272
Total	0.2974	1.7225	1.9842	0.0102	0.7934	6.1200e-003	0.7996	0.2131	5.7000e-003	0.2188		1,043.4438	1,043.4438	0.0454		1,044.5779

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0458	1.5387	0.3529	4.8000e-003	0.1115	1.9700e-003	0.1135	0.0323	1.8800e-003	0.0342		501.5406	501.5406	0.0324		502.3508
Worker	0.2517	0.1838	1.6313	5.4400e-003	0.6417	4.1500e-003	0.6458	0.1709	3.8200e-003	0.1747		541.9032	541.9032	0.0130		542.2272
Total	0.2974	1.7225	1.9842	0.0102	0.7532	6.1200e-003	0.7593	0.2032	5.7000e-003	0.2089		1,043.4438	1,043.4438	0.0454		1,044.5779

3.4 Building 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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.4 Building 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0441	1.5117	0.3344	4.7600e-003	0.1165	1.8600e-003	0.1183	0.0335	1.7800e-003	0.0353		497.9447	497.9447	0.0326		498.7587
Worker	0.2386	0.1661	1.5042	5.2200e-003	0.6770	4.0700e-003	0.6810	0.1795	3.7500e-003	0.1833		520.2732	520.2732	0.0116		520.5640
Total	0.2827	1.6778	1.8386	9.9800e-003	0.7934	5.9300e-003	0.7994	0.2131	5.5300e-003	0.2186		1,018.2179	1,018.2179	0.0442		1,019.3226

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.4 Building 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0441	1.5117	0.3344	4.7600e-003	0.1115	1.8600e-003	0.1134	0.0323	1.7800e-003	0.0341		497.9447	497.9447	0.0326		498.7587
Worker	0.2386	0.1661	1.5042	5.2200e-003	0.6417	4.0700e-003	0.6457	0.1709	3.7500e-003	0.1746		520.2732	520.2732	0.0116		520.5640
Total	0.2827	1.6778	1.8386	9.9800e-003	0.7532	5.9300e-003	0.7591	0.2032	5.5300e-003	0.2087		1,018.2179	1,018.2179	0.0442		1,019.3226

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0084	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0712	0.0520	0.4617	1.5400e-003	0.1916	1.1700e-003	0.1928	0.0508	1.0800e-003	0.0519		153.3688	153.3688	3.6700e-003		153.4605
Total	0.0712	0.0520	0.4617	1.5400e-003	0.1916	1.1700e-003	0.1928	0.0508	1.0800e-003	0.0519		153.3688	153.3688	3.6700e-003		153.4605

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3544	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0712	0.0520	0.4617	1.5400e-003	0.1816	1.1700e-003	0.1828	0.0484	1.0800e-003	0.0494		153.3688	153.3688	3.6700e-003		153.4605
Total	0.0712	0.0520	0.4617	1.5400e-003	0.1816	1.1700e-003	0.1828	0.0484	1.0800e-003	0.0494		153.3688	153.3688	3.6700e-003		153.4605

3.5 Paving - 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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9354	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0675	0.0470	0.4257	1.4800e-003	0.1916	1.1500e-003	0.1928	0.0508	1.0600e-003	0.0519		147.2471	147.2471	3.2900e-003		147.3294
Total	0.0675	0.0470	0.4257	1.4800e-003	0.1916	1.1500e-003	0.1928	0.0508	1.0600e-003	0.0519		147.2471	147.2471	3.2900e-003		147.3294

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3544	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0675	0.0470	0.4257	1.4800e-003	0.1816	1.1500e-003	0.1828	0.0484	1.0600e-003	0.0494		147.2471	147.2471	3.2900e-003		147.3294
Total	0.0675	0.0470	0.4257	1.4800e-003	0.1816	1.1500e-003	0.1828	0.0484	1.0600e-003	0.0494		147.2471	147.2471	3.2900e-003		147.3294

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.3699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	9.5506	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0522	0.0382	0.3386	1.1300e-003	0.1405	8.6000e-004	0.1414	0.0373	7.9000e-004	0.0381		112.4705	112.4705	2.6900e-003		112.5377
Total	0.0522	0.0382	0.3386	1.1300e-003	0.1405	8.6000e-004	0.1414	0.0373	7.9000e-004	0.0381		112.4705	112.4705	2.6900e-003		112.5377

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.3699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	9.4244	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0522	0.0382	0.3386	1.1300e-003	0.1332	8.6000e-004	0.1340	0.0355	7.9000e-004	0.0363		112.4705	112.4705	2.6900e-003		112.5377
Total	0.0522	0.0382	0.3386	1.1300e-003	0.1332	8.6000e-004	0.1340	0.0355	7.9000e-004	0.0363		112.4705	112.4705	2.6900e-003		112.5377

3.6 Architectural Coating - 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					
Archit. Coating	9.3699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	9.5407	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0495	0.0345	0.3122	1.0800e-003	0.1405	8.5000e-004	0.1414	0.0373	7.8000e-004	0.0380		107.9812	107.9812	2.4100e-003		108.0416
Total	0.0495	0.0345	0.3122	1.0800e-003	0.1405	8.5000e-004	0.1414	0.0373	7.8000e-004	0.0380		107.9812	107.9812	2.4100e-003		108.0416

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.3699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	9.4244	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0495	0.0345	0.3122	1.0800e-003	0.1332	8.5000e-004	0.1340	0.0355	7.8000e-004	0.0362		107.9812	107.9812	2.4100e-003		108.0416
Total	0.0495	0.0345	0.3122	1.0800e-003	0.1332	8.5000e-004	0.1340	0.0355	7.8000e-004	0.0362		107.9812	107.9812	2.4100e-003		108.0416

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4365	4.1640	5.2164	0.0257	2.0013	0.0197	2.0210	0.5360	0.0185	0.5544		2,622.6869	2,622.6869	0.1271		2,625.8646
Unmitigated	0.4365	4.1640	5.2164	0.0257	2.0013	0.0197	2.0210	0.5360	0.0185	0.5544		2,622.6869	2,622.6869	0.1271		2,625.8646

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	13.18	14.32	12.14	48,897	48,897
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	228.48	237.84	206.88	840,257	840,257
Total	241.66	252.16	219.02	889,155	889,155

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550569	0.030337	0.179180	0.093645	0.021484	0.005033	0.012514	0.097714	0.001290	0.001118	0.004930	0.001233	0.000952
Other Asphalt Surfaces	0.550569	0.030337	0.179180	0.093645	0.021484	0.005033	0.012514	0.097714	0.001290	0.001118	0.004930	0.001233	0.000952
Single Family Housing	0.550569	0.030337	0.179180	0.093645	0.021484	0.005033	0.012514	0.097714	0.001290	0.001118	0.004930	0.001233	0.000952

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0182	0.1557	0.0663	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.7531	198.7531	3.8100e-003	3.6400e-003	199.9342
NaturalGas Unmitigated	0.0194	0.1656	0.0705	1.0600e-003		0.0134	0.0134		0.0134	0.0134		211.3646	211.3646	4.0500e-003	3.8800e-003	212.6206

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	77.4601	8.4000e-004	7.1400e-003	3.0400e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		9.1130	9.1130	1.7000e-004	1.7000e-004	9.1671
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1719.14	0.0185	0.1584	0.0674	1.0100e-003		0.0128	0.0128		0.0128	0.0128		202.2517	202.2517	3.8800e-003	3.7100e-003	203.4535
Total		0.0194	0.1656	0.0705	1.0600e-003		0.0134	0.0134		0.0134	0.0134		211.3646	211.3646	4.0500e-003	3.8800e-003	212.6206

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.0734659	7.9000e-004	6.7700e-003	2.8800e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.6430	8.6430	1.7000e-004	1.6000e-004	8.6944
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.61594	0.0174	0.1489	0.0634	9.5000e-004		0.0120	0.0120		0.0120	0.0120		190.1100	190.1100	3.6400e-003	3.4900e-003	191.2398
Total		0.0182	0.1557	0.0663	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.7531	198.7531	3.8100e-003	3.6500e-003	199.9342

6.0 Area Detail

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.1752	0.4129	2.3185	2.5900e-003		0.0433	0.0433		0.0433	0.0433	0.0000	499.4139	499.4139	0.0133	9.0800e-003	502.4525
Unmitigated	42.5361	0.8018	51.2701	0.0891		6.8986	6.8986		6.8986	6.8986	722.0650	306.7080	1,028.7730	0.6701	0.0568	1,062.4507

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9105					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	39.7903	0.7771	49.1168	0.0890		6.8866	6.8866		6.8866	6.8866	722.0650	302.8235	1,024.8885	0.6664	0.0568	1,058.4724
Landscaping	0.0653	0.0248	2.1533	1.1000e-004		0.0119	0.0119		0.0119	0.0119		3.8845	3.8845	3.7600e-003		3.9784
Total	42.5361	0.8018	51.2701	0.0891		6.8986	6.8986		6.8986	6.8986	722.0650	306.7080	1,028.7730	0.6701	0.0568	1,062.4507

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9105					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0454	0.3882	0.1652	2.4800e-003		0.0314	0.0314		0.0314	0.0314	0.0000	495.5294	495.5294	9.5000e-003	9.0800e-003	498.4741
Landscaping	0.0653	0.0248	2.1533	1.1000e-004		0.0119	0.0119		0.0119	0.0119		3.8845	3.8845	3.7600e-003		3.9784
Total	2.1752	0.4129	2.3185	2.5900e-003		0.0433	0.0433		0.0433	0.0433	0.0000	499.4139	499.4139	0.0133	9.0800e-003	502.4525

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Turf Reduction
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles Phase 3 - Construction Only - Shasta County AQMD Air District, Winter

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
----------------	--------	-----------	------------	-------------	-------------	-----------

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

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Annual

Tierra Robles - Phase 4 Construction Only
Shasta County AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	147.00	1000sqft	3.37	147,000.00	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,400.00	6
Single Family Housing	20.00	Dwelling Unit	6.49	71,000.00	57

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2028
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Annual

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 4 includes 20 DU, anticipates 2 secondary units (apartments), 147,000 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - 6,370 yds of rock material imported

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 standards reduce residential power use by 7% or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	230.00
tblConstructionPhase	NumDays	20.00	230.00
tblGrading	MaterialImported	0.00	6,370.00
tblLandUse	LandUseSquareFeet	2,000.00	2,400.00
tblLandUse	LandUseSquareFeet	36,000.00	71,000.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-13-2026	4-12-2026	0.6451	0.4988
2	4-13-2026	7-12-2026	1.2311	1.1753
3	7-13-2026	10-12-2026	1.2448	1.1884
4	10-13-2026	1-12-2027	1.2456	1.1891
5	1-13-2027	4-12-2027	0.3649	0.3484
		Highest	1.2456	1.1891

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	1.8015	0.0289	1.8685	3.1000e-003		0.2398	0.2398		0.2398	0.2398	22.7251	9.8000	32.5251	0.0212	1.7900e-003	33.5886
Energy	2.9700e-003	0.0254	0.0108	1.6000e-004		2.0500e-003	2.0500e-003		2.0500e-003	2.0500e-003	0.0000	54.0265	54.0265	2.9900e-003	1.0400e-003	54.4116
Mobile	0.0594	0.5650	0.6629	3.6900e-003	0.2780	2.4900e-003	0.2804	0.0747	2.3400e-003	0.0771	0.0000	342.3884	342.3884	0.0156	0.0000	342.7786
Waste						0.0000	0.0000		0.0000	0.0000	3.0794	0.0000	3.0794	0.1820	0.0000	7.6290
Water						0.0000	0.0000		0.0000	0.0000	0.4548	1.4561	1.9109	0.0469	1.1300e-003	3.4196
Total	1.8639	0.6193	2.5422	6.9500e-003	0.2780	0.2444	0.5223	0.0747	0.2442	0.3189	26.2592	407.6710	433.9302	0.2687	3.9600e-003	441.8275

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3268	0.0154	0.1703	9.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	15.8649	15.8649	5.6000e-004	2.9000e-004	15.9642
Energy	2.7900e-003	0.0239	0.0102	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	52.0746	52.0746	2.9400e-003	1.0100e-003	52.4477
Mobile	0.0594	0.5650	0.6629	3.6900e-003	0.2780	2.4900e-003	0.2804	0.0747	2.3400e-003	0.0771	0.0000	342.3884	342.3884	0.0156	0.0000	342.7786
Waste						0.0000	0.0000		0.0000	0.0000	3.0794	0.0000	3.0794	0.1820	0.0000	7.6290
Water						0.0000	0.0000		0.0000	0.0000	0.3638	1.2235	1.5873	0.0375	9.1000e-004	2.7948
Total	0.3889	0.6043	0.8433	3.9300e-003	0.2780	6.4200e-003	0.2844	0.0747	6.2700e-003	0.0810	3.4432	411.5514	414.9946	0.2386	2.2100e-003	421.6142

	ROG	NOx	CO	SO2	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	79.13	2.42	66.83	43.45	0.00	97.37	45.56	0.00	97.43	74.61	86.89	-0.95	4.36	11.20	44.19	4.57

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2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	- 3,496.500 0
Total	- 3,496.500 0

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/10/2026	2/23/2026	5	10	
2	Grading	Grading	2/24/2026	3/23/2026	5	20	
3	Building Construction	Building Construction	3/24/2026	2/8/2027	5	230	
4	Paving	Paving	3/24/2026	2/8/2027	5	230	
5	Architectural Coating	Architectural Coating	3/24/2026	2/8/2027	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 3.37

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Residential Indoor: 148,635; Residential Outdoor: 49,545; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,820 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	796.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	70.00	26.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 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					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	0.0124	0.1262	0.0896	1.9000e-004	0.0903	5.4300e-003	0.0958	0.0497	5.0000e-003	0.0547	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688

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3.2 Site Preparation - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.3000e-004	2.4300e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.7977	0.7977	2.0000e-005	0.0000	0.7981
Total	3.5000e-004	2.3000e-004	2.4300e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.7977	0.7977	2.0000e-005	0.0000	0.7981

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4800e-003	0.0608	0.1148	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	3.4800e-003	0.0608	0.1148	1.9000e-004	0.0903	3.1000e-004	0.0906	0.0497	3.1000e-004	0.0500	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688

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3.2 Site Preparation - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.3000e-004	2.4300e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.7977	0.7977	2.0000e-005	0.0000	0.7981
Total	3.5000e-004	2.3000e-004	2.4300e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.7977	0.7977	2.0000e-005	0.0000	0.7981

3.3 Grading - 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					
Fugitive Dust					0.0660	0.0000	0.0660	0.0338	0.0000	0.0338	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.1532	0.1454	3.0000e-004		6.2400e-003	6.2400e-003		5.7400e-003	5.7400e-003	0.0000	26.0698	26.0698	8.4300e-003	0.0000	26.2806
Total	0.0152	0.1532	0.1454	3.0000e-004	0.0660	6.2400e-003	0.0722	0.0338	5.7400e-003	0.0395	0.0000	26.0698	26.0698	8.4300e-003	0.0000	26.2806

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3.3 Grading - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9200e-003	0.0639	0.0117	3.0000e-004	6.6800e-003	1.2000e-004	6.8000e-003	1.8400e-003	1.2000e-004	1.9600e-003	0.0000	28.5053	28.5053	1.1300e-003	0.0000	28.5335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	3.8000e-004	4.0500e-003	1.0000e-005	1.8200e-003	1.0000e-005	1.8300e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3295	1.3295	3.0000e-005	0.0000	1.3302
Total	2.5100e-003	0.0642	0.0157	3.1000e-004	8.5000e-003	1.3000e-004	8.6300e-003	2.3300e-003	1.3000e-004	2.4600e-003	0.0000	29.8347	29.8347	1.1600e-003	0.0000	29.8636

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					0.0660	0.0000	0.0660	0.0338	0.0000	0.0338	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-003	0.1033	0.1899	3.0000e-004		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	26.0698	26.0698	8.4300e-003	0.0000	26.2806
Total	5.2000e-003	0.1033	0.1899	3.0000e-004	0.0660	4.8000e-004	0.0665	0.0338	4.8000e-004	0.0342	0.0000	26.0698	26.0698	8.4300e-003	0.0000	26.2806

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3.3 Grading - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9200e-003	0.0639	0.0117	3.0000e-004	6.2300e-003	1.2000e-004	6.3500e-003	1.7300e-003	1.2000e-004	1.8500e-003	0.0000	28.5053	28.5053	1.1300e-003	0.0000	28.5335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	3.8000e-004	4.0500e-003	1.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.3295	1.3295	3.0000e-005	0.0000	1.3302
Total	2.5100e-003	0.0642	0.0157	3.1000e-004	7.9100e-003	1.3000e-004	8.0400e-003	2.1800e-003	1.3000e-004	2.3100e-003	0.0000	29.8347	29.8347	1.1600e-003	0.0000	29.8636

3.4 Building 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	0.1388	1.2657	1.6326	2.7400e-003		0.0536	0.0536		0.0504	0.0504	0.0000	235.3982	235.3982	0.0553	0.0000	236.7816
Total	0.1388	1.2657	1.6326	2.7400e-003		0.0536	0.0536		0.0504	0.0504	0.0000	235.3982	235.3982	0.0553	0.0000	236.7816

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3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6800e-003	0.2074	0.0400	6.7000e-004	0.0155	2.4000e-004	0.0158	4.5000e-003	2.3000e-004	4.7300e-003	0.0000	63.6363	63.6363	3.8400e-003	0.0000	63.7322
Worker	0.0278	0.0182	0.1918	7.0000e-004	0.0863	5.3000e-004	0.0869	0.0230	4.9000e-004	0.0235	0.0000	62.9726	62.9726	1.3300e-003	0.0000	63.0057
Total	0.0335	0.2256	0.2318	1.3700e-003	0.1019	7.7000e-004	0.1026	0.0275	7.2000e-004	0.0282	0.0000	126.6089	126.6089	5.1700e-003	0.0000	126.7379

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	0.0542	1.1076	1.8142	2.7400e-003		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	235.3980	235.3980	0.0553	0.0000	236.7813
Total	0.0542	1.1076	1.8142	2.7400e-003		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	235.3980	235.3980	0.0553	0.0000	236.7813

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3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6800e-003	0.2074	0.0400	6.7000e-004	0.0146	2.4000e-004	0.0148	4.2600e-003	2.3000e-004	4.4900e-003	0.0000	63.6363	63.6363	3.8400e-003	0.0000	63.7322
Worker	0.0278	0.0182	0.1918	7.0000e-004	0.0796	5.3000e-004	0.0802	0.0213	4.9000e-004	0.0218	0.0000	62.9726	62.9726	1.3300e-003	0.0000	63.0057
Total	0.0335	0.2256	0.2318	1.3700e-003	0.0942	7.7000e-004	0.0950	0.0256	7.2000e-004	0.0263	0.0000	126.6089	126.6089	5.1700e-003	0.0000	126.7379

3.4 Building Construction - 2027

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	0.0185	0.1683	0.2171	3.6000e-004		7.1200e-003	7.1200e-003		6.7000e-003	6.7000e-003	0.0000	31.3091	31.3091	7.3600e-003	0.0000	31.4931
Total	0.0185	0.1683	0.2171	3.6000e-004		7.1200e-003	7.1200e-003		6.7000e-003	6.7000e-003	0.0000	31.3091	31.3091	7.3600e-003	0.0000	31.4931

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3.4 Building Construction - 2027

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	7.3000e-004	0.0272	5.0700e-003	9.0000e-005	2.0700e-003	3.0000e-005	2.1000e-003	6.0000e-004	3.0000e-005	6.3000e-004	0.0000	8.4121	8.4121	5.2000e-004	0.0000	8.4250
Worker	3.5200e-003	2.2100e-003	0.0238	9.0000e-005	0.0115	7.0000e-005	0.0116	3.0600e-003	6.0000e-005	3.1200e-003	0.0000	8.0895	8.0895	1.6000e-004	0.0000	8.0935
Total	4.2500e-003	0.0294	0.0289	1.8000e-004	0.0136	1.0000e-004	0.0137	3.6600e-003	9.0000e-005	3.7500e-003	0.0000	16.5016	16.5016	6.8000e-004	0.0000	16.5185

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	7.2000e-003	0.1473	0.2413	3.6000e-004		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	31.3091	31.3091	7.3600e-003	0.0000	31.4931
Total	7.2000e-003	0.1473	0.2413	3.6000e-004		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	31.3091	31.3091	7.3600e-003	0.0000	31.4931

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3.4 Building Construction - 2027

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	7.3000e-004	0.0272	5.0700e-003	9.0000e-005	1.9400e-003	3.0000e-005	1.9700e-003	5.7000e-004	3.0000e-005	6.0000e-004	0.0000	8.4121	8.4121	5.2000e-004	0.0000	8.4250
Worker	3.5200e-003	2.2100e-003	0.0238	9.0000e-005	0.0106	7.0000e-005	0.0107	2.8400e-003	6.0000e-005	2.9000e-003	0.0000	8.0895	8.0895	1.6000e-004	0.0000	8.0935
Total	4.2500e-003	0.0294	0.0289	1.8000e-004	0.0125	1.0000e-004	0.0126	3.4100e-003	9.0000e-005	3.5000e-003	0.0000	16.5016	16.5016	6.8000e-004	0.0000	16.5185

3.5 Paving - 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	0.0929	0.8710	1.4797	2.3100e-003		0.0425	0.0425		0.0391	0.0391	0.0000	203.1954	203.1954	0.0657	0.0000	204.8384
Paving	3.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0968	0.8710	1.4797	2.3100e-003		0.0425	0.0425		0.0391	0.0391	0.0000	203.1954	203.1954	0.0657	0.0000	204.8384

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3.5 Paving - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9600e-003	3.9000e-003	0.0411	1.5000e-004	0.0185	1.1000e-004	0.0186	4.9200e-003	1.0000e-004	5.0300e-003	0.0000	13.4941	13.4941	2.8000e-004	0.0000	13.5012
Total	5.9600e-003	3.9000e-003	0.0411	1.5000e-004	0.0185	1.1000e-004	0.0186	4.9200e-003	1.0000e-004	5.0300e-003	0.0000	13.4941	13.4941	2.8000e-004	0.0000	13.5012

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	0.0339	1.0190	1.7555	2.3100e-003		3.8000e-003	3.8000e-003		3.8000e-003	3.8000e-003	0.0000	203.1952	203.1952	0.0657	0.0000	204.8381
Paving	3.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0378	1.0190	1.7555	2.3100e-003		3.8000e-003	3.8000e-003		3.8000e-003	3.8000e-003	0.0000	203.1952	203.1952	0.0657	0.0000	204.8381

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3.5 Paving - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9600e-003	3.9000e-003	0.0411	1.5000e-004	0.0171	1.1000e-004	0.0172	4.5700e-003	1.0000e-004	4.6800e-003	0.0000	13.4941	13.4941	2.8000e-004	0.0000	13.5012
Total	5.9600e-003	3.9000e-003	0.0411	1.5000e-004	0.0171	1.1000e-004	0.0172	4.5700e-003	1.0000e-004	4.6800e-003	0.0000	13.4941	13.4941	2.8000e-004	0.0000	13.5012

3.5 Paving - 2027

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	0.0124	0.1159	0.1968	3.1000e-004		5.6500e-003	5.6500e-003		5.2000e-003	5.2000e-003	0.0000	27.0260	27.0260	8.7400e-003	0.0000	27.2445
Paving	5.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0129	0.1159	0.1968	3.1000e-004		5.6500e-003	5.6500e-003		5.2000e-003	5.2000e-003	0.0000	27.0260	27.0260	8.7400e-003	0.0000	27.2445

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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	7.5000e-004	4.7000e-004	5.1000e-003	2.0000e-005	2.4600e-003	1.0000e-005	2.4700e-003	6.5000e-004	1.0000e-005	6.7000e-004	0.0000	1.7335	1.7335	3.0000e-005	0.0000	1.7343
Total	7.5000e-004	4.7000e-004	5.1000e-003	2.0000e-005	2.4600e-003	1.0000e-005	2.4700e-003	6.5000e-004	1.0000e-005	6.7000e-004	0.0000	1.7335	1.7335	3.0000e-005	0.0000	1.7343

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	4.5100e-003	0.1355	0.2335	3.1000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	27.0260	27.0260	8.7400e-003	0.0000	27.2445
Paving	5.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.0300e-003	0.1355	0.2335	3.1000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	27.0260	27.0260	8.7400e-003	0.0000	27.2445

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3.5 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	4.7000e-004	5.1000e-003	2.0000e-005	2.2700e-003	1.0000e-005	2.2800e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	1.7335	1.7335	3.0000e-005	0.0000	1.7343
Total	7.5000e-004	4.7000e-004	5.1000e-003	2.0000e-005	2.2700e-003	1.0000e-005	2.2800e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	1.7335	1.7335	3.0000e-005	0.0000	1.7343

3.6 Architectural Coating - 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					
Archit. Coating	1.0585					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0173	0.1163	0.1836	3.0000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003	0.0000	25.9155	25.9155	1.4100e-003	0.0000	25.9509
Total	1.0759	0.1163	0.1836	3.0000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003	0.0000	25.9155	25.9155	1.4100e-003	0.0000	25.9509

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3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5700e-003	3.6400e-003	0.0384	1.4000e-004	0.0173	1.1000e-004	0.0174	4.6000e-003	1.0000e-004	4.6900e-003	0.0000	12.5945	12.5945	2.7000e-004	0.0000	12.6012
Total	5.5700e-003	3.6400e-003	0.0384	1.4000e-004	0.0173	1.1000e-004	0.0174	4.6000e-003	1.0000e-004	4.6900e-003	0.0000	12.5945	12.5945	2.7000e-004	0.0000	12.6012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0585					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5300e-003	0.1076	0.1860	3.0000e-004		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	25.9155	25.9155	1.4100e-003	0.0000	25.9508
Total	1.0641	0.1076	0.1860	3.0000e-004		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	25.9155	25.9155	1.4100e-003	0.0000	25.9508

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3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5700e-003	3.6400e-003	0.0384	1.4000e-004	0.0159	1.1000e-004	0.0160	4.2700e-003	1.0000e-004	4.3600e-003	0.0000	12.5945	12.5945	2.7000e-004	0.0000	12.6012
Total	5.5700e-003	3.6400e-003	0.0384	1.4000e-004	0.0159	1.1000e-004	0.0160	4.2700e-003	1.0000e-004	4.3600e-003	0.0000	12.5945	12.5945	2.7000e-004	0.0000	12.6012

3.6 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1408					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3100e-003	0.0155	0.0244	4.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	3.4469	3.4469	1.9000e-004	0.0000	3.4516
Total	0.1431	0.0155	0.0244	4.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	3.4469	3.4469	1.9000e-004	0.0000	3.4516

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3.6 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.4000e-004	4.7600e-003	2.0000e-005	2.3000e-003	1.0000e-005	2.3100e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	1.6179	1.6179	3.0000e-005	0.0000	1.6187
Total	7.0000e-004	4.4000e-004	4.7600e-003	2.0000e-005	2.3000e-003	1.0000e-005	2.3100e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	1.6179	1.6179	3.0000e-005	0.0000	1.6187

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1408					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4000e-004	0.0143	0.0247	4.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	3.4469	3.4469	1.9000e-004	0.0000	3.4516
Total	0.1415	0.0143	0.0247	4.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	3.4469	3.4469	1.9000e-004	0.0000	3.4516

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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	7.0000e-004	4.4000e-004	4.7600e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.6179	1.6179	3.0000e-005	0.0000	1.6187
Total	7.0000e-004	4.4000e-004	4.7600e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.6179	1.6179	3.0000e-005	0.0000	1.6187

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0594	0.5650	0.6629	3.6900e-003	0.2780	2.4900e-003	0.2804	0.0747	2.3400e-003	0.0771	0.0000	342.3884	342.3884	0.0156	0.0000	342.7786
Unmitigated	0.0594	0.5650	0.6629	3.6900e-003	0.2780	2.4900e-003	0.2804	0.0747	2.3400e-003	0.0771	0.0000	342.3884	342.3884	0.0156	0.0000	342.7786

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	13.18	14.32	12.14	48,897	48,897
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	190.40	198.20	172.40	700,214	700,214
Total	203.58	212.52	184.54	749,112	749,112

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.558790	0.029643	0.178314	0.089883	0.017968	0.004533	0.012549	0.099298	0.001271	0.001071	0.004660	0.001209	0.000810
Other Asphalt Surfaces	0.558790	0.029643	0.178314	0.089883	0.017968	0.004533	0.012549	0.099298	0.001271	0.001071	0.004660	0.001209	0.000810
Single Family Housing	0.558790	0.029643	0.178314	0.089883	0.017968	0.004533	0.012549	0.099298	0.001271	0.001071	0.004660	0.001209	0.000810

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	24.4146	24.4146	2.4100e-003	5.0000e-004	24.6233
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	24.6135	24.6135	2.4300e-003	5.0000e-004	24.8239
NaturalGas Mitigated	2.7900e-003	0.0239	0.0102	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6600	27.6600	5.3000e-004	5.1000e-004	27.8244
NaturalGas Unmitigated	2.9700e-003	0.0254	0.0108	1.6000e-004		2.0500e-003	2.0500e-003		2.0500e-003	2.0500e-003	0.0000	29.4129	29.4129	5.6000e-004	5.4000e-004	29.5877

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	28272.9	1.5000e-004	1.3000e-003	5.5000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5088	1.5088	3.0000e-005	3.0000e-005	1.5177
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	522905	2.8200e-003	0.0241	0.0103	1.5000e-004		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	27.9042	27.9042	5.3000e-004	5.1000e-004	28.0700
Total		2.9700e-003	0.0254	0.0108	1.6000e-004		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	29.4129	29.4129	5.6000e-004	5.4000e-004	29.5877

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	26815	1.4000e-004	1.2400e-003	5.3000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4310	1.4310	3.0000e-005	3.0000e-005	1.4395
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	491514	2.6500e-003	0.0227	9.6400e-003	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	26.2290	26.2290	5.0000e-004	4.8000e-004	26.3849
Total		2.7900e-003	0.0239	0.0102	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6600	27.6600	5.3000e-004	5.1000e-004	27.8244

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9355.04	1.2476	1.2000e-004	3.0000e-005	1.2582
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	175215	23.3660	2.3000e-003	4.8000e-004	23.5657
Total		24.6135	2.4200e-003	5.1000e-004	24.8239

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	9257.82	1.2346	1.2000e-004	3.0000e-005	1.2451
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	173820	23.1800	2.2900e-003	4.7000e-004	23.3782
Total		24.4146	2.4100e-003	5.0000e-004	24.6233

6.0 Area Detail

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6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3268	0.0154	0.1703	9.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	15.8649	15.8649	5.6000e-004	2.9000e-004	15.9642
Unmitigated	1.8015	0.0289	1.8685	3.1000e-003		0.2398	0.2398		0.2398	0.2398	22.7251	9.8000	32.5251	0.0212	1.7900e-003	33.5886

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1199					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2962					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.3804	0.0270	1.7040	3.0900e-003		0.2389	0.2389		0.2389	0.2389	22.7251	9.5306	32.2556	0.0210	1.7900e-003	33.3126
Landscaping	5.0200e-003	1.8900e-003	0.1646	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.2695	0.2695	2.6000e-004	0.0000	0.2760
Total	1.8015	0.0289	1.8685	3.1000e-003		0.2398	0.2398		0.2398	0.2398	22.7251	9.8000	32.5251	0.0212	1.7900e-003	33.5886

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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	0.0240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2962					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5800e-003	0.0135	5.7300e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	15.5955	15.5955	3.0000e-004	2.9000e-004	15.6881
Landscaping	5.0200e-003	1.8900e-003	0.1646	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.2695	0.2695	2.6000e-004	0.0000	0.2760
Total	0.3268	0.0154	0.1703	1.0000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	15.8649	15.8649	5.6000e-004	2.9000e-004	15.9642

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.5873	0.0375	9.1000e-004	2.7948
Unmitigated	1.9109	0.0469	1.1300e-003	3.4196

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.130308 / 0.0821507	0.1737	4.2600e-003	1.0000e-004	0.3109
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.30308 / 0.821507	1.7371	0.0426	1.0300e-003	3.1087
Total		1.9108	0.0469	1.1300e-003	3.4196

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.104246 / 0.0771395	0.1443	3.4100e-003	8.0000e-005	0.2541
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.04246 / 0.771395	1.4430	0.0341	8.2000e-004	2.5408
Total		1.5873	0.0375	9.0000e-004	2.7948

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.0794	0.1820	0.0000	7.6290
Unmitigated	3.0794	0.1820	0.0000	7.6290

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	0.92	0.1868	0.0110	0.0000	0.4627
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	14.25	2.8926	0.1710	0.0000	7.1664
Total		3.0794	0.1820	0.0000	7.6290

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	0.92	0.1868	0.0110	0.0000	0.4627
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	14.25	2.8926	0.1710	0.0000	7.1664
Total		3.0794	0.1820	0.0000	7.6290

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

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

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11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	- 3,496.500 0	0.0000	0.0000	- 3,496.500 0

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Trees	87.5 / 56	- 3,496.500 0	0.0000	0.0000	- 3,496.500 0
Total		- 3,496.500 0	0.0000	0.0000	- 3,496.500 0

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	147.00	1000sqft	3.37	147,000.00	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,400.00	6
Single Family Housing	20.00	Dwelling Unit	6.49	71,000.00	57

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2028
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 4 includes 20 DU, anticipates 2 secondary units (apartments), 147,000 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - 6,370 yds of rock material imported

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 standards reduce residential power use by 7% or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	230.00
tblConstructionPhase	NumDays	20.00	230.00
tblGrading	MaterialImported	0.00	6,370.00
tblLandUse	LandUseSquareFeet	2,000.00	2,400.00
tblLandUse	LandUseSquareFeet	36,000.00	71,000.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

2.0 Emissions Summary

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	36.0045	0.6785	43.3886	0.0754		5.8373	5.8373		5.8373	5.8373	610.9781	259.5356	870.5137	0.5670	0.0481	899.0111
Energy	0.0163	0.1392	0.0592	8.9000e-004		0.0113	0.0113		0.0113	0.0113		177.6560	177.6560	3.4100e-003	3.2600e-003	178.7117
Mobile	0.4326	3.2110	4.3941	0.0227	1.6860	0.0144	1.7004	0.4514	0.0135	0.4649		2,318.7040	2,318.7040	0.0982		2,321.1599
Total	36.4534	4.0287	47.8419	0.0990	1.6860	5.8629	7.5489	0.4514	5.8620	6.3134	610.9781	2,755.8956	3,366.8736	0.6687	0.0513	3,398.8827

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	1.8485	0.3495	1.9680	2.1900e-003		0.0367	0.0367		0.0367	0.0367	0.0000	422.5944	422.5944	0.0113	7.6900e-003	425.1664
Energy	0.0153	0.1309	0.0557	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.0681	167.0681	3.2000e-003	3.0600e-003	168.0609
Mobile	0.4326	3.2110	4.3941	0.0227	1.6860	0.0144	1.7004	0.4514	0.0135	0.4649		2,318.7040	2,318.7040	0.0982		2,321.1599
Total	2.2964	3.6913	6.4178	0.0258	1.6860	0.0616	1.7476	0.4514	0.0607	0.5121	0.0000	2,908.3665	2,908.3665	0.1127	0.0108	2,914.3872

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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	93.70	8.37	86.59	73.99	0.00	98.95	76.85	0.00	98.96	91.89	100.00	-5.53	13.62	83.15	79.05	14.25

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/10/2026	2/23/2026	5	10	
2	Grading	Grading	2/24/2026	3/23/2026	5	20	
3	Building Construction	Building Construction	3/24/2026	2/8/2027	5	230	
4	Paving	Paving	3/24/2026	2/8/2027	5	230	
5	Architectural Coating	Architectural Coating	3/24/2026	2/8/2027	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 3.37

Residential Indoor: 148,635; Residential Outdoor: 49,545; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,820 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	796.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	70.00	26.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	18.0663	1.0868	19.1531	9.9307	0.9999	10.9305		3,689.1037	3,689.1037	1.1931		3,718.9320

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0807	0.0431	0.6021	1.9700e-003	0.2299	1.3400e-003	0.2313	0.0610	1.2300e-003	0.0622		196.3730	196.3730	4.2700e-003		196.4799
Total	0.0807	0.0431	0.6021	1.9700e-003	0.2299	1.3400e-003	0.2313	0.0610	1.2300e-003	0.0622		196.3730	196.3730	4.2700e-003		196.4799

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	0.6967	12.1620	22.9600	0.0381	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0807	0.0431	0.6021	1.9700e-003	0.2119	1.3400e-003	0.2133	0.0566	1.2300e-003	0.0578		196.3730	196.3730	4.2700e-003		196.4799
Total	0.0807	0.0431	0.6021	1.9700e-003	0.2119	1.3400e-003	0.2133	0.0566	1.2300e-003	0.0578		196.3730	196.3730	4.2700e-003		196.4799

3.3 Grading - 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	lb/day										lb/day					
Fugitive Dust					6.5993	0.0000	6.5993	3.3746	0.0000	3.3746			0.0000			0.0000
Off-Road	1.5227	15.3148	14.5402	0.0297		0.6236	0.6236		0.5737	0.5737		2,873.7052	2,873.7052	0.9294		2,896.9405
Total	1.5227	15.3148	14.5402	0.0297	6.5993	0.6236	7.2229	3.3746	0.5737	3.9483		2,873.7052	2,873.7052	0.9294		2,896.9405

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2026

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	0.1893	6.2736	1.1137	0.0303	0.6972	0.0123	0.7095	0.1912	0.0118	0.2030		3,173.2427	3,173.2427	0.1177		3,176.1840
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0672	0.0359	0.5018	1.6400e-003	0.1916	1.1200e-003	0.1927	0.0508	1.0300e-003	0.0518		163.6442	163.6442	3.5600e-003		163.7332
Total	0.2565	6.3095	1.6155	0.0319	0.8888	0.0135	0.9023	0.2420	0.0128	0.2548		3,336.8869	3,336.8869	0.1212		3,339.9172

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5993	0.0000	6.5993	3.3746	0.0000	3.3746			0.0000			0.0000
Off-Road	0.5200	10.3327	18.9906	0.0297		0.0484	0.0484		0.0484	0.0484	0.0000	2,873.7052	2,873.7052	0.9294		2,896.9405
Total	0.5200	10.3327	18.9906	0.0297	6.5993	0.0484	6.6478	3.3746	0.0484	3.4230	0.0000	2,873.7052	2,873.7052	0.9294		2,896.9405

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2026

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	0.1893	6.2736	1.1137	0.0303	0.6499	0.0123	0.6622	0.1796	0.0118	0.1914		3,173.2427	3,173.2427	0.1177		3,176.1840
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0672	0.0359	0.5018	1.6400e-003	0.1766	1.1200e-003	0.1777	0.0471	1.0300e-003	0.0482		163.6442	163.6442	3.5600e-003		163.7332
Total	0.2565	6.3095	1.6155	0.0319	0.8265	0.0135	0.8399	0.2267	0.0128	0.2395		3,336.8869	3,336.8869	0.1212		3,339.9172

3.4 Building 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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0549	2.0257	0.3611	6.7100e-003	0.1594	2.3600e-003	0.1618	0.0459	2.2600e-003	0.0482		701.5199	701.5199	0.0393		702.5032
Worker	0.3136	0.1677	2.3415	7.6600e-003	0.8941	5.2200e-003	0.8993	0.2371	4.8000e-003	0.2419		763.6728	763.6728	0.0166		764.0884
Total	0.3685	2.1934	2.7027	0.0144	1.0535	7.5800e-003	1.0611	0.2830	7.0600e-003	0.2901		1,465.1927	1,465.1927	0.0560		1,466.5917

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0549	2.0257	0.3611	6.7100e-003	0.1492	2.3600e-003	0.1515	0.0434	2.2600e-003	0.0457		701.5199	701.5199	0.0393		702.5032
Worker	0.3136	0.1677	2.3415	7.6600e-003	0.8242	5.2200e-003	0.8294	0.2199	4.8000e-003	0.2247		763.6728	763.6728	0.0166		764.0884
Total	0.3685	2.1934	2.7027	0.0144	0.9733	7.5800e-003	0.9809	0.2633	7.0600e-003	0.2704		1,465.1927	1,465.1927	0.0560		1,466.5917

3.4 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0532	1.9984	0.3436	6.6700e-003	0.1594	2.2600e-003	0.1617	0.0459	2.1600e-003	0.0481		697.1597	697.1597	0.0398		698.1542
Worker	0.2975	0.1531	2.1884	7.4000e-003	0.8941	4.9500e-003	0.8991	0.2371	4.5500e-003	0.2417		737.5932	737.5932	0.0151		737.9703
Total	0.3507	2.1515	2.5320	0.0141	1.0535	7.2100e-003	1.0607	0.2830	6.7100e-003	0.2897		1,434.7529	1,434.7529	0.0549		1,436.1246

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0532	1.9984	0.3436	6.6700e-003	0.1492	2.2600e-003	0.1514	0.0434	2.1600e-003	0.0456		697.1597	697.1597	0.0398		698.1542
Worker	0.2975	0.1531	2.1884	7.4000e-003	0.8242	4.9500e-003	0.8291	0.2199	4.5500e-003	0.2245		737.5932	737.5932	0.0151		737.9703
Total	0.3507	2.1515	2.5320	0.0141	0.9733	7.2100e-003	0.9805	0.2633	6.7100e-003	0.2700		1,434.7529	1,434.7529	0.0549		1,436.1246

3.5 Paving - 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	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9535	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0672	0.0359	0.5018	1.6400e-003	0.1916	1.1200e-003	0.1927	0.0508	1.0300e-003	0.0518		163.6442	163.6442	3.5600e-003		163.7332
Total	0.0672	0.0359	0.5018	1.6400e-003	0.1916	1.1200e-003	0.1927	0.0508	1.0300e-003	0.0518		163.6442	163.6442	3.5600e-003		163.7332

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3725	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0672	0.0359	0.5018	1.6400e-003	0.1766	1.1200e-003	0.1777	0.0471	1.0300e-003	0.0482		163.6442	163.6442	3.5600e-003		163.7332
Total	0.0672	0.0359	0.5018	1.6400e-003	0.1766	1.1200e-003	0.1777	0.0471	1.0300e-003	0.0482		163.6442	163.6442	3.5600e-003		163.7332

3.5 Paving - 2027

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9535	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0328	0.4689	1.5900e-003	0.1916	1.0600e-003	0.1927	0.0508	9.8000e-004	0.0518		158.0557	158.0557	3.2300e-003		158.1365
Total	0.0638	0.0328	0.4689	1.5900e-003	0.1916	1.0600e-003	0.1927	0.0508	9.8000e-004	0.0518		158.0557	158.0557	3.2300e-003		158.1365

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3725	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0328	0.4689	1.5900e-003	0.1766	1.0600e-003	0.1777	0.0471	9.8000e-004	0.0481		158.0557	158.0557	3.2300e-003		158.1365
Total	0.0638	0.0328	0.4689	1.5900e-003	0.1766	1.0600e-003	0.1777	0.0471	9.8000e-004	0.0481		158.0557	158.0557	3.2300e-003		158.1365

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	10.4288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	10.5996	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0336	0.4683	1.5300e-003	0.1788	1.0400e-003	0.1799	0.0474	9.6000e-004	0.0484		152.7346	152.7346	3.3200e-003		152.8177
Total	0.0627	0.0336	0.4683	1.5300e-003	0.1788	1.0400e-003	0.1799	0.0474	9.6000e-004	0.0484		152.7346	152.7346	3.3200e-003		152.8177

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	10.4288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	10.4832	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0336	0.4683	1.5300e-003	0.1648	1.0400e-003	0.1659	0.0440	9.6000e-004	0.0450		152.7346	152.7346	3.3200e-003		152.8177
Total	0.0627	0.0336	0.4683	1.5300e-003	0.1648	1.0400e-003	0.1659	0.0440	9.6000e-004	0.0450		152.7346	152.7346	3.3200e-003		152.8177

3.6 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	10.4288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	10.5996	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0595	0.0306	0.4377	1.4800e-003	0.1788	9.9000e-004	0.1798	0.0474	9.1000e-004	0.0483		147.5186	147.5186	3.0200e-003		147.5941
Total	0.0595	0.0306	0.4377	1.4800e-003	0.1788	9.9000e-004	0.1798	0.0474	9.1000e-004	0.0483		147.5186	147.5186	3.0200e-003		147.5941

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	10.4288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	10.4832	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0595	0.0306	0.4377	1.4800e-003	0.1648	9.9000e-004	0.1658	0.0440	9.1000e-004	0.0449		147.5186	147.5186	3.0200e-003		147.5941
Total	0.0595	0.0306	0.4377	1.4800e-003	0.1648	9.9000e-004	0.1658	0.0440	9.1000e-004	0.0449		147.5186	147.5186	3.0200e-003		147.5941

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4326	3.2110	4.3941	0.0227	1.6860	0.0144	1.7004	0.4514	0.0135	0.4649		2,318.7040	2,318.7040	0.0982		2,321.1599
Unmitigated	0.4326	3.2110	4.3941	0.0227	1.6860	0.0144	1.7004	0.4514	0.0135	0.4649		2,318.7040	2,318.7040	0.0982		2,321.1599

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	13.18	14.32	12.14	48,897	48,897
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	190.40	198.20	172.40	700,214	700,214
Total	203.58	212.52	184.54	749,112	749,112

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.558790	0.029643	0.178314	0.089883	0.017968	0.004533	0.012549	0.099298	0.001271	0.001071	0.004660	0.001209	0.000810
Other Asphalt Surfaces	0.558790	0.029643	0.178314	0.089883	0.017968	0.004533	0.012549	0.099298	0.001271	0.001071	0.004660	0.001209	0.000810
Single Family Housing	0.558790	0.029643	0.178314	0.089883	0.017968	0.004533	0.012549	0.099298	0.001271	0.001071	0.004660	0.001209	0.000810

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0153	0.1309	0.0557	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.0681	167.0681	3.2000e-003	3.0600e-003	168.0609
NaturalGas Unmitigated	0.0163	0.1392	0.0592	8.9000e-004		0.0113	0.0113		0.0113	0.0113		177.6560	177.6560	3.4100e-003	3.2600e-003	178.7117

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	77.4601	8.4000e-004	7.1400e-003	3.0400e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		9.1130	9.1130	1.7000e-004	1.7000e-004	9.1671
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1432.62	0.0155	0.1320	0.0562	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.5431	168.5431	3.2300e-003	3.0900e-003	169.5446
Total		0.0163	0.1392	0.0592	8.9000e-004		0.0113	0.0113		0.0113	0.0113		177.6560	177.6560	3.4000e-003	3.2600e-003	178.7117

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.0734659	7.9000e-004	6.7700e-003	2.8800e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.6430	8.6430	1.7000e-004	1.6000e-004	8.6944
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.34661	0.0145	0.1241	0.0528	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.4250	158.4250	3.0400e-003	2.9000e-003	159.3665
Total		0.0153	0.1309	0.0557	8.3000e-004		0.0106	0.0106		0.0106	0.0106		167.0681	167.0681	3.2100e-003	3.0600e-003	168.0609

6.0 Area Detail

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.8485	0.3495	1.9680	2.1900e-003		0.0367	0.0367		0.0367	0.0367	0.0000	422.5944	422.5944	0.0113	7.6900e-003	425.1664
Unmitigated	36.0045	0.6785	43.3886	0.0754		5.8373	5.8373		5.8373	5.8373	610.9781	259.5356	870.5137	0.5670	0.0481	899.0111

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6228					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	33.6687	0.6575	41.5603	0.0753		5.8272	5.8272		5.8272	5.8272	610.9781	256.2353	867.2134	0.5638	0.0481	895.6305
Landscaping	0.0558	0.0210	1.8283	1.0000e-004		0.0101	0.0101		0.0101	0.0101		3.3003	3.3003	3.2100e-003		3.3807
Total	36.0045	0.6785	43.3886	0.0754		5.8373	5.8373		5.8373	5.8373	610.9781	259.5356	870.5137	0.5670	0.0481	899.0111

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6228					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0384	0.3285	0.1398	2.1000e-003		0.0266	0.0266		0.0266	0.0266	0.0000	419.2941	419.2941	8.0400e-003	7.6900e-003	421.7858
Landscaping	0.0558	0.0210	1.8283	1.0000e-004		0.0101	0.0101		0.0101	0.0101		3.3003	3.3003	3.2100e-003		3.3807
Total	1.8485	0.3495	1.9680	2.2000e-003		0.0367	0.0367		0.0367	0.0367	0.0000	422.5944	422.5944	0.0113	7.6900e-003	425.1664

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Summer

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

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

Tierra Robles - Phase 4 Construction Only
Shasta County AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	147.00	1000sqft	3.37	147,000.00	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,400.00	6
Single Family Housing	20.00	Dwelling Unit	6.49	71,000.00	57

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2028
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 4 includes 20 DU, anticipates 2 secondary units (apartments), 147,000 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - 6,370 yds of rock material imported

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 standards reduce residential power use by 7% or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	230.00
tblConstructionPhase	NumDays	20.00	230.00
tblGrading	MaterialImported	0.00	6,370.00
tblLandUse	LandUseSquareFeet	2,000.00	2,400.00
tblLandUse	LandUseSquareFeet	36,000.00	71,000.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

2.0 Emissions Summary

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	36.0045	0.6785	43.3886	0.0754		5.8373	5.8373		5.8373	5.8373	610.9781	259.5356	870.5137	0.5670	0.0481	899.0111
Energy	0.0163	0.1392	0.0592	8.9000e-004		0.0113	0.0113		0.0113	0.0113		177.6560	177.6560	3.4100e-003	3.2600e-003	178.7117
Mobile	0.3281	3.2922	3.8947	0.0208	1.6860	0.0145	1.7004	0.4514	0.0136	0.4650		2,127.3224	2,127.3224	0.1045		2,129.9346
Total	36.3489	4.1099	47.3426	0.0971	1.6860	5.8630	7.5490	0.4514	5.8621	6.3135	610.9781	2,564.5140	3,175.4921	0.6749	0.0513	3,207.6574

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	1.8485	0.3495	1.9680	2.1900e-003		0.0367	0.0367		0.0367	0.0367	0.0000	422.5944	422.5944	0.0113	7.6900e-003	425.1664
Energy	0.0153	0.1309	0.0557	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.0681	167.0681	3.2000e-003	3.0600e-003	168.0609
Mobile	0.3281	3.2922	3.8947	0.0208	1.6860	0.0145	1.7004	0.4514	0.0136	0.4650		2,127.3224	2,127.3224	0.1045		2,129.9346
Total	2.1920	3.7726	5.9185	0.0239	1.6860	0.0617	1.7477	0.4514	0.0608	0.5122	0.0000	2,716.9849	2,716.9849	0.1189	0.0108	2,723.1619

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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	93.97	8.21	87.50	75.44	0.00	98.95	76.85	0.00	98.96	91.89	100.00	-5.95	14.44	82.38	79.05	15.10

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/10/2026	2/23/2026	5	10	
2	Grading	Grading	2/24/2026	3/23/2026	5	20	
3	Building Construction	Building Construction	3/24/2026	2/8/2027	5	230	
4	Paving	Paving	3/24/2026	2/8/2027	5	230	
5	Architectural Coating	Architectural Coating	3/24/2026	2/8/2027	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 3.37

Residential Indoor: 148,635; Residential Outdoor: 49,545; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,820 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	796.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	70.00	26.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	18.0663	1.0868	19.1531	9.9307	0.9999	10.9305		3,689.1037	3,689.1037	1.1931		3,718.9320

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0513	0.4736	1.7100e-003	0.2299	1.3400e-003	0.2313	0.0610	1.2300e-003	0.0622		170.1706	170.1706	3.5600e-003		170.2597
Total	0.0772	0.0513	0.4736	1.7100e-003	0.2299	1.3400e-003	0.2313	0.0610	1.2300e-003	0.0622		170.1706	170.1706	3.5600e-003		170.2597

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	0.6967	12.1620	22.9600	0.0381	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0513	0.4736	1.7100e-003	0.2119	1.3400e-003	0.2133	0.0566	1.2300e-003	0.0578		170.1706	170.1706	3.5600e-003		170.2597
Total	0.0772	0.0513	0.4736	1.7100e-003	0.2119	1.3400e-003	0.2133	0.0566	1.2300e-003	0.0578		170.1706	170.1706	3.5600e-003		170.2597

3.3 Grading - 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	lb/day										lb/day					
Fugitive Dust					6.5993	0.0000	6.5993	3.3746	0.0000	3.3746			0.0000			0.0000
Off-Road	1.5227	15.3148	14.5402	0.0297		0.6236	0.6236		0.5737	0.5737		2,873.7052	2,873.7052	0.9294		2,896.9405
Total	1.5227	15.3148	14.5402	0.0297	6.5993	0.6236	7.2229	3.3746	0.5737	3.9483		2,873.7052	2,873.7052	0.9294		2,896.9405

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2026

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	0.1961	6.3874	1.2403	0.0296	0.6972	0.0125	0.7097	0.1912	0.0119	0.2031		3,099.249 2	3,099.249 2	0.1336		3,102.589 8
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0428	0.3947	1.4200e- 003	0.1916	1.1200e- 003	0.1927	0.0508	1.0300e- 003	0.0518		141.8089	141.8089	2.9700e- 003		141.8831
Total	0.2605	6.4301	1.6350	0.0310	0.8888	0.0136	0.9024	0.2420	0.0130	0.2550		3,241.058 1	3,241.058 1	0.1366		3,244.472 8

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5993	0.0000	6.5993	3.3746	0.0000	3.3746			0.0000			0.0000
Off-Road	0.5200	10.3327	18.9906	0.0297		0.0484	0.0484		0.0484	0.0484	0.0000	2,873.705 2	2,873.705 2	0.9294		2,896.940 5
Total	0.5200	10.3327	18.9906	0.0297	6.5993	0.0484	6.6478	3.3746	0.0484	3.4230	0.0000	2,873.705 2	2,873.705 2	0.9294		2,896.940 5

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2026

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	0.1961	6.3874	1.2403	0.0296	0.6499	0.0125	0.6623	0.1796	0.0119	0.1915		3,099.249 2	3,099.249 2	0.1336		3,102.589 8
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0428	0.3947	1.4200e-003	0.1766	1.1200e-003	0.1777	0.0471	1.0300e-003	0.0482		141.8089	141.8089	2.9700e-003		141.8831
Total	0.2605	6.4301	1.6350	0.0310	0.8265	0.0136	0.8401	0.2267	0.0130	0.2397		3,241.058 1	3,241.058 1	0.1366		3,244.472 8

3.4 Building 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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0583	2.0357	0.4345	6.4700e-003	0.1594	2.4100e-003	0.1618	0.0459	2.3100e-003	0.0482		676.7279	676.7279	0.0448		677.8473
Worker	0.3001	0.1995	1.8418	6.6300e-003	0.8941	5.2200e-003	0.8993	0.2371	4.8000e-003	0.2419		661.7747	661.7747	0.0139		662.1211
Total	0.3584	2.2352	2.2763	0.0131	1.0535	7.6300e-003	1.0611	0.2830	7.1100e-003	0.2901		1,338.5026	1,338.5026	0.0586		1,339.9684

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0583	2.0357	0.4345	6.4700e-003	0.1492	2.4100e-003	0.1516	0.0434	2.3100e-003	0.0457		676.7279	676.7279	0.0448		677.8473
Worker	0.3001	0.1995	1.8418	6.6300e-003	0.8242	5.2200e-003	0.8294	0.2199	4.8000e-003	0.2247		661.7747	661.7747	0.0139		662.1211
Total	0.3584	2.2352	2.2763	0.0131	0.9733	7.6300e-003	0.9810	0.2633	7.1100e-003	0.2704		1,338.5026	1,338.5026	0.0586		1,339.9684

3.4 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0564	2.0070	0.4141	6.4300e-003	0.1594	2.3000e-003	0.1617	0.0459	2.2000e-003	0.0481		672.6723	672.6723	0.0453		673.8049
Worker	0.2859	0.1821	1.7169	6.4100e-003	0.8941	4.9500e-003	0.8991	0.2371	4.5500e-003	0.2417		639.1589	639.1589	0.0126		639.4728
Total	0.3424	2.1891	2.1309	0.0128	1.0535	7.2500e-003	1.0608	0.2830	6.7500e-003	0.2898		1,311.8312	1,311.8312	0.0579		1,313.2777

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0564	2.0070	0.4141	6.4300e-003	0.1492	2.3000e-003	0.1515	0.0434	2.2000e-003	0.0456		672.6723	672.6723	0.0453		673.8049
Worker	0.2859	0.1821	1.7169	6.4100e-003	0.8242	4.9500e-003	0.8291	0.2199	4.5500e-003	0.2245		639.1589	639.1589	0.0126		639.4728
Total	0.3424	2.1891	2.1309	0.0128	0.9733	7.2500e-003	0.9806	0.2633	6.7500e-003	0.2701		1,311.8312	1,311.8312	0.0579		1,313.2777

3.5 Paving - 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	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9535	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0428	0.3947	1.4200e-003	0.1916	1.1200e-003	0.1927	0.0508	1.0300e-003	0.0518		141.8089	141.8089	2.9700e-003		141.8831
Total	0.0643	0.0428	0.3947	1.4200e-003	0.1916	1.1200e-003	0.1927	0.0508	1.0300e-003	0.0518		141.8089	141.8089	2.9700e-003		141.8831

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3725	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0428	0.3947	1.4200e-003	0.1766	1.1200e-003	0.1777	0.0471	1.0300e-003	0.0482		141.8089	141.8089	2.9700e-003		141.8831
Total	0.0643	0.0428	0.3947	1.4200e-003	0.1766	1.1200e-003	0.1777	0.0471	1.0300e-003	0.0482		141.8089	141.8089	2.9700e-003		141.8831

3.5 Paving - 2027

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9535	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0613	0.0390	0.3679	1.3700e-003	0.1916	1.0600e-003	0.1927	0.0508	9.8000e-004	0.0518		136.9626	136.9626	2.6900e-003		137.0299
Total	0.0613	0.0390	0.3679	1.3700e-003	0.1916	1.0600e-003	0.1927	0.0508	9.8000e-004	0.0518		136.9626	136.9626	2.6900e-003		137.0299

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3725	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0613	0.0390	0.3679	1.3700e-003	0.1766	1.0600e-003	0.1777	0.0471	9.8000e-004	0.0481		136.9626	136.9626	2.6900e-003		137.0299
Total	0.0613	0.0390	0.3679	1.3700e-003	0.1766	1.0600e-003	0.1777	0.0471	9.8000e-004	0.0481		136.9626	136.9626	2.6900e-003		137.0299

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	10.4288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	10.5996	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0600	0.0399	0.3684	1.3300e-003	0.1788	1.0400e-003	0.1799	0.0474	9.6000e-004	0.0484		132.3549	132.3549	2.7700e-003		132.4242
Total	0.0600	0.0399	0.3684	1.3300e-003	0.1788	1.0400e-003	0.1799	0.0474	9.6000e-004	0.0484		132.3549	132.3549	2.7700e-003		132.4242

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	10.4288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	10.4832	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0600	0.0399	0.3684	1.3300e-003	0.1648	1.0400e-003	0.1659	0.0440	9.6000e-004	0.0450		132.3549	132.3549	2.7700e-003		132.4242
Total	0.0600	0.0399	0.3684	1.3300e-003	0.1648	1.0400e-003	0.1659	0.0440	9.6000e-004	0.0450		132.3549	132.3549	2.7700e-003		132.4242

3.6 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	10.4288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	10.5996	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0572	0.0364	0.3434	1.2800e-003	0.1788	9.9000e-004	0.1798	0.0474	9.1000e-004	0.0483		127.8318	127.8318	2.5100e-003		127.8946
Total	0.0572	0.0364	0.3434	1.2800e-003	0.1788	9.9000e-004	0.1798	0.0474	9.1000e-004	0.0483		127.8318	127.8318	2.5100e-003		127.8946

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	10.4288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	10.4832	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0572	0.0364	0.3434	1.2800e-003	0.1648	9.9000e-004	0.1658	0.0440	9.1000e-004	0.0449		127.8318	127.8318	2.5100e-003		127.8946
Total	0.0572	0.0364	0.3434	1.2800e-003	0.1648	9.9000e-004	0.1658	0.0440	9.1000e-004	0.0449		127.8318	127.8318	2.5100e-003		127.8946

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3281	3.2922	3.8947	0.0208	1.6860	0.0145	1.7004	0.4514	0.0136	0.4650		2,127.3224	2,127.3224	0.1045		2,129.9346
Unmitigated	0.3281	3.2922	3.8947	0.0208	1.6860	0.0145	1.7004	0.4514	0.0136	0.4650		2,127.3224	2,127.3224	0.1045		2,129.9346

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	13.18	14.32	12.14	48,897	48,897
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	190.40	198.20	172.40	700,214	700,214
Total	203.58	212.52	184.54	749,112	749,112

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.558790	0.029643	0.178314	0.089883	0.017968	0.004533	0.012549	0.099298	0.001271	0.001071	0.004660	0.001209	0.000810
Other Asphalt Surfaces	0.558790	0.029643	0.178314	0.089883	0.017968	0.004533	0.012549	0.099298	0.001271	0.001071	0.004660	0.001209	0.000810
Single Family Housing	0.558790	0.029643	0.178314	0.089883	0.017968	0.004533	0.012549	0.099298	0.001271	0.001071	0.004660	0.001209	0.000810

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0153	0.1309	0.0557	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.0681	167.0681	3.2000e-003	3.0600e-003	168.0609
NaturalGas Unmitigated	0.0163	0.1392	0.0592	8.9000e-004		0.0113	0.0113		0.0113	0.0113		177.6560	177.6560	3.4100e-003	3.2600e-003	178.7117

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	77.4601	8.4000e-004	7.1400e-003	3.0400e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		9.1130	9.1130	1.7000e-004	1.7000e-004	9.1671
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1432.62	0.0155	0.1320	0.0562	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.5431	168.5431	3.2300e-003	3.0900e-003	169.5446
Total		0.0163	0.1392	0.0592	8.9000e-004		0.0113	0.0113		0.0113	0.0113		177.6560	177.6560	3.4000e-003	3.2600e-003	178.7117

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.0734659	7.9000e-004	6.7700e-003	2.8800e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.6430	8.6430	1.7000e-004	1.6000e-004	8.6944
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.34661	0.0145	0.1241	0.0528	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.4250	158.4250	3.0400e-003	2.9000e-003	159.3665
Total		0.0153	0.1309	0.0557	8.3000e-004		0.0106	0.0106		0.0106	0.0106		167.0681	167.0681	3.2100e-003	3.0600e-003	168.0609

6.0 Area Detail

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.8485	0.3495	1.9680	2.1900e-003		0.0367	0.0367		0.0367	0.0367	0.0000	422.5944	422.5944	0.0113	7.6900e-003	425.1664
Unmitigated	36.0045	0.6785	43.3886	0.0754		5.8373	5.8373		5.8373	5.8373	610.9781	259.5356	870.5137	0.5670	0.0481	899.0111

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6228					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	33.6687	0.6575	41.5603	0.0753		5.8272	5.8272		5.8272	5.8272	610.9781	256.2353	867.2134	0.5638	0.0481	895.6305
Landscaping	0.0558	0.0210	1.8283	1.0000e-004		0.0101	0.0101		0.0101	0.0101		3.3003	3.3003	3.2100e-003		3.3807
Total	36.0045	0.6785	43.3886	0.0754		5.8373	5.8373		5.8373	5.8373	610.9781	259.5356	870.5137	0.5670	0.0481	899.0111

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6228					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0384	0.3285	0.1398	2.1000e-003		0.0266	0.0266		0.0266	0.0266	0.0000	419.2941	419.2941	8.0400e-003	7.6900e-003	421.7858
Landscaping	0.0558	0.0210	1.8283	1.0000e-004		0.0101	0.0101		0.0101	0.0101		3.3003	3.3003	3.2100e-003		3.3807
Total	1.8485	0.3495	1.9680	2.2000e-003		0.0367	0.0367		0.0367	0.0367	0.0000	422.5944	422.5944	0.0113	7.6900e-003	425.1664

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Phase 4 Construction Only - Shasta County AQMD Air District, Winter

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	119.00	1000sqft	2.73	119,000.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,800.00	11
Single Family Housing	43.00	Dwelling Unit	13.96	152,650.00	123

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 5 includes 43 units, anticipates 4 secondary units (apartments), 119,000 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - imported 5,160 cubic yards of rock material

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 energy standard reduces residential energy use by 7% or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	300.00
tblConstructionPhase	NumDays	20.00	300.00
tblGrading	MaterialImported	0.00	5,160.00
tblLandUse	LandUseSquareFeet	4,000.00	4,800.00
tblLandUse	LandUseSquareFeet	77,400.00	152,650.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

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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					
2028	1.9370	2.9302	3.8731	7.9200e-003	0.3582	0.1191	0.4773	0.1406	0.1110	0.2516	0.0000	698.3706	698.3706	0.1537	0.0000	702.2119
2029	1.0553	1.3112	1.8871	3.6500e-003	0.0716	0.0543	0.1259	0.0192	0.0508	0.0700	0.0000	321.3667	321.3667	0.0679	0.0000	323.0640
Maximum	1.9370	2.9302	3.8731	7.9200e-003	0.3582	0.1191	0.4773	0.1406	0.1110	0.2516	0.0000	698.3706	698.3706	0.1537	0.0000	702.2119

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					
2028	1.7527	2.7169	4.4891	7.9200e-003	0.3478	0.0149	0.3627	0.1381	0.0148	0.1529	0.0000	698.3699	698.3699	0.1537	0.0000	702.2113
2029	0.9726	1.3012	2.1317	3.6500e-003	0.0661	7.2300e-003	0.0734	0.0179	7.2000e-003	0.0251	0.0000	321.3664	321.3664	0.0679	0.0000	323.0637
Maximum	1.7527	2.7169	4.4891	7.9200e-003	0.3478	0.0149	0.3627	0.1381	0.0148	0.1529	0.0000	698.3699	698.3699	0.1537	0.0000	702.2113

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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	8.92	5.26	-14.94	0.00	3.69	87.26	27.71	2.43	86.41	44.67	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	1-13-2028	4-12-2028	0.7642	0.5272
2	4-13-2028	7-12-2028	1.4268	1.3710
3	7-13-2028	10-12-2028	1.4427	1.3863
4	10-13-2028	1-12-2029	1.4433	1.3869
5	1-13-2029	4-12-2029	1.4100	1.3548
6	4-13-2029	7-12-2029	0.7516	0.7221
		Highest	1.4433	1.3869

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	3.8326	0.0616	3.9895	6.6100e-003		0.5124	0.5124		0.5124	0.5124	48.5490	20.9329	69.4819	0.0454	3.8200e-003	71.7537
Energy	6.3700e-003	0.0544	0.0232	3.5000e-004		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	115.7435	115.7435	6.4100e-003	2.2300e-003	116.5686
Mobile	0.1144	1.1562	1.2693	7.6700e-003	0.5948	4.6300e-003	0.5994	0.1599	4.3400e-003	0.1642	0.0000	712.1387	712.1387	0.0328	0.0000	712.9574
Waste						0.0000	0.0000		0.0000	0.0000	6.6155	0.0000	6.6155	0.3910	0.0000	16.3896
Water						0.0000	0.0000		0.0000	0.0000	0.9715	3.1108	4.0823	0.1001	2.4200e-003	7.3056
Total	3.9534	1.2723	5.2819	0.0146	0.5948	0.5214	1.1161	0.1599	0.5211	0.6810	56.1360	851.9259	908.0618	0.5756	8.4700e-003	924.9749

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6866	0.0328	0.3614	2.0000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	33.8898	33.8898	1.1900e-003	6.1000e-004	34.1015
Energy	5.9900e-003	0.0512	0.0218	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	111.5606	111.5606	6.3000e-003	2.1500e-003	112.3598
Mobile	0.1144	1.1562	1.2693	7.6700e-003	0.5948	4.6300e-003	0.5994	0.1599	4.3400e-003	0.1642	0.0000	712.1387	712.1387	0.0328	0.0000	712.9574
Waste						0.0000	0.0000		0.0000	0.0000	6.6155	0.0000	6.6155	0.3910	0.0000	16.3896
Water						0.0000	0.0000		0.0000	0.0000	0.7772	2.6139	3.3911	0.0801	1.9400e-003	5.9708
Total	0.8070	1.2402	1.6524	8.2000e-003	0.5948	0.0130	0.6078	0.1599	0.0128	0.1726	7.3927	860.2029	867.5956	0.5113	4.7000e-003	881.7790

	ROG	NOx	CO	SO2	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	79.59	2.52	68.72	43.95	0.00	97.50	45.54	0.00	97.55	74.65	86.83	-0.97	4.46	11.17	44.51	4.67

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2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	- 4,706.400 0
Total	- 4,706.400 0

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/10/2028	2/23/2028	5	10	
2	Grading	Grading	2/24/2028	4/5/2028	5	30	
3	Building Construction	Building Construction	4/6/2028	5/30/2029	5	300	
4	Paving	Paving	4/6/2028	5/30/2029	5	300	
5	Architectural Coating	Architectural Coating	4/6/2028	5/30/2029	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 2.73

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Residential Indoor: 318,836; Residential Outdoor: 106,279; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 7,140 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	645.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	68.00	25.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2028

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	0.0124	0.1262	0.0896	1.9000e-004	0.0903	5.4300e-003	0.0958	0.0497	5.0000e-003	0.0547	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688

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3.2 Site Preparation - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	1.9000e-004	2.1200e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.7463	0.7463	1.0000e-005	0.0000	0.7467
Total	3.2000e-004	1.9000e-004	2.1200e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.7463	0.7463	1.0000e-005	0.0000	0.7467

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4800e-003	0.0608	0.1148	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	3.4800e-003	0.0608	0.1148	1.9000e-004	0.0903	3.1000e-004	0.0906	0.0497	3.1000e-004	0.0500	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688

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3.2 Site Preparation - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	1.9000e-004	2.1200e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.7463	0.7463	1.0000e-005	0.0000	0.7467
Total	3.2000e-004	1.9000e-004	2.1200e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.7463	0.7463	1.0000e-005	0.0000	0.7467

3.3 Grading - 2028

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					0.1305	0.0000	0.1305	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0435	0.4191	0.3950	9.3000e-004		0.0170	0.0170		0.0156	0.0156	0.0000	81.7593	81.7593	0.0264	0.0000	82.4204
Total	0.0435	0.4191	0.3950	9.3000e-004	0.1305	0.0170	0.1474	0.0540	0.0156	0.0696	0.0000	81.7593	81.7593	0.0264	0.0000	82.4204

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3.3 Grading - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5200e-003	0.0494	9.2000e-003	2.4000e-004	5.4100e-003	9.0000e-005	5.5000e-003	1.4900e-003	9.0000e-005	1.5800e-003	0.0000	22.8632	22.8632	9.3000e-004	0.0000	22.8865
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	6.4000e-004	7.0800e-003	3.0000e-005	3.6400e-003	2.0000e-005	3.6600e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	2.4877	2.4877	5.0000e-005	0.0000	2.4888
Total	2.5700e-003	0.0500	0.0163	2.7000e-004	9.0500e-003	1.1000e-004	9.1600e-003	2.4600e-003	1.1000e-004	2.5700e-003	0.0000	25.3509	25.3509	9.8000e-004	0.0000	25.3754

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					0.1305	0.0000	0.1305	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.2891	0.5508	9.3000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	81.7592	81.7592	0.0264	0.0000	82.4203
Total	0.0152	0.2891	0.5508	9.3000e-004	0.1305	1.5200e-003	0.1320	0.0540	1.5200e-003	0.0555	0.0000	81.7592	81.7592	0.0264	0.0000	82.4203

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3.3 Grading - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5200e-003	0.0494	9.2000e-003	2.4000e-004	5.0500e-003	9.0000e-005	5.1400e-003	1.4000e-003	9.0000e-005	1.4900e-003	0.0000	22.8632	22.8632	9.3000e-004	0.0000	22.8865
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	6.4000e-004	7.0800e-003	3.0000e-005	3.3600e-003	2.0000e-005	3.3800e-003	9.0000e-004	2.0000e-005	9.2000e-004	0.0000	2.4877	2.4877	5.0000e-005	0.0000	2.4888
Total	2.5700e-003	0.0500	0.0163	2.7000e-004	8.4100e-003	1.1000e-004	8.5200e-003	2.3000e-003	1.1000e-004	2.4100e-003	0.0000	25.3509	25.3509	9.8000e-004	0.0000	25.3754

3.4 Building Construction - 2028

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	0.1313	1.1971	1.5441	2.5900e-003		0.0507	0.0507		0.0476	0.0476	0.0000	222.6427	222.6427	0.0523	0.0000	223.9511
Total	0.1313	1.1971	1.5441	2.5900e-003		0.0507	0.0507		0.0476	0.0476	0.0000	222.6427	222.6427	0.0523	0.0000	223.9511

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3.4 Building Construction - 2028

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	4.8600e-003	0.1838	0.0332	6.0000e-004	0.0141	2.0000e-004	0.0143	4.0900e-003	1.9000e-004	4.2900e-003	0.0000	57.2248	57.2248	3.5400e-003	0.0000	57.3133
Worker	0.0230	0.0140	0.1540	6.0000e-004	0.0793	4.3000e-004	0.0797	0.0211	4.0000e-004	0.0215	0.0000	54.1316	54.1316	1.0100e-003	0.0000	54.1567
Total	0.0278	0.1978	0.1872	1.2000e-003	0.0934	6.3000e-004	0.0941	0.0252	5.9000e-004	0.0258	0.0000	111.3563	111.3563	4.5500e-003	0.0000	111.4700

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	0.0512	1.0476	1.7159	2.5900e-003		8.1200e-003	8.1200e-003		8.1200e-003	8.1200e-003	0.0000	222.6424	222.6424	0.0523	0.0000	223.9508
Total	0.0512	1.0476	1.7159	2.5900e-003		8.1200e-003	8.1200e-003		8.1200e-003	8.1200e-003	0.0000	222.6424	222.6424	0.0523	0.0000	223.9508

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3.4 Building Construction - 2028

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	4.8600e-003	0.1838	0.0332	6.0000e-004	0.0132	2.0000e-004	0.0134	3.8700e-003	1.9000e-004	4.0700e-003	0.0000	57.2248	57.2248	3.5400e-003	0.0000	57.3133
Worker	0.0230	0.0140	0.1540	6.0000e-004	0.0732	4.3000e-004	0.0736	0.0196	4.0000e-004	0.0200	0.0000	54.1316	54.1316	1.0100e-003	0.0000	54.1567
Total	0.0278	0.1978	0.1872	1.2000e-003	0.0864	6.3000e-004	0.0870	0.0235	5.9000e-004	0.0241	0.0000	111.3563	111.3563	4.5500e-003	0.0000	111.4700

3.4 Building Construction - 2029

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	0.0738	0.6734	0.8686	1.4600e-003		0.0285	0.0285		0.0268	0.0268	0.0000	125.2365	125.2365	0.0294	0.0000	125.9725
Total	0.0738	0.6734	0.8686	1.4600e-003		0.0285	0.0285		0.0268	0.0268	0.0000	125.2365	125.2365	0.0294	0.0000	125.9725

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3.4 Building Construction - 2029

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	2.6700e-003	0.1023	0.0180	3.4000e-004	7.9500e-003	1.1000e-004	8.0500e-003	2.3000e-003	1.0000e-004	2.4100e-003	0.0000	32.0461	32.0461	2.0000e-003	0.0000	32.0962
Worker	0.0121	7.1900e-003	0.0811	3.3000e-004	0.0446	2.3000e-004	0.0448	0.0119	2.1000e-004	0.0121	0.0000	29.5783	29.5783	5.1000e-004	0.0000	29.5911
Total	0.0148	0.1095	0.0991	6.7000e-004	0.0526	3.4000e-004	0.0529	0.0142	3.1000e-004	0.0145	0.0000	61.6244	61.6244	2.5100e-003	0.0000	61.6873

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	0.0288	0.5893	0.9652	1.4600e-003		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	125.2364	125.2364	0.0294	0.0000	125.9723
Total	0.0288	0.5893	0.9652	1.4600e-003		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	125.2364	125.2364	0.0294	0.0000	125.9723

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3.4 Building Construction - 2029

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	2.6700e-003	0.1023	0.0180	3.4000e-004	7.4400e-003	1.1000e-004	7.5500e-003	2.1800e-003	1.0000e-004	2.2800e-003	0.0000	32.0461	32.0461	2.0000e-003	0.0000	32.0962
Worker	0.0121	7.1900e-003	0.0811	3.3000e-004	0.0412	2.3000e-004	0.0414	0.0110	2.1000e-004	0.0112	0.0000	29.5783	29.5783	5.1000e-004	0.0000	29.5911
Total	0.0148	0.1095	0.0991	6.7000e-004	0.0486	3.4000e-004	0.0489	0.0132	3.1000e-004	0.0135	0.0000	61.6244	61.6244	2.5100e-003	0.0000	61.6873

3.5 Paving - 2028

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	0.0879	0.8238	1.3995	2.1900e-003		0.0402	0.0402		0.0370	0.0370	0.0000	192.1849	192.1849	0.0622	0.0000	193.7388
Paving	2.2900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0901	0.8238	1.3995	2.1900e-003		0.0402	0.0402		0.0370	0.0370	0.0000	192.1849	192.1849	0.0622	0.0000	193.7388

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3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0600e-003	3.0800e-003	0.0340	1.3000e-004	0.0175	9.0000e-005	0.0176	4.6600e-003	9.0000e-005	4.7400e-003	0.0000	11.9408	11.9408	2.2000e-004	0.0000	11.9463
Total	5.0600e-003	3.0800e-003	0.0340	1.3000e-004	0.0175	9.0000e-005	0.0176	4.6600e-003	9.0000e-005	4.7400e-003	0.0000	11.9408	11.9408	2.2000e-004	0.0000	11.9463

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	0.0321	0.9638	1.6604	2.1900e-003		3.5900e-003	3.5900e-003		3.5900e-003	3.5900e-003	0.0000	192.1846	192.1846	0.0622	0.0000	193.7385
Paving	2.2900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0344	0.9638	1.6604	2.1900e-003		3.5900e-003	3.5900e-003		3.5900e-003	3.5900e-003	0.0000	192.1846	192.1846	0.0622	0.0000	193.7385

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3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0600e-003	3.0800e-003	0.0340	1.3000e-004	0.0161	9.0000e-005	0.0162	4.3200e-003	9.0000e-005	4.4100e-003	0.0000	11.9408	11.9408	2.2000e-004	0.0000	11.9463
Total	5.0600e-003	3.0800e-003	0.0340	1.3000e-004	0.0161	9.0000e-005	0.0162	4.3200e-003	9.0000e-005	4.4100e-003	0.0000	11.9408	11.9408	2.2000e-004	0.0000	11.9463

3.5 Paving - 2029

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	0.0494	0.4634	0.7872	1.2300e-003		0.0226	0.0226		0.0208	0.0208	0.0000	108.1040	108.1040	0.0350	0.0000	108.9781
Paving	1.2900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0507	0.4634	0.7872	1.2300e-003		0.0226	0.0226		0.0208	0.0208	0.0000	108.1040	108.1040	0.0350	0.0000	108.9781

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3.5 Paving - 2029

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	2.6700e-003	1.5900e-003	0.0179	7.0000e-005	9.8400e-003	5.0000e-005	9.8900e-003	2.6200e-003	5.0000e-005	2.6700e-003	0.0000	6.5246	6.5246	1.1000e-004	0.0000	6.5275
Total	2.6700e-003	1.5900e-003	0.0179	7.0000e-005	9.8400e-003	5.0000e-005	9.8900e-003	2.6200e-003	5.0000e-005	2.6700e-003	0.0000	6.5246	6.5246	1.1000e-004	0.0000	6.5275

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	0.0180	0.5421	0.9340	1.2300e-003		2.0200e-003	2.0200e-003		2.0200e-003	2.0200e-003	0.0000	108.1039	108.1039	0.0350	0.0000	108.9779
Paving	1.2900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0193	0.5421	0.9340	1.2300e-003		2.0200e-003	2.0200e-003		2.0200e-003	2.0200e-003	0.0000	108.1039	108.1039	0.0350	0.0000	108.9779

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3.5 Paving - 2029

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	2.6700e-003	1.5900e-003	0.0179	7.0000e-005	9.0800e-003	5.0000e-005	9.1300e-003	2.4300e-003	5.0000e-005	2.4800e-003	0.0000	6.5246	6.5246	1.1000e-004	0.0000	6.5275
Total	2.6700e-003	1.5900e-003	0.0179	7.0000e-005	9.0800e-003	5.0000e-005	9.1300e-003	2.4300e-003	5.0000e-005	2.4800e-003	0.0000	6.5246	6.5246	1.1000e-004	0.0000	6.5275

3.6 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6028					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0164	0.1100	0.1737	2.9000e-004		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	24.5112	24.5112	1.3400e-003	0.0000	24.5447
Total	1.6192	0.1100	0.1737	2.9000e-004		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	24.5112	24.5112	1.3400e-003	0.0000	24.5447

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3.6 Architectural Coating - 2028

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	4.7200e-003	2.8800e-003	0.0317	1.2000e-004	0.0163	9.0000e-005	0.0164	4.3500e-003	8.0000e-005	4.4300e-003	0.0000	11.1447	11.1447	2.1000e-004	0.0000	11.1499
Total	4.7200e-003	2.8800e-003	0.0317	1.2000e-004	0.0163	9.0000e-005	0.0164	4.3500e-003	8.0000e-005	4.4300e-003	0.0000	11.1447	11.1447	2.1000e-004	0.0000	11.1499

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6028					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2300e-003	0.1017	0.1759	2.9000e-004		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	24.5112	24.5112	1.3400e-003	0.0000	24.5446
Total	1.6080	0.1017	0.1759	2.9000e-004		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	24.5112	24.5112	1.3400e-003	0.0000	24.5446

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3.6 Architectural Coating - 2028

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	4.7200e-003	2.8800e-003	0.0317	1.2000e-004	0.0151	9.0000e-005	0.0152	4.0400e-003	8.0000e-005	4.1200e-003	0.0000	11.1447	11.1447	2.1000e-004	0.0000	11.1499
Total	4.7200e-003	2.8800e-003	0.0317	1.2000e-004	0.0151	9.0000e-005	0.0152	4.0400e-003	8.0000e-005	4.1200e-003	0.0000	11.1447	11.1447	2.1000e-004	0.0000	11.1499

3.6 Architectural Coating - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9016					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2300e-003	0.0619	0.0977	1.6000e-004		2.7800e-003	2.7800e-003		2.7800e-003	2.7800e-003	0.0000	13.7876	13.7876	7.5000e-004	0.0000	13.8064
Total	0.9108	0.0619	0.0977	1.6000e-004		2.7800e-003	2.7800e-003		2.7800e-003	2.7800e-003	0.0000	13.7876	13.7876	7.5000e-004	0.0000	13.8064

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3.6 Architectural Coating - 2029

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	2.4900e-003	1.4800e-003	0.0167	7.0000e-005	9.1800e-003	5.0000e-005	9.2300e-003	2.4500e-003	4.0000e-005	2.4900e-003	0.0000	6.0897	6.0897	1.1000e-004	0.0000	6.0923
Total	2.4900e-003	1.4800e-003	0.0167	7.0000e-005	9.1800e-003	5.0000e-005	9.2300e-003	2.4500e-003	4.0000e-005	2.4900e-003	0.0000	6.0897	6.0897	1.1000e-004	0.0000	6.0923

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9016					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9400e-003	0.0572	0.0990	1.6000e-004		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	13.7876	13.7876	7.5000e-004	0.0000	13.8064
Total	0.9045	0.0572	0.0990	1.6000e-004		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	13.7876	13.7876	7.5000e-004	0.0000	13.8064

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3.6 Architectural Coating - 2029

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	2.4900e-003	1.4800e-003	0.0167	7.0000e-005	8.4700e-003	5.0000e-005	8.5200e-003	2.2700e-003	4.0000e-005	2.3100e-003	0.0000	6.0897	6.0897	1.1000e-004	0.0000	6.0923
Total	2.4900e-003	1.4800e-003	0.0167	7.0000e-005	8.4700e-003	5.0000e-005	8.5200e-003	2.2700e-003	4.0000e-005	2.3100e-003	0.0000	6.0897	6.0897	1.1000e-004	0.0000	6.0923

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1144	1.1562	1.2693	7.6700e-003	0.5948	4.6300e-003	0.5994	0.1599	4.3400e-003	0.1642	0.0000	712.1387	712.1387	0.0328	0.0000	712.9574
Unmitigated	0.1144	1.1562	1.2693	7.6700e-003	0.5948	4.6300e-003	0.5994	0.1599	4.3400e-003	0.1642	0.0000	712.1387	712.1387	0.0328	0.0000	712.9574

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	26.36	28.64	24.28	97,795	97,795
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	409.36	426.13	370.66	1,505,461	1,505,461
Total	435.72	454.77	394.94	1,603,256	1,603,256

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698
Other Asphalt Surfaces	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698
Single Family Housing	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	52.3063	52.3063	5.1600e-003	1.0700e-003	52.7533
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	52.7319	52.7319	5.2000e-003	1.0800e-003	53.1827
NaturalGas Mitigated	5.9900e-003	0.0512	0.0218	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	59.2543	59.2543	1.1400e-003	1.0900e-003	59.6065
NaturalGas Unmitigated	6.3700e-003	0.0544	0.0232	3.5000e-004		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	63.0115	63.0115	1.2100e-003	1.1600e-003	63.3860

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	56545.8	3.0000e-004	2.6100e-003	1.1100e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	3.0175	3.0175	6.0000e-005	6.0000e-005	3.0354
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.12425e+006	6.0600e-003	0.0518	0.0220	3.3000e-004		4.1900e-003	4.1900e-003		4.1900e-003	4.1900e-003	0.0000	59.9940	59.9940	1.1500e-003	1.1000e-003	60.3505
Total		6.3600e-003	0.0544	0.0232	3.5000e-004		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	63.0115	63.0115	1.2100e-003	1.1600e-003	63.3860

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	53630.1	2.9000e-004	2.4700e-003	1.0500e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8619	2.8619	5.0000e-005	5.0000e-005	2.8789
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.05675e+006	5.7000e-003	0.0487	0.0207	3.1000e-004		3.9400e-003	3.9400e-003		3.9400e-003	3.9400e-003	0.0000	56.3924	56.3924	1.0800e-003	1.0300e-003	56.7276
Total		5.9900e-003	0.0512	0.0218	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	59.2543	59.2543	1.1300e-003	1.0800e-003	59.6065

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	18710.1	2.4951	2.5000e-004	5.0000e-005	2.5164
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	376712	50.2368	4.9600e-003	1.0300e-003	50.6663
Total		52.7319	5.2100e-003	1.0800e-003	53.1827

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	18515.6	2.4692	2.4000e-004	5.0000e-005	2.4903
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	373714	49.8371	4.9200e-003	1.0200e-003	50.2631
Total		52.3063	5.1600e-003	1.0700e-003	52.7533

6.0 Area Detail

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6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.6866	0.0328	0.3614	2.0000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	33.8898	33.8898	1.1900e-003	6.1000e-004	34.1015
Unmitigated	3.8326	0.0616	3.9895	6.6100e-003		0.5124	0.5124		0.5124	0.5124	48.5490	20.9329	69.4819	0.0454	3.8200e-003	71.7537

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2504					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.9491	0.0576	3.6403	6.6000e-003		0.5104	0.5104		0.5104	0.5104	48.5490	20.3608	68.9098	0.0448	3.8200e-003	71.1678
Landscaping	0.0105	4.0200e-003	0.3492	2.0000e-005		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	0.5722	0.5722	5.5000e-004	0.0000	0.5859
Total	3.8326	0.0616	3.9895	6.6200e-003		0.5124	0.5124		0.5124	0.5124	48.5490	20.9329	69.4819	0.0454	3.8200e-003	71.7537

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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	0.0501					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.3700e-003	0.0288	0.0122	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003	0.0000	33.3176	33.3176	6.4000e-004	6.1000e-004	33.5156
Landscaping	0.0105	4.0200e-003	0.3492	2.0000e-005		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	0.5722	0.5722	5.5000e-004	0.0000	0.5859
Total	0.6866	0.0328	0.3614	2.0000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	33.8898	33.8898	1.1900e-003	6.1000e-004	34.1015

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.3911	0.0801	1.9400e-003	5.9708
Unmitigated	4.0823	0.1001	2.4200e-003	7.3056

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.260616 / 0.164301	0.3474	8.5200e-003	2.1000e-004	0.6218
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.80162 / 1.76624	3.7348	0.0916	2.2100e-003	6.6838
Total		4.0823	0.1001	2.4200e-003	7.3056

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.208493 / 0.154279	0.2886	6.8200e-003	1.6000e-004	0.5082
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.2413 / 1.6585	3.1025	0.0733	1.7700e-003	5.4626
Total		3.3911	0.0801	1.9300e-003	5.9708

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.6155	0.3910	0.0000	16.3896
Unmitigated	6.6155	0.3910	0.0000	16.3896

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.84	0.3735	0.0221	0.0000	0.9253
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	30.75	6.2420	0.3689	0.0000	15.4642
Total		6.6155	0.3910	0.0000	16.3896

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.84	0.3735	0.0221	0.0000	0.9253
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	30.75	6.2420	0.3689	0.0000	15.4642
Total		6.6155	0.3910	0.0000	16.3896

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

Equipment Type	Number
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Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Annual

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	- 4,706.400 0	0.0000	0.0000	- 4,706.400 0

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Trees	130.4 / 88	- 4,706.400 0	0.0000	0.0000	- 4,706.400 0
Total		- 4,706.400 0	0.0000	0.0000	- 4,706.400 0

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

Tierra Robles - Phase 5 Construction Only
Shasta County AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	119.00	1000sqft	2.73	119,000.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,800.00	11
Single Family Housing	43.00	Dwelling Unit	13.96	152,650.00	123

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 5 includes 43 units, anticipates 4 secondary units (apartments), 119,000 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - imported 5,160 cubic yards of rock material

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 energy standard reduces residential energy use by 7% or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	300.00
tblConstructionPhase	NumDays	20.00	300.00
tblGrading	MaterialImported	0.00	5,160.00
tblLandUse	LandUseSquareFeet	4,000.00	4,800.00
tblLandUse	LandUseSquareFeet	77,400.00	152,650.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

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					
2028	19.6115	31.2212	35.6332	0.0803	18.2962	1.1384	19.3842	9.9917	1.0475	10.9926	0.0000	7,908.968 5	7,908.968 5	2.0120	0.0000	7,959.268 6
2029	19.5851	24.2556	35.4439	0.0687	1.3923	1.0055	2.3978	0.3727	0.9402	1.3129	0.0000	6,670.414 4	6,670.414 4	1.3859	0.0000	6,705.062 8
Maximum	19.6115	31.2212	35.6332	0.0803	18.2962	1.1384	19.3842	9.9917	1.0475	10.9926	0.0000	7,908.968 5	7,908.968 5	2.0120	0.0000	7,959.268 6

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					
2028	18.0802	24.1058	40.1632	0.0803	18.2782	0.1344	18.3415	9.9872	0.1338	10.0504	0.0000	7,908.968 5	7,908.968 5	2.0120	0.0000	7,959.268 5
2029	18.0538	24.0703	39.9740	0.0687	1.2855	0.1339	1.4194	0.3465	0.1334	0.4799	0.0000	6,670.414 4	6,670.414 4	1.3859	0.0000	6,705.062 8
Maximum	18.0802	24.1058	40.1632	0.0803	18.2782	0.1344	18.3415	9.9872	0.1338	10.0504	0.0000	7,908.968 5	7,908.968 5	2.0120	0.0000	7,959.268 5

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	7.81	13.16	-12.75	0.00	0.63	87.48	9.28	0.30	86.56	14.43	0.00	0.00	0.00	0.00	0.00	0.00

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	76.8292	1.4494	92.6674	0.1611		12.4705	12.4705		12.4705	12.4705	1,305.2713	554.4198	1,859.6911	1.2113	0.1027	1,920.5683
Energy	0.0349	0.2981	0.1269	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.5934	380.5934	7.2900e-003	6.9800e-003	382.8551
Mobile	0.8311	6.5835	8.4169	0.0471	3.6071	0.0268	3.6338	0.9656	0.0251	0.9906		4,816.1439	4,816.1439	0.2049		4,821.2653
Total	77.6952	8.3310	101.2112	0.2101	3.6071	12.5213	16.1284	0.9656	12.5196	13.4852	1,305.2713	5,751.1571	7,056.4284	1.4234	0.1097	7,124.6887

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.8849	0.7464	4.1780	4.6800e-003		0.0783	0.0783		0.0783	0.0783	0.0000	902.7727	902.7727	0.0239	0.0164	908.2638
Energy	0.0328	0.2804	0.1193	1.7900e-003		0.0227	0.0227		0.0227	0.0227		357.8999	357.8999	6.8600e-003	6.5600e-003	360.0267
Mobile	0.8311	6.5835	8.4169	0.0471	3.6071	0.0268	3.6338	0.9656	0.0251	0.9906		4,816.1439	4,816.1439	0.2049		4,821.2653
Total	4.7488	7.6102	12.7142	0.0536	3.6071	0.1277	3.7348	0.9656	0.1260	1.0916	0.0000	6,076.8165	6,076.8165	0.2356	0.0230	6,089.5558

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	93.89	8.65	87.44	74.48	0.00	98.98	76.84	0.00	98.99	91.91	100.00	-5.66	13.88	83.45	79.04	14.53

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/10/2028	2/23/2028	5	10	
2	Grading	Grading	2/24/2028	4/5/2028	5	30	
3	Building Construction	Building Construction	4/6/2028	5/30/2029	5	300	
4	Paving	Paving	4/6/2028	5/30/2029	5	300	
5	Architectural Coating	Architectural Coating	4/6/2028	5/30/2029	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 2.73

Residential Indoor: 318,836; Residential Outdoor: 106,279; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 7,140 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	645.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	68.00	25.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	18.0663	1.0868	19.1531	9.9307	0.9999	10.9305		3,689.1037	3,689.1037	1.1931		3,718.9320

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0361	0.5279	1.8400e-003	0.2299	1.1900e-003	0.2311	0.0610	1.0900e-003	0.0621		183.7359	183.7359	3.5300e-003		183.8243
Total	0.0721	0.0361	0.5279	1.8400e-003	0.2299	1.1900e-003	0.2311	0.0610	1.0900e-003	0.0621		183.7359	183.7359	3.5300e-003		183.8243

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	0.6967	12.1620	22.9600	0.0381	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0361	0.5279	1.8400e-003	0.2119	1.1900e-003	0.2131	0.0566	1.0900e-003	0.0577		183.7359	183.7359	3.5300e-003		183.8243
Total	0.0721	0.0361	0.5279	1.8400e-003	0.2119	1.1900e-003	0.2131	0.0566	1.0900e-003	0.0577		183.7359	183.7359	3.5300e-003		183.8243

3.3 Grading - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6987	0.0000	8.6987	3.6003	0.0000	3.6003			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.2814	6,008.2814	1.9432		6,056.8614
Total	2.9012	27.9429	26.3311	0.0621	8.6987	1.1309	9.8296	3.6003	1.0404	4.6408		6,008.2814	6,008.2814	1.9432		6,056.8614

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2028

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	0.0996	3.2382	0.5856	0.0162	0.3766	6.1700e-003	0.3828	0.1033	5.9000e-003	0.1092		1,696.5360	1,696.5360	0.0649		1,698.1579
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0802	0.0401	0.5866	2.0500e-003	0.2555	1.3200e-003	0.2568	0.0678	1.2100e-003	0.0690		204.1510	204.1510	3.9300e-003		204.2492
Total	0.1797	3.2783	1.1721	0.0182	0.6321	7.4900e-003	0.6396	0.1710	7.1100e-003	0.1782		1,900.6870	1,900.6870	0.0688		1,902.4071

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					8.6987	0.0000	8.6987	3.6003	0.0000	3.6003			0.0000			0.0000
Off-Road	1.0110	19.2707	36.7226	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614
Total	1.0110	19.2707	36.7226	0.0621	8.6987	0.1015	8.8003	3.6003	0.1015	3.7019	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2028

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	0.0996	3.2382	0.5856	0.0162	0.3511	6.1700e-003	0.3572	0.0970	5.9000e-003	0.1029		1,696.5360	1,696.5360	0.0649		1,698.1579
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0802	0.0401	0.5866	2.0500e-003	0.2355	1.3200e-003	0.2368	0.0628	1.2100e-003	0.0641		204.1510	204.1510	3.9300e-003		204.2492
Total	0.1797	3.2783	1.1721	0.0182	0.5865	7.4900e-003	0.5940	0.1599	7.1100e-003	0.1670		1,900.6870	1,900.6870	0.0688		1,902.4071

3.4 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0497	1.9001	0.3166	6.3800e-003	0.1533	2.0800e-003	0.1553	0.0441	1.9900e-003	0.0461		666.8605	666.8605	0.0384		667.8199
Worker	0.2725	0.1362	1.9943	6.9600e-003	0.8686	4.4800e-003	0.8731	0.2303	4.1200e-003	0.2345		694.1135	694.1135	0.0134		694.4473
Total	0.3222	2.0363	2.3109	0.0133	1.0218	6.5600e-003	1.0284	0.2745	6.1100e-003	0.2806		1,360.9740	1,360.9740	0.0517		1,362.2672

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0497	1.9001	0.3166	6.3800e-003	0.1434	2.0800e-003	0.1455	0.0417	1.9900e-003	0.0437		666.8605	666.8605	0.0384		667.8199
Worker	0.2725	0.1362	1.9943	6.9600e-003	0.8006	4.4800e-003	0.8051	0.2137	4.1200e-003	0.2178		694.1135	694.1135	0.0134		694.4473
Total	0.3222	2.0363	2.3109	0.0133	0.9440	6.5600e-003	0.9506	0.2554	6.1100e-003	0.2615		1,360.9740	1,360.9740	0.0517		1,362.2672

3.4 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0484	1.8809	0.3045	6.3500e-003	0.1533	2.0000e-003	0.1553	0.0441	1.9100e-003	0.0461		663.8517	663.8517	0.0386		664.8173
Worker	0.2549	0.1247	1.8701	6.7600e-003	0.8686	4.1800e-003	0.8727	0.2303	3.8400e-003	0.2342		674.3182	674.3182	0.0121		674.6215
Total	0.3033	2.0056	2.1746	0.0131	1.0218	6.1800e-003	1.0280	0.2745	5.7500e-003	0.2802		1,338.1699	1,338.1699	0.0508		1,339.4388

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0484	1.8809	0.3045	6.3500e-003	0.1434	2.0000e-003	0.1454	0.0417	1.9100e-003	0.0436		663.8517	663.8517	0.0386		664.8173
Worker	0.2549	0.1247	1.8701	6.7600e-003	0.8006	4.1800e-003	0.8048	0.2137	3.8400e-003	0.2175		674.3182	674.3182	0.0121		674.6215
Total	0.3033	2.0056	2.1746	0.0131	0.9440	6.1800e-003	0.9502	0.2554	5.7500e-003	0.2611		1,338.1699	1,338.1699	0.0508		1,339.4388

3.5 Paving - 2028

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9390	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0300	0.4399	1.5400e-003	0.1916	9.9000e-004	0.1926	0.0508	9.1000e-004	0.0517		153.1133	153.1133	2.9500e-003		153.1869
Total	0.0601	0.0300	0.4399	1.5400e-003	0.1916	9.9000e-004	0.1926	0.0508	9.1000e-004	0.0517		153.1133	153.1133	2.9500e-003		153.1869

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3579	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0300	0.4399	1.5400e-003	0.1766	9.9000e-004	0.1776	0.0471	9.1000e-004	0.0480		153.1133	153.1133	2.9500e-003		153.1869
Total	0.0601	0.0300	0.4399	1.5400e-003	0.1766	9.9000e-004	0.1776	0.0471	9.1000e-004	0.0480		153.1133	153.1133	2.9500e-003		153.1869

3.5 Paving - 2029

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9390	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0562	0.0275	0.4125	1.4900e-003	0.1916	9.2000e-004	0.1925	0.0508	8.5000e-004	0.0517		148.7467	148.7467	2.6800e-003		148.8136
Total	0.0562	0.0275	0.4125	1.4900e-003	0.1916	9.2000e-004	0.1925	0.0508	8.5000e-004	0.0517		148.7467	148.7467	2.6800e-003		148.8136

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3579	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0562	0.0275	0.4125	1.4900e-003	0.1766	9.2000e-004	0.1775	0.0471	8.5000e-004	0.0480		148.7467	148.7467	2.6800e-003		148.8136
Total	0.0562	0.0275	0.4125	1.4900e-003	0.1766	9.2000e-004	0.1775	0.0471	8.5000e-004	0.0480		148.7467	148.7467	2.6800e-003		148.8136

3.6 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	16.8667	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0280	0.4106	1.4300e-003	0.1788	9.2000e-004	0.1798	0.0474	8.5000e-004	0.0483		142.9057	142.9057	2.7500e-003		142.9745
Total	0.0561	0.0280	0.4106	1.4300e-003	0.1788	9.2000e-004	0.1798	0.0474	8.5000e-004	0.0483		142.9057	142.9057	2.7500e-003		142.9745

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	16.7503	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0280	0.4106	1.4300e-003	0.1648	9.2000e-004	0.1658	0.0440	8.5000e-004	0.0448		142.9057	142.9057	2.7500e-003		142.9745
Total	0.0561	0.0280	0.4106	1.4300e-003	0.1648	9.2000e-004	0.1658	0.0440	8.5000e-004	0.0448		142.9057	142.9057	2.7500e-003		142.9745

3.6 Architectural Coating - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	16.8667	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0257	0.3850	1.3900e-003	0.1788	8.6000e-004	0.1797	0.0474	7.9000e-004	0.0482		138.8302	138.8302	2.5000e-003		138.8927
Total	0.0525	0.0257	0.3850	1.3900e-003	0.1788	8.6000e-004	0.1797	0.0474	7.9000e-004	0.0482		138.8302	138.8302	2.5000e-003		138.8927

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	16.7503	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0257	0.3850	1.3900e-003	0.1648	8.6000e-004	0.1657	0.0440	7.9000e-004	0.0448		138.8302	138.8302	2.5000e-003		138.8927
Total	0.0525	0.0257	0.3850	1.3900e-003	0.1648	8.6000e-004	0.1657	0.0440	7.9000e-004	0.0448		138.8302	138.8302	2.5000e-003		138.8927

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8311	6.5835	8.4169	0.0471	3.6071	0.0268	3.6338	0.9656	0.0251	0.9906		4,816.1439	4,816.1439	0.2049		4,821.2653
Unmitigated	0.8311	6.5835	8.4169	0.0471	3.6071	0.0268	3.6338	0.9656	0.0251	0.9906		4,816.1439	4,816.1439	0.2049		4,821.2653

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	26.36	28.64	24.28	97,795	97,795
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	409.36	426.13	370.66	1,505,461	1,505,461
Total	435.72	454.77	394.94	1,603,256	1,603,256

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698
Other Asphalt Surfaces	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698
Single Family Housing	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0328	0.2804	0.1193	1.7900e-003		0.0227	0.0227		0.0227	0.0227		357.8999	357.8999	6.8600e-003	6.5600e-003	360.0267
NaturalGas Unmitigated	0.0349	0.2981	0.1269	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.5934	380.5934	7.2900e-003	6.9800e-003	382.8551

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	154.92	1.6700e-003	0.0143	6.0800e-003	9.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003		18.2259	18.2259	3.5000e-004	3.3000e-004	18.3342
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3080.12	0.0332	0.2839	0.1208	1.8100e-003		0.0230	0.0230		0.0230	0.0230		362.3676	362.3676	6.9500e-003	6.6400e-003	364.5209
Total		0.0349	0.2981	0.1269	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.5935	380.5935	7.3000e-003	6.9700e-003	382.8551

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					
Apartments Low Rise	0.146932	1.5800e-003	0.0135	5.7600e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		17.2861	17.2861	3.3000e-004	3.2000e-004	17.3888
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.89522	0.0312	0.2668	0.1135	1.7000e-003		0.0216	0.0216		0.0216	0.0216		340.6138	340.6138	6.5300e-003	6.2400e-003	342.6379
Total		0.0328	0.2804	0.1193	1.7900e-003		0.0227	0.0227		0.0227	0.0227		357.8999	357.8999	6.8600e-003	6.5600e-003	360.0267

6.0 Area Detail

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.8849	0.7464	4.1780	4.6800e-003		0.0783	0.0783		0.0783	0.0783	0.0000	902.7727	902.7727	0.0239	0.0164	908.2638
Unmitigated	76.8292	1.4494	92.6674	0.1611		12.4705	12.4705		12.4705	12.4705	1,305.2713	554.4198	1,859.6911	1.2113	0.1027	1,920.5683

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3723					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	71.9286	1.4047	88.7880	0.1609		12.4489	12.4489		12.4489	12.4489	1,305.2713	547.4118	1,852.6831	1.2046	0.1027	1,913.3923
Landscaping	0.1168	0.0447	3.8794	2.1000e-004		0.0216	0.0216		0.0216	0.0216		7.0080	7.0080	6.7200e-003		7.1760
Total	76.8292	1.4494	92.6674	0.1611		12.4705	12.4705		12.4705	12.4705	1,305.2713	554.4198	1,859.6911	1.2113	0.1027	1,920.5683

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2745					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0821	0.7017	0.2986	4.4800e-003		0.0567	0.0567		0.0567	0.0567	0.0000	895.7647	895.7647	0.0172	0.0164	901.0878
Landscaping	0.1168	0.0447	3.8794	2.1000e-004		0.0216	0.0216		0.0216	0.0216		7.0080	7.0080	6.7200e-003		7.1760
Total	3.8849	0.7464	4.1780	4.6900e-003		0.0783	0.0783		0.0783	0.0783	0.0000	902.7727	902.7727	0.0239	0.0164	908.2638

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Summer

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

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

Tierra Robles - Phase 5 Construction Only
Shasta County AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	119.00	1000sqft	2.73	119,000.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,800.00	11
Single Family Housing	43.00	Dwelling Unit	13.96	152,650.00	123

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 5 includes 43 units, anticipates 4 secondary units (apartments), 119,000 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - imported 5,160 cubic yards of rock material

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 energy standard reduces residential energy use by 7% or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	300.00
tblConstructionPhase	NumDays	20.00	300.00
tblGrading	MaterialImported	0.00	5,160.00
tblLandUse	LandUseSquareFeet	4,000.00	4,800.00
tblLandUse	LandUseSquareFeet	77,400.00	152,650.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

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					
2028	19.6005	31.2826	35.0798	0.0797	18.2962	1.1384	19.3842	9.9917	1.0476	10.9926	0.0000	7,842.713 9	7,842.713 9	2.0202	0.0000	7,893.218 5
2029	19.5759	24.2953	34.9205	0.0672	1.3923	1.0056	2.3978	0.3727	0.9402	1.3129	0.0000	6,518.843 0	6,518.843 0	1.3884	0.0000	6,553.552 9
Maximum	19.6005	31.2826	35.0798	0.0797	18.2962	1.1384	19.3842	9.9917	1.0476	10.9926	0.0000	7,842.713 9	7,842.713 9	2.0202	0.0000	7,893.218 5

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					
2028	18.0692	24.1497	39.6099	0.0797	18.2782	0.1345	18.3415	9.9872	0.1339	10.0504	0.0000	7,842.713 9	7,842.713 9	2.0202	0.0000	7,893.218 5
2029	18.0445	24.1100	39.4506	0.0672	1.2855	0.1340	1.4194	0.3465	0.1334	0.4799	0.0000	6,518.843 0	6,518.843 0	1.3884	0.0000	6,553.552 9
Maximum	18.0692	24.1497	39.6099	0.0797	18.2782	0.1345	18.3415	9.9872	0.1339	10.0504	0.0000	7,842.713 9	7,842.713 9	2.0202	0.0000	7,893.218 5

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.82	13.17	-12.94	0.00	0.63	87.48	9.28	0.30	86.56	14.43	0.00	0.00	0.00	0.00	0.00	0.00

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	76.8292	1.4494	92.6674	0.1611		12.4705	12.4705		12.4705	12.4705	1,305.2713	554.4198	1,859.6911	1.2113	0.1027	1,920.5683
Energy	0.0349	0.2981	0.1269	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.5934	380.5934	7.2900e-003	6.9800e-003	382.8551
Mobile	0.6315	6.7225	7.4526	0.0433	3.6071	0.0269	3.6340	0.9656	0.0252	0.9907		4,424.5556	4,424.5556	0.2199		4,430.0538
Total	77.4956	8.4700	100.2469	0.2062	3.6071	12.5214	16.1285	0.9656	12.5198	13.4853	1,305.2713	5,359.5688	6,664.8402	1.4385	0.1097	6,733.4772

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.8849	0.7464	4.1780	4.6800e-003		0.0783	0.0783		0.0783	0.0783	0.0000	902.7727	902.7727	0.0239	0.0164	908.2638
Energy	0.0328	0.2804	0.1193	1.7900e-003		0.0227	0.0227		0.0227	0.0227		357.8999	357.8999	6.8600e-003	6.5600e-003	360.0267
Mobile	0.6315	6.7225	7.4526	0.0433	3.6071	0.0269	3.6340	0.9656	0.0252	0.9907		4,424.5556	4,424.5556	0.2199		4,430.0538
Total	4.5492	7.7492	11.7499	0.0497	3.6071	0.1278	3.7349	0.9656	0.1261	1.0917	0.0000	5,685.2282	5,685.2282	0.2507	0.0230	5,698.3443

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	94.13	8.51	88.28	75.88	0.00	98.98	76.84	0.00	98.99	91.90	100.00	-6.08	14.70	82.57	79.04	15.37

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/10/2028	2/23/2028	5	10	
2	Grading	Grading	2/24/2028	4/5/2028	5	30	
3	Building Construction	Building Construction	4/6/2028	5/30/2029	5	300	
4	Paving	Paving	4/6/2028	5/30/2029	5	300	
5	Architectural Coating	Architectural Coating	4/6/2028	5/30/2029	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 2.73

Residential Indoor: 318,836; Residential Outdoor: 106,279; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 7,140 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	645.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	68.00	25.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	18.0663	1.0868	19.1531	9.9307	0.9999	10.9305		3,689.1037	3,689.1037	1.1931		3,718.9320

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0428	0.4131	1.6000e-003	0.2299	1.1900e-003	0.2311	0.0610	1.0900e-003	0.0621		159.2055	159.2055	2.9400e-003		159.2789
Total	0.0695	0.0428	0.4131	1.6000e-003	0.2299	1.1900e-003	0.2311	0.0610	1.0900e-003	0.0621		159.2055	159.2055	2.9400e-003		159.2789

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	0.6967	12.1620	22.9600	0.0381	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0428	0.4131	1.6000e-003	0.2119	1.1900e-003	0.2131	0.0566	1.0900e-003	0.0577		159.2055	159.2055	2.9400e-003		159.2789
Total	0.0695	0.0428	0.4131	1.6000e-003	0.2119	1.1900e-003	0.2131	0.0566	1.0900e-003	0.0577		159.2055	159.2055	2.9400e-003		159.2789

3.3 Grading - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6987	0.0000	8.6987	3.6003	0.0000	3.6003			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.2814	6,008.2814	1.9432		6,056.8614
Total	2.9012	27.9429	26.3311	0.0621	8.6987	1.1309	9.8296	3.6003	1.0404	4.6408		6,008.2814	6,008.2814	1.9432		6,056.8614

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2028

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	0.1031	3.2921	0.6516	0.0158	0.3766	6.2300e-003	0.3829	0.1033	5.9600e-003	0.1093		1,657.5375	1,657.5375	0.0737		1,659.3805
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0773	0.0476	0.4590	1.7700e-003	0.2555	1.3200e-003	0.2568	0.0678	1.2100e-003	0.0690		176.8950	176.8950	3.2700e-003		176.9766
Total	0.1804	3.3397	1.1105	0.0176	0.6321	7.5500e-003	0.6397	0.1710	7.1700e-003	0.1782		1,834.4325	1,834.4325	0.0770		1,836.3571

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					8.6987	0.0000	8.6987	3.6003	0.0000	3.6003			0.0000			0.0000
Off-Road	1.0110	19.2707	36.7226	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614
Total	1.0110	19.2707	36.7226	0.0621	8.6987	0.1015	8.8003	3.6003	0.1015	3.7019	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2028

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	0.1031	3.2921	0.6516	0.0158	0.3511	6.2300e-003	0.3573	0.0970	5.9600e-003	0.1030		1,657.5375	1,657.5375	0.0737		1,659.3805
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0773	0.0476	0.4590	1.7700e-003	0.2355	1.3200e-003	0.2368	0.0628	1.2100e-003	0.0641		176.8950	176.8950	3.2700e-003		176.9766
Total	0.1804	3.3397	1.1105	0.0176	0.5865	7.5500e-003	0.5941	0.1599	7.1700e-003	0.1670		1,834.4325	1,834.4325	0.0770		1,836.3571

3.4 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0527	1.9073	0.3821	6.1500e-003	0.1533	2.1200e-003	0.1554	0.0441	2.0300e-003	0.0462		643.5774	643.5774	0.0437		644.6703
Worker	0.2627	0.1619	1.5605	6.0300e-003	0.8686	4.4800e-003	0.8731	0.2303	4.1200e-003	0.2345		601.4429	601.4429	0.0111		601.7205
Total	0.3154	2.0692	1.9426	0.0122	1.0218	6.6000e-003	1.0284	0.2745	6.1500e-003	0.2806		1,245.0202	1,245.0202	0.0548		1,246.3908

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0527	1.9073	0.3821	6.1500e-003	0.1434	2.1200e-003	0.1456	0.0417	2.0300e-003	0.0438		643.5774	643.5774	0.0437		644.6703
Worker	0.2627	0.1619	1.5605	6.0300e-003	0.8006	4.4800e-003	0.8051	0.2137	4.1200e-003	0.2178		601.4429	601.4429	0.0111		601.7205
Total	0.3154	2.0692	1.9426	0.0122	0.9440	6.6000e-003	0.9506	0.2554	6.1500e-003	0.2615		1,245.0202	1,245.0202	0.0548		1,246.3908

3.4 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0514	1.8873	0.3680	6.1300e-003	0.1533	2.0400e-003	0.1553	0.0441	1.9500e-003	0.0461		640.7898	640.7898	0.0440		641.8903
Worker	0.2463	0.1481	1.4587	5.8500e-003	0.8686	4.1800e-003	0.8727	0.2303	3.8400e-003	0.2342		584.2292	584.2292	0.0101		584.4810
Total	0.2977	2.0354	1.8267	0.0120	1.0218	6.2200e-003	1.0280	0.2745	5.7900e-003	0.2803		1,225.0189	1,225.0189	0.0541		1,226.3712

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	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.5335	10.9122	17.8738	0.0270		0.0846	0.0846		0.0846	0.0846	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0514	1.8873	0.3680	6.1300e-003	0.1434	2.0400e-003	0.1455	0.0417	1.9500e-003	0.0437		640.7898	640.7898	0.0440		641.8903
Worker	0.2463	0.1481	1.4587	5.8500e-003	0.8006	4.1800e-003	0.8048	0.2137	3.8400e-003	0.2175		584.2292	584.2292	0.0101		584.4810
Total	0.2977	2.0354	1.8267	0.0120	0.9440	6.2200e-003	0.9503	0.2554	5.7900e-003	0.2612		1,225.0189	1,225.0189	0.0541		1,226.3712

3.5 Paving - 2028

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9390	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0579	0.0357	0.3442	1.3300e-003	0.1916	9.9000e-004	0.1926	0.0508	9.1000e-004	0.0517		132.6712	132.6712	2.4500e-003		132.7325
Total	0.0579	0.0357	0.3442	1.3300e-003	0.1916	9.9000e-004	0.1926	0.0508	9.1000e-004	0.0517		132.6712	132.6712	2.4500e-003		132.7325

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3579	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0579	0.0357	0.3442	1.3300e-003	0.1766	9.9000e-004	0.1776	0.0471	9.1000e-004	0.0480		132.6712	132.6712	2.4500e-003		132.7325
Total	0.0579	0.0357	0.3442	1.3300e-003	0.1766	9.9000e-004	0.1776	0.0471	9.1000e-004	0.0480		132.6712	132.6712	2.4500e-003		132.7325

3.5 Paving - 2029

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9390	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0327	0.3218	1.2900e-003	0.1916	9.2000e-004	0.1925	0.0508	8.5000e-004	0.0517		128.8741	128.8741	2.2200e-003		128.9296
Total	0.0543	0.0327	0.3218	1.2900e-003	0.1916	9.2000e-004	0.1925	0.0508	8.5000e-004	0.0517		128.8741	128.8741	2.2200e-003		128.9296

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	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3579	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0327	0.3218	1.2900e-003	0.1766	9.2000e-004	0.1775	0.0471	8.5000e-004	0.0480		128.8741	128.8741	2.2200e-003		128.9296
Total	0.0543	0.0327	0.3218	1.2900e-003	0.1766	9.2000e-004	0.1775	0.0471	8.5000e-004	0.0480		128.8741	128.8741	2.2200e-003		128.9296

3.6 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	16.8667	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0541	0.0333	0.3213	1.2400e-003	0.1788	9.2000e-004	0.1798	0.0474	8.5000e-004	0.0483		123.8265	123.8265	2.2900e-003		123.8836
Total	0.0541	0.0333	0.3213	1.2400e-003	0.1788	9.2000e-004	0.1798	0.0474	8.5000e-004	0.0483		123.8265	123.8265	2.2900e-003		123.8836

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	16.7503	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0541	0.0333	0.3213	1.2400e-003	0.1648	9.2000e-004	0.1658	0.0440	8.5000e-004	0.0448		123.8265	123.8265	2.2900e-003		123.8836
Total	0.0541	0.0333	0.3213	1.2400e-003	0.1648	9.2000e-004	0.1658	0.0440	8.5000e-004	0.0448		123.8265	123.8265	2.2900e-003		123.8836

3.6 Architectural Coating - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	16.8667	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0507	0.0305	0.3003	1.2100e-003	0.1788	8.6000e-004	0.1797	0.0474	7.9000e-004	0.0482		120.2825	120.2825	2.0700e-003		120.3343
Total	0.0507	0.0305	0.3003	1.2100e-003	0.1788	8.6000e-004	0.1797	0.0474	7.9000e-004	0.0482		120.2825	120.2825	2.0700e-003		120.3343

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.6959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	16.7503	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0507	0.0305	0.3003	1.2100e-003	0.1648	8.6000e-004	0.1657	0.0440	7.9000e-004	0.0448		120.2825	120.2825	2.0700e-003		120.3343
Total	0.0507	0.0305	0.3003	1.2100e-003	0.1648	8.6000e-004	0.1657	0.0440	7.9000e-004	0.0448		120.2825	120.2825	2.0700e-003		120.3343

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6315	6.7225	7.4526	0.0433	3.6071	0.0269	3.6340	0.9656	0.0252	0.9907		4,424.5556	4,424.5556	0.2199		4,430.0538
Unmitigated	0.6315	6.7225	7.4526	0.0433	3.6071	0.0269	3.6340	0.9656	0.0252	0.9907		4,424.5556	4,424.5556	0.2199		4,430.0538

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	26.36	28.64	24.28	97,795	97,795
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	409.36	426.13	370.66	1,505,461	1,505,461
Total	435.72	454.77	394.94	1,603,256	1,603,256

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698
Other Asphalt Surfaces	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698
Single Family Housing	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0328	0.2804	0.1193	1.7900e-003		0.0227	0.0227		0.0227	0.0227		357.8999	357.8999	6.8600e-003	6.5600e-003	360.0267
NaturalGas Unmitigated	0.0349	0.2981	0.1269	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.5934	380.5934	7.2900e-003	6.9800e-003	382.8551

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	154.92	1.6700e-003	0.0143	6.0800e-003	9.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003		18.2259	18.2259	3.5000e-004	3.3000e-004	18.3342
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3080.12	0.0332	0.2839	0.1208	1.8100e-003		0.0230	0.0230		0.0230	0.0230		362.3676	362.3676	6.9500e-003	6.6400e-003	364.5209
Total		0.0349	0.2981	0.1269	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.5935	380.5935	7.3000e-003	6.9700e-003	382.8551

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					
Apartments Low Rise	0.146932	1.5800e-003	0.0135	5.7600e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		17.2861	17.2861	3.3000e-004	3.2000e-004	17.3888
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.89522	0.0312	0.2668	0.1135	1.7000e-003		0.0216	0.0216		0.0216	0.0216		340.6138	340.6138	6.5300e-003	6.2400e-003	342.6379
Total		0.0328	0.2804	0.1193	1.7900e-003		0.0227	0.0227		0.0227	0.0227		357.8999	357.8999	6.8600e-003	6.5600e-003	360.0267

6.0 Area Detail

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.8849	0.7464	4.1780	4.6800e-003		0.0783	0.0783		0.0783	0.0783	0.0000	902.7727	902.7727	0.0239	0.0164	908.2638
Unmitigated	76.8292	1.4494	92.6674	0.1611		12.4705	12.4705		12.4705	12.4705	1,305.2713	554.4198	1,859.6911	1.2113	0.1027	1,920.5683

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3723					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	71.9286	1.4047	88.7880	0.1609		12.4489	12.4489		12.4489	12.4489	1,305.2713	547.4118	1,852.6831	1.2046	0.1027	1,913.3923
Landscaping	0.1168	0.0447	3.8794	2.1000e-004		0.0216	0.0216		0.0216	0.0216		7.0080	7.0080	6.7200e-003		7.1760
Total	76.8292	1.4494	92.6674	0.1611		12.4705	12.4705		12.4705	12.4705	1,305.2713	554.4198	1,859.6911	1.2113	0.1027	1,920.5683

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2745					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0821	0.7017	0.2986	4.4800e-003		0.0567	0.0567		0.0567	0.0567	0.0000	895.7647	895.7647	0.0172	0.0164	901.0878
Landscaping	0.1168	0.0447	3.8794	2.1000e-004		0.0216	0.0216		0.0216	0.0216		7.0080	7.0080	6.7200e-003		7.1760
Total	3.8849	0.7464	4.1780	4.6900e-003		0.0783	0.0783		0.0783	0.0783	0.0000	902.7727	902.7727	0.0239	0.0164	908.2638

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Phase 5 Construction Only - Shasta County AQMD Air District, Winter

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
----------------	--------	-----------	------------	-------------	-------------	-----------

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

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Annual

Tierra Robles - Phase 6 Construction Only
Shasta County AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	91.20	1000sqft	2.09	91,200.00	0
Apartments Low Rise	1.00	Dwelling Unit	0.06	1,200.00	3
Single Family Housing	14.00	Dwelling Unit	4.55	49,700.00	40

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2032
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Annual

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 6 includes 14 DU, anticipate 1 secondary unit (apartment), 91,200 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - imported 3,950 cubic yards of rock material

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 energy standard will reduce residential energy use by 7% or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	230.00
tblConstructionPhase	NumDays	20.00	230.00
tblGrading	MaterialImported	0.00	3,950.00
tblLandUse	LandUseSquareFeet	1,000.00	1,200.00
tblLandUse	LandUseSquareFeet	25,200.00	49,700.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-13-2030	4-12-2030	0.3961	0.4344
2	4-13-2030	7-12-2030	0.3501	0.4216
3	7-13-2030	10-12-2030	0.3540	0.4263
4	10-13-2030	1-12-2031	0.3527	0.4248
5	1-13-2031	4-12-2031	0.4646	0.5276
6	4-13-2031	7-12-2031	0.5469	0.6118
7	7-13-2031	9-30-2031	0.4808	0.5378
		Highest	0.5469	0.6118

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	1.2321	0.0197	1.2737	2.1100e-003		0.1635	0.1635		0.1635	0.1635	15.4944	6.6817	22.1760	0.0145	1.2200e-003	22.9011
Energy	2.0500e-003	0.0175	7.4500e-003	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	37.2673	37.2673	2.0600e-003	7.2000e-004	37.5330
Mobile	0.0332	0.3602	0.3694	2.4100e-003	0.1909	1.3000e-003	0.1922	0.0513	1.2200e-003	0.0525	0.0000	224.2233	224.2233	0.0105	0.0000	224.4849
Waste						0.0000	0.0000		0.0000	0.0000	2.1233	0.0000	2.1233	0.1255	0.0000	5.2604
Water						0.0000	0.0000		0.0000	0.0000	0.3101	0.9928	1.3029	0.0319	7.7000e-004	2.3316
Total	1.2674	0.3974	1.6505	4.6300e-003	0.1909	0.1662	0.3571	0.0513	0.1662	0.2175	17.9277	269.1651	287.0928	0.1844	2.7100e-003	292.5109

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2257	0.0105	0.1158	6.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	10.8168	10.8168	3.8000e-004	1.9000e-004	10.8845
Energy	1.9300e-003	0.0165	7.0100e-003	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	35.9191	35.9191	2.0300e-003	6.9000e-004	36.1765
Mobile	0.0332	0.3602	0.3694	2.4100e-003	0.1909	1.3000e-003	0.1922	0.0513	1.2200e-003	0.0525	0.0000	224.2233	224.2233	0.0105	0.0000	224.4849
Waste						0.0000	0.0000		0.0000	0.0000	2.1233	0.0000	2.1233	0.1255	0.0000	5.2604
Water						0.0000	0.0000		0.0000	0.0000	0.2480	0.8342	1.0823	0.0256	6.2000e-004	1.9056
Total	0.2609	0.3871	0.4922	2.5800e-003	0.1909	3.9900e-003	0.1949	0.0513	3.9100e-003	0.0552	2.3713	271.7935	274.1648	0.1639	1.5000e-003	278.7117

	ROG	NOx	CO	SO2	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	79.41	2.58	70.18	44.28	0.00	97.60	45.43	0.00	97.65	74.61	86.77	-0.98	4.50	11.12	44.65	4.72

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2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	- 2,075.700 0
Total	- 2,075.700 0

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/13/2030	1/25/2030	5	10	
2	Grading	Grading	1/26/2030	2/22/2030	5	20	
3	Building Construction	Building Construction	2/23/2030	1/10/2031	5	230	
4	Paving	Paving	1/11/2031	11/28/2031	5	230	
5	Architectural Coating	Architectural Coating	2/8/2031	12/26/2031	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.09

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Residential Indoor: 103,073; Residential Outdoor: 34,358; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 5,472 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	494.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	44.00	17.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2030

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0122	0.0683	0.0815	2.3000e-004		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	20.0023	20.0023	9.9000e-004	0.0000	20.0270
Total	0.0122	0.0683	0.0815	2.3000e-004	0.0903	2.1800e-003	0.0925	0.0497	2.1800e-003	0.0518	0.0000	20.0023	20.0023	9.9000e-004	0.0000	20.0270

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3.2 Site Preparation - 2030

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	2.8000e-004	1.6000e-004	1.8600e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	0.0000	3.0000e-004	0.0000	0.7062	0.7062	1.0000e-005	0.0000	0.7064
Total	2.8000e-004	1.6000e-004	1.8600e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	0.0000	3.0000e-004	0.0000	0.7062	0.7062	1.0000e-005	0.0000	0.7064

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4800e-003	0.0608	0.1148	2.3000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	20.0023	20.0023	9.9000e-004	0.0000	20.0270
Total	3.4800e-003	0.0608	0.1148	2.3000e-004	0.0903	3.1000e-004	0.0906	0.0497	3.1000e-004	0.0500	0.0000	20.0023	20.0023	9.9000e-004	0.0000	20.0270

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3.2 Site Preparation - 2030

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	2.8000e-004	1.6000e-004	1.8600e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0100e-003	2.7000e-004	0.0000	2.7000e-004	0.0000	0.7062	0.7062	1.0000e-005	0.0000	0.7064
Total	2.8000e-004	1.6000e-004	1.8600e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0100e-003	2.7000e-004	0.0000	2.7000e-004	0.0000	0.7062	0.7062	1.0000e-005	0.0000	0.7064

3.3 Grading - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0658	0.0000	0.0658	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0162	0.0775	0.1445	3.6000e-004		2.3400e-003	2.3400e-003		2.3400e-003	2.3400e-003	0.0000	31.2046	31.2046	1.3000e-003	0.0000	31.2372
Total	0.0162	0.0775	0.1445	3.6000e-004	0.0658	2.3400e-003	0.0682	0.0337	2.3400e-003	0.0361	0.0000	31.2046	31.2046	1.3000e-003	0.0000	31.2372

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3.3 Grading - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1400e-003	0.0366	6.9100e-003	1.8000e-004	4.1400e-003	7.0000e-005	4.2100e-003	1.1400e-003	6.0000e-005	1.2100e-003	0.0000	17.3875	17.3875	7.3000e-004	0.0000	17.4057
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	2.7000e-004	3.1100e-003	1.0000e-005	1.8200e-003	1.0000e-005	1.8300e-003	4.9000e-004	1.0000e-005	4.9000e-004	0.0000	1.1769	1.1769	2.0000e-005	0.0000	1.1774
Total	1.6000e-003	0.0368	0.0100	1.9000e-004	5.9600e-003	8.0000e-005	6.0400e-003	1.6300e-003	7.0000e-005	1.7000e-003	0.0000	18.5644	18.5644	7.5000e-004	0.0000	18.5831

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					0.0658	0.0000	0.0658	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-003	0.1033	0.1899	3.6000e-004		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	31.2046	31.2046	1.3000e-003	0.0000	31.2372
Total	5.2000e-003	0.1033	0.1899	3.6000e-004	0.0658	4.8000e-004	0.0663	0.0337	4.8000e-004	0.0342	0.0000	31.2046	31.2046	1.3000e-003	0.0000	31.2372

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3.3 Grading - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1400e-003	0.0366	6.9100e-003	1.8000e-004	3.8700e-003	7.0000e-005	3.9300e-003	1.0700e-003	6.0000e-005	1.1400e-003	0.0000	17.3875	17.3875	7.3000e-004	0.0000	17.4057
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	2.7000e-004	3.1100e-003	1.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.1769	1.1769	2.0000e-005	0.0000	1.1774
Total	1.6000e-003	0.0368	0.0100	1.9000e-004	5.5500e-003	8.0000e-005	5.6200e-003	1.5200e-003	7.0000e-005	1.6000e-003	0.0000	18.5644	18.5644	7.5000e-004	0.0000	18.5831

3.4 Building Construction - 2030

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	0.1453	0.8807	1.7934	3.4400e-003		0.0164	0.0164		0.0164	0.0164	0.0000	291.7757	291.7757	0.0117	0.0000	292.0684
Total	0.1453	0.8807	1.7934	3.4400e-003		0.0164	0.0164		0.0164	0.0164	0.0000	291.7757	291.7757	0.0117	0.0000	292.0684

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3.4 Building Construction - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6500e-003	0.1417	0.0244	4.7000e-004	0.0111	1.5000e-004	0.0113	3.2200e-003	1.4000e-004	3.3600e-003	0.0000	44.6350	44.6350	2.8200e-003	0.0000	44.7056
Worker	0.0150	8.7600e-003	0.1012	4.2000e-004	0.0593	2.8000e-004	0.0596	0.0158	2.6000e-004	0.0161	0.0000	38.3203	38.3203	6.2000e-004	0.0000	38.3359
Total	0.0187	0.1505	0.1256	8.9000e-004	0.0705	4.3000e-004	0.0709	0.0190	4.0000e-004	0.0194	0.0000	82.9553	82.9553	3.4400e-003	0.0000	83.0415

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	0.0592	1.2113	1.9840	3.4400e-003		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003	0.0000	291.7754	291.7754	0.0117	0.0000	292.0680
Total	0.0592	1.2113	1.9840	3.4400e-003		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003	0.0000	291.7754	291.7754	0.0117	0.0000	292.0680

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3.4 Building Construction - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6500e-003	0.1417	0.0244	4.7000e-004	0.0104	1.5000e-004	0.0106	3.0500e-003	1.4000e-004	3.1900e-003	0.0000	44.6350	44.6350	2.8200e-003	0.0000	44.7056
Worker	0.0150	8.7600e-003	0.1012	4.2000e-004	0.0547	2.8000e-004	0.0550	0.0147	2.6000e-004	0.0149	0.0000	38.3203	38.3203	6.2000e-004	0.0000	38.3359
Total	0.0187	0.1505	0.1256	8.9000e-004	0.0651	4.3000e-004	0.0656	0.0177	4.0000e-004	0.0181	0.0000	82.9553	82.9553	3.4400e-003	0.0000	83.0415

3.4 Building Construction - 2031

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	5.2400e-003	0.0317	0.0646	1.2000e-004		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	10.5144	10.5144	4.2000e-004	0.0000	10.5250
Total	5.2400e-003	0.0317	0.0646	1.2000e-004		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	10.5144	10.5144	4.2000e-004	0.0000	10.5250

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3.4 Building Construction - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	5.0700e-003	8.6000e-004	2.0000e-005	4.0000e-004	1.0000e-005	4.1000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	1.6040	1.6040	1.0000e-004	0.0000	1.6066
Worker	4.9000e-004	2.9000e-004	3.4100e-003	1.0000e-005	2.1400e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.3486	1.3486	2.0000e-005	0.0000	1.3491
Total	6.2000e-004	5.3600e-003	4.2700e-003	3.0000e-005	2.5400e-003	2.0000e-005	2.5600e-003	6.9000e-004	1.0000e-005	7.0000e-004	0.0000	2.9526	2.9526	1.2000e-004	0.0000	2.9557

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	2.1300e-003	0.0437	0.0715	1.2000e-004		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	10.5144	10.5144	4.2000e-004	0.0000	10.5250
Total	2.1300e-003	0.0437	0.0715	1.2000e-004		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	10.5144	10.5144	4.2000e-004	0.0000	10.5250

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3.4 Building Construction - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	5.0700e-003	8.6000e-004	2.0000e-005	3.8000e-004	1.0000e-005	3.8000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	1.6040	1.6040	1.0000e-004	0.0000	1.6066
Worker	4.9000e-004	2.9000e-004	3.4100e-003	1.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.3486	1.3486	2.0000e-005	0.0000	1.3491
Total	6.2000e-004	5.3600e-003	4.2700e-003	3.0000e-005	2.3500e-003	2.0000e-005	2.3600e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	2.9526	2.9526	1.2000e-004	0.0000	2.9557

3.5 Paving - 2031

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	0.1592	0.8188	1.8227	3.2300e-003		0.0380	0.0380		0.0380	0.0380	0.0000	277.1444	277.1444	0.0130	0.0000	277.4692
Paving	2.7400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1620	0.8188	1.8227	3.2300e-003		0.0380	0.0380		0.0380	0.0380	0.0000	277.1444	277.1444	0.0130	0.0000	277.4692

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3.5 Paving - 2031

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	4.8500e-003	2.8200e-003	0.0335	1.5000e-004	0.0210	9.0000e-005	0.0211	5.5800e-003	8.0000e-005	5.6600e-003	0.0000	13.2181	13.2181	2.0000e-004	0.0000	13.2231
Total	4.8500e-003	2.8200e-003	0.0335	1.5000e-004	0.0210	9.0000e-005	0.0211	5.5800e-003	8.0000e-005	5.6600e-003	0.0000	13.2181	13.2181	2.0000e-004	0.0000	13.2231

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	0.0384	1.1545	1.9890	3.2300e-003		4.3000e-003	4.3000e-003		4.3000e-003	4.3000e-003	0.0000	277.1441	277.1441	0.0130	0.0000	277.4689
Paving	2.7400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0412	1.1545	1.9890	3.2300e-003		4.3000e-003	4.3000e-003		4.3000e-003	4.3000e-003	0.0000	277.1441	277.1441	0.0130	0.0000	277.4689

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3.5 Paving - 2031

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	4.8500e-003	2.8200e-003	0.0335	1.5000e-004	0.0193	9.0000e-005	0.0194	5.1800e-003	8.0000e-005	5.2600e-003	0.0000	13.2181	13.2181	2.0000e-004	0.0000	13.2231
Total	4.8500e-003	2.8200e-003	0.0335	1.5000e-004	0.0193	9.0000e-005	0.0194	5.1800e-003	8.0000e-005	5.2600e-003	0.0000	13.2181	13.2181	2.0000e-004	0.0000	13.2231

3.6 Architectural Coating - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8279					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.0985	0.2067	3.4000e-004		2.3400e-003	2.3400e-003		2.3400e-003	2.3400e-003	0.0000	29.3624	29.3624	1.1900e-003	0.0000	29.3921
Total	0.8430	0.0985	0.2067	3.4000e-004		2.3400e-003	2.3400e-003		2.3400e-003	2.3400e-003	0.0000	29.3624	29.3624	1.1900e-003	0.0000	29.3921

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3.6 Architectural Coating - 2031

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	2.9100e-003	1.6900e-003	0.0201	9.0000e-005	0.0126	6.0000e-005	0.0126	3.3500e-003	5.0000e-005	3.4000e-003	0.0000	7.9309	7.9309	1.2000e-004	0.0000	7.9339
Total	2.9100e-003	1.6900e-003	0.0201	9.0000e-005	0.0126	6.0000e-005	0.0126	3.3500e-003	5.0000e-005	3.4000e-003	0.0000	7.9309	7.9309	1.2000e-004	0.0000	7.9339

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8279					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2600e-003	0.1219	0.2107	3.4000e-004		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	29.3624	29.3624	1.1900e-003	0.0000	29.3921
Total	0.8342	0.1219	0.2107	3.4000e-004		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	29.3624	29.3624	1.1900e-003	0.0000	29.3921

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3.6 Architectural Coating - 2031

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	2.9100e-003	1.6900e-003	0.0201	9.0000e-005	0.0116	6.0000e-005	0.0117	3.1100e-003	5.0000e-005	3.1600e-003	0.0000	7.9309	7.9309	1.2000e-004	0.0000	7.9339
Total	2.9100e-003	1.6900e-003	0.0201	9.0000e-005	0.0116	6.0000e-005	0.0117	3.1100e-003	5.0000e-005	3.1600e-003	0.0000	7.9309	7.9309	1.2000e-004	0.0000	7.9339

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0332	0.3602	0.3694	2.4100e-003	0.1909	1.3000e-003	0.1922	0.0513	1.2200e-003	0.0525	0.0000	224.2233	224.2233	0.0105	0.0000	224.4849
Unmitigated	0.0332	0.3602	0.3694	2.4100e-003	0.1909	1.3000e-003	0.1922	0.0513	1.2200e-003	0.0525	0.0000	224.2233	224.2233	0.0105	0.0000	224.4849

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	6.59	7.16	6.07	24,449	24,449
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	133.28	138.74	120.68	490,150	490,150
Total	139.87	145.90	126.75	514,599	514,599

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.567395	0.028804	0.177003	0.085578	0.013298	0.003927	0.012903	0.102744	0.001258	0.000996	0.004304	0.001169	0.000622
Other Asphalt Surfaces	0.567395	0.028804	0.177003	0.085578	0.013298	0.003927	0.012903	0.102744	0.001258	0.000996	0.004304	0.001169	0.000622
Single Family Housing	0.567395	0.028804	0.177003	0.085578	0.013298	0.003927	0.012903	0.102744	0.001258	0.000996	0.004304	0.001169	0.000622

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	16.8433	16.8433	1.6600e-003	3.4000e-004	16.9873
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	16.9800	16.9800	1.6700e-003	3.5000e-004	17.1251
NaturalGas Mitigated	1.9300e-003	0.0165	7.0100e-003	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.0758	19.0758	3.7000e-004	3.5000e-004	19.1892
NaturalGas Unmitigated	2.0500e-003	0.0175	7.4500e-003	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.2873	20.2873	3.9000e-004	3.7000e-004	20.4079

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	14136.5	8.0000e-005	6.5000e-004	2.8000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7544	0.7544	1.0000e-005	1.0000e-005	0.7589
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	366033	1.9700e-003	0.0169	7.1800e-003	1.1000e-004		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	19.5329	19.5329	3.7000e-004	3.6000e-004	19.6490
Total		2.0500e-003	0.0175	7.4600e-003	1.1000e-004		1.4100e-003	1.4100e-003		1.4100e-003	1.4100e-003	0.0000	20.2873	20.2873	3.8000e-004	3.7000e-004	20.4079

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	13407.5	7.0000e-005	6.2000e-004	2.6000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7155	0.7155	1.0000e-005	1.0000e-005	0.7197
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	344060	1.8600e-003	0.0159	6.7500e-003	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3603	18.3603	3.5000e-004	3.4000e-004	18.4694
Total		1.9300e-003	0.0165	7.0100e-003	1.0000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.0758	19.0758	3.6000e-004	3.5000e-004	19.1892

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4677.52	0.6238	6.0000e-005	1.0000e-005	0.6291
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	122650	16.3562	1.6100e-003	3.3000e-004	16.4960
Total		16.9800	1.6700e-003	3.4000e-004	17.1251

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4628.91	0.6173	6.0000e-005	1.0000e-005	0.6226
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	121674	16.2260	1.6000e-003	3.3000e-004	16.3647
Total		16.8433	1.6600e-003	3.4000e-004	16.9873

6.0 Area Detail

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6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2257	0.0105	0.1158	6.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	10.8168	10.8168	3.8000e-004	1.9000e-004	10.8845
Unmitigated	1.2321	0.0197	1.2737	2.1100e-003		0.1635	0.1635		0.1635	0.1635	15.4944	6.6817	22.1760	0.0145	1.2200e-003	22.9011

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2047					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.9412	0.0184	1.1618	2.1000e-003		0.1629	0.1629		0.1629	0.1629	15.4944	6.4981	21.9925	0.0143	1.2200e-003	22.7131
Landscaping	3.4000e-003	1.2900e-003	0.1119	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	0.1836	0.1836	1.8000e-004	0.0000	0.1880
Total	1.2321	0.0197	1.2737	2.1100e-003		0.1635	0.1635		0.1635	0.1635	15.4944	6.6817	22.1760	0.0145	1.2200e-003	22.9011

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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	0.0166					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2047					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.0700e-003	9.1800e-003	3.9100e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.6333	10.6333	2.0000e-004	1.9000e-004	10.6965
Landscaping	3.4000e-003	1.2900e-003	0.1119	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	0.1836	0.1836	1.8000e-004	0.0000	0.1880
Total	0.2257	0.0105	0.1158	7.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	10.8168	10.8168	3.8000e-004	1.9000e-004	10.8845

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0823	0.0256	6.2000e-004	1.9056
Unmitigated	1.3029	0.0319	7.7000e-004	2.3316

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.065154 / 0.0410754	0.0869	2.1300e-003	5.0000e-005	0.1554
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.912156 / 0.575055	1.2160	0.0298	7.2000e-004	2.1761
Total		1.3029	0.0319	7.7000e-004	2.3316

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.0521232 / 0.0385698	0.0722	1.7000e-003	4.0000e-005	0.1270
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.729725 / 0.539977	1.0101	0.0239	5.8000e-004	1.7785
Total		1.0823	0.0256	6.2000e-004	1.9056

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.1233	0.1255	0.0000	5.2604
Unmitigated	2.1233	0.1255	0.0000	5.2604

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	0.46	0.0934	5.5200e-003	0.0000	0.2313
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	10	2.0299	0.1200	0.0000	5.0290
Total		2.1233	0.1255	0.0000	5.2604

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	0.46	0.0934	5.5200e-003	0.0000	0.2313
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	10	2.0299	0.1200	0.0000	5.0290
Total		2.1233	0.1255	0.0000	5.2604

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

Equipment Type	Number
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Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Annual

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	- 2,075.700 0	0.0000	0.0000	- 2,075.700 0

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Trees	85.2 / 66.5	- 2,075.700 0	0.0000	0.0000	- 2,075.700 0
Total		- 2,075.700 0	0.0000	0.0000	- 2,075.700 0

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

Tierra Robles - Phase 6 Construction Only
Shasta County AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	91.20	1000sqft	2.09	91,200.00	0
Apartments Low Rise	1.00	Dwelling Unit	0.06	1,200.00	3
Single Family Housing	14.00	Dwelling Unit	4.55	49,700.00	40

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2032
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 6 includes 14 DU, anticipate 1 secondary unit (apartment), 91,200 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - imported 3,950 cubic yards of rock material

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 energy standard will reduce residential energy use by 7% or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	230.00
tblConstructionPhase	NumDays	20.00	230.00
tblGrading	MaterialImported	0.00	3,950.00
tblLandUse	LandUseSquareFeet	1,000.00	1,200.00
tblLandUse	LandUseSquareFeet	25,200.00	49,700.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

2.0 Emissions Summary

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	24.5689	0.4626	29.5801	0.0514		3.9800	3.9800		3.9800	3.9800	416.5760	176.9541	593.5301	0.3866	0.0328	612.9597
Energy	0.0112	0.0960	0.0409	6.1000e-004		7.7600e-003	7.7600e-003		7.7600e-003	7.7600e-003		122.5366	122.5366	2.3500e-003	2.2500e-003	123.2648
Mobile	0.2403	2.0535	2.4492	0.0148	1.1572	7.5200e-003	1.1647	0.3097	7.0400e-003	0.3168		1,514.0429	1,514.0429	0.0651		1,515.6701
Total	24.8205	2.6121	32.0702	0.0668	1.1572	3.9952	5.1524	0.3097	3.9948	4.3045	416.5760	1,813.5337	2,230.1096	0.4540	0.0350	2,251.8946

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	1.2763	0.2383	1.3388	1.5000e-003		0.0250	0.0250		0.0250	0.0250	0.0000	288.1306	288.1306	7.6500e-003	5.2400e-003	289.8838
Energy	0.0106	0.0903	0.0384	5.8000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003		115.2190	115.2190	2.2100e-003	2.1100e-003	115.9037
Mobile	0.2403	2.0535	2.4492	0.0148	1.1572	7.5200e-003	1.1647	0.3097	7.0400e-003	0.3168		1,514.0429	1,514.0429	0.0651		1,515.6701
Total	1.5271	2.3820	3.8264	0.0169	1.1572	0.0398	1.1970	0.3097	0.0393	0.3491	0.0000	1,917.3926	1,917.3926	0.0750	7.3500e-003	1,921.4577

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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	93.85	8.81	88.07	74.72	0.00	99.00	76.77	0.00	99.02	91.89	100.00	-5.73	14.02	83.49	79.01	14.67

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/13/2030	1/25/2030	5	10	
2	Grading	Grading	1/26/2030	2/22/2030	5	20	
3	Building Construction	Building Construction	2/23/2030	1/10/2031	5	230	
4	Paving	Paving	1/11/2031	11/28/2031	5	230	
5	Architectural Coating	Architectural Coating	2/8/2031	12/26/2031	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.09

Residential Indoor: 103,073; Residential Outdoor: 34,358; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 5,472 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	494.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	44.00	17.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.7537	4,409.7537	0.2176		4,415.1936
Total	2.4399	13.6680	16.2918	0.0466	18.0663	0.4367	18.5029	9.9307	0.4367	10.3673		4,409.7537	4,409.7537	0.2176		4,415.1936

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0303	0.4655	1.7400e-003	0.2299	1.0300e-003	0.2310	0.0610	9.5000e-004	0.0619		173.8817	173.8817	2.9300e-003		173.9548
Total	0.0629	0.0303	0.4655	1.7400e-003	0.2299	1.0300e-003	0.2310	0.0610	9.5000e-004	0.0619		173.8817	173.8817	2.9300e-003		173.9548

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0466		0.0621	0.0621		0.0621	0.0621	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936
Total	0.6967	12.1620	22.9600	0.0466	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.2 Site Preparation - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0303	0.4655	1.7400e-003	0.2119	1.0300e-003	0.2130	0.0566	9.5000e-004	0.0575		173.8817	173.8817	2.9300e-003		173.9548
Total	0.0629	0.0303	0.4655	1.7400e-003	0.2119	1.0300e-003	0.2130	0.0566	9.5000e-004	0.0575		173.8817	173.8817	2.9300e-003		173.9548

3.3 Grading - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5815	0.0000	6.5815	3.3719	0.0000	3.3719			0.0000			0.0000
Off-Road	1.6179	7.7501	14.4518	0.0363		0.2340	0.2340		0.2340	0.2340		3,439.7201	3,439.7201	0.1437		3,443.3117
Total	1.6179	7.7501	14.4518	0.0363	6.5815	0.2340	6.8155	3.3719	0.2340	3.6059		3,439.7201	3,439.7201	0.1437		3,443.3117

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2030

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	0.1122	3.5980	0.6595	0.0185	0.4327	6.6600e-003	0.4394	0.1187	6.3700e-003	0.1250		1,935.1469	1,935.1469	0.0759		1,937.0442
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0252	0.3879	1.4500e-003	0.1916	8.6000e-004	0.1925	0.0508	7.9000e-004	0.0516		144.9014	144.9014	2.4400e-003		144.9624
Total	0.1646	3.6233	1.0474	0.0199	0.6243	7.5200e-003	0.6318	0.1695	7.1600e-003	0.1766		2,080.0483	2,080.0483	0.0783		2,082.0066

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5815	0.0000	6.5815	3.3719	0.0000	3.3719			0.0000			0.0000
Off-Road	0.5200	10.3327	18.9906	0.0363		0.0484	0.0484		0.0484	0.0484	0.0000	3,439.7201	3,439.7201	0.1437		3,443.3117
Total	0.5200	10.3327	18.9906	0.0363	6.5815	0.0484	6.6299	3.3719	0.0484	3.4203	0.0000	3,439.7201	3,439.7201	0.1437		3,443.3117

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.3 Grading - 2030

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	0.1122	3.5980	0.6595	0.0185	0.4033	6.6600e-003	0.4100	0.1115	6.3700e-003	0.1178		1,935.1469	1,935.1469	0.0759		1,937.0442
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0252	0.3879	1.4500e-003	0.1766	8.6000e-004	0.1775	0.0471	7.9000e-004	0.0479		144.9014	144.9014	2.4400e-003		144.9624
Total	0.1646	3.6233	1.0474	0.0199	0.5799	7.5200e-003	0.5874	0.1586	7.1600e-003	0.1658		2,080.0483	2,080.0483	0.0783		2,082.0066

3.4 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0322	1.2679	0.2008	4.3000e-003	0.1042	1.3100e-003	0.1055	0.0300	1.2500e-003	0.0313		449.8027	449.8027	0.0265		450.4643
Worker	0.1537	0.0740	1.1380	4.2600e-003	0.5620	2.5200e-003	0.5645	0.1490	2.3200e-003	0.1514		425.0442	425.0442	7.1500e-003		425.2230
Total	0.1860	1.3419	1.3387	8.5600e-003	0.6662	3.8300e-003	0.6701	0.1791	3.5700e-003	0.1826		874.8468	874.8468	0.0336		875.6872

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	0.5335	10.9122	17.8738	0.0310		0.0846	0.0846		0.0846	0.0846	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	0.5335	10.9122	17.8738	0.0310		0.0846	0.0846		0.0846	0.0846	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0322	1.2679	0.2008	4.3000e-003	0.0975	1.3100e-003	0.0989	0.0284	1.2500e-003	0.0296		449.8027	449.8027	0.0265		450.4643
Worker	0.1537	0.0740	1.1380	4.2600e-003	0.5180	2.5200e-003	0.5206	0.1383	2.3200e-003	0.1406		425.0442	425.0442	7.1500e-003		425.2230
Total	0.1860	1.3419	1.3387	8.5600e-003	0.6156	3.8300e-003	0.6194	0.1666	3.5700e-003	0.1702		874.8468	874.8468	0.0336		875.6872

3.4 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0317	1.2585	0.1956	4.2900e-003	0.1042	1.2700e-003	0.1055	0.0300	1.2100e-003	0.0312		448.5326	448.5326	0.0268		449.2013
Worker	0.1406	0.0676	1.0681	4.1600e-003	0.5620	2.3500e-003	0.5644	0.1490	2.1600e-003	0.1512		415.1561	415.1561	6.4900e-003		415.3183
Total	0.1723	1.3260	1.2637	8.4500e-003	0.6662	3.6200e-003	0.6699	0.1791	3.3700e-003	0.1824		863.6888	863.6888	0.0332		864.5196

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	0.5335	10.9122	17.8738	0.0310		0.0846	0.0846		0.0846	0.0846	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	0.5335	10.9122	17.8738	0.0310		0.0846	0.0846		0.0846	0.0846	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.4 Building Construction - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0317	1.2585	0.1956	4.2900e-003	0.0975	1.2700e-003	0.0988	0.0284	1.2100e-003	0.0296		448.5326	448.5326	0.0268		449.2013
Worker	0.1406	0.0676	1.0681	4.1600e-003	0.5180	2.3500e-003	0.5204	0.1383	2.1600e-003	0.1404		415.1561	415.1561	6.4900e-003		415.3183
Total	0.1723	1.3260	1.2637	8.4500e-003	0.6156	3.6200e-003	0.6192	0.1666	3.3700e-003	0.1700		863.6888	863.6888	0.0332		864.5196

3.5 Paving - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4083	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0479	0.0230	0.3641	1.4200e-003	0.1916	8.0000e-004	0.1924	0.0508	7.4000e-004	0.0516		141.5305	141.5305	2.2100e-003		141.5858
Total	0.0479	0.0230	0.3641	1.4200e-003	0.1916	8.0000e-004	0.1924	0.0508	7.4000e-004	0.0516		141.5305	141.5305	2.2100e-003		141.5858

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	0.3341	10.0395	17.2957	0.0281		0.0374	0.0374		0.0374	0.0374	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3579	10.0395	17.2957	0.0281		0.0374	0.0374		0.0374	0.0374	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.5 Paving - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0479	0.0230	0.3641	1.4200e-003	0.1766	8.0000e-004	0.1774	0.0471	7.4000e-004	0.0479		141.5305	141.5305	2.2100e-003		141.5858
Total	0.0479	0.0230	0.3641	1.4200e-003	0.1766	8.0000e-004	0.1774	0.0471	7.4000e-004	0.0479		141.5305	141.5305	2.2100e-003		141.5858

3.6 Architectural Coating - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.1995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	7.3303	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0288	0.0138	0.2185	8.5000e-004	0.1150	4.8000e-004	0.1154	0.0305	4.4000e-004	0.0309		84.9183	84.9183	1.3300e-003		84.9515
Total	0.0288	0.0138	0.2185	8.5000e-004	0.1150	4.8000e-004	0.1154	0.0305	4.4000e-004	0.0309		84.9183	84.9183	1.3300e-003		84.9515

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.1995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0114		281.7328
Total	7.2540	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0114		281.7328

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

3.6 Architectural Coating - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0288	0.0138	0.2185	8.5000e-004	0.1060	4.8000e-004	0.1064	0.0283	4.4000e-004	0.0287		84.9183	84.9183	1.3300e-003		84.9515
Total	0.0288	0.0138	0.2185	8.5000e-004	0.1060	4.8000e-004	0.1064	0.0283	4.4000e-004	0.0287		84.9183	84.9183	1.3300e-003		84.9515

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2403	2.0535	2.4492	0.0148	1.1572	7.5200e-003	1.1647	0.3097	7.0400e-003	0.3168		1,514.0429	1,514.0429	0.0651		1,515.6701
Unmitigated	0.2403	2.0535	2.4492	0.0148	1.1572	7.5200e-003	1.1647	0.3097	7.0400e-003	0.3168		1,514.0429	1,514.0429	0.0651		1,515.6701

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	6.59	7.16	6.07	24,449	24,449
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	133.28	138.74	120.68	490,150	490,150
Total	139.87	145.90	126.75	514,599	514,599

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.567395	0.028804	0.177003	0.085578	0.013298	0.003927	0.012903	0.102744	0.001258	0.000996	0.004304	0.001169	0.000622
Other Asphalt Surfaces	0.567395	0.028804	0.177003	0.085578	0.013298	0.003927	0.012903	0.102744	0.001258	0.000996	0.004304	0.001169	0.000622
Single Family Housing	0.567395	0.028804	0.177003	0.085578	0.013298	0.003927	0.012903	0.102744	0.001258	0.000996	0.004304	0.001169	0.000622

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0106	0.0903	0.0384	5.8000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003		115.2190	115.2190	2.2100e-003	2.1100e-003	115.9037
NaturalGas Unmitigated	0.0112	0.0960	0.0409	6.1000e-004		7.7600e-003	7.7600e-003		7.7600e-003	7.7600e-003		122.5366	122.5366	2.3500e-003	2.2500e-003	123.2648

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	38.73	4.2000e-004	3.5700e-003	1.5200e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		4.5565	4.5565	9.0000e-005	8.0000e-005	4.5836
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1002.83	0.0108	0.0924	0.0393	5.9000e-004		7.4700e-003	7.4700e-003		7.4700e-003	7.4700e-003		117.9801	117.9801	2.2600e-003	2.1600e-003	118.6812
Total		0.0112	0.0960	0.0409	6.1000e-004		7.7600e-003	7.7600e-003		7.7600e-003	7.7600e-003		122.5366	122.5366	2.3500e-003	2.2400e-003	123.2648

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					
Apartments Low Rise	0.0367329	4.0000e-004	3.3900e-003	1.4400e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		4.3215	4.3215	8.0000e-005	8.0000e-005	4.3472
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.942629	0.0102	0.0869	0.0370	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8975	110.8975	2.1300e-003	2.0300e-003	111.5565
Total		0.0106	0.0903	0.0384	5.7000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003		115.2190	115.2190	2.2100e-003	2.1100e-003	115.9037

6.0 Area Detail

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.2763	0.2383	1.3388	1.5000e-003		0.0250	0.0250		0.0250	0.0250	0.0000	288.1306	288.1306	7.6500e-003	5.2400e-003	289.8838
Unmitigated	24.5689	0.4626	29.5801	0.0514		3.9800	3.9800		3.9800	3.9800	416.5760	176.9541	593.5301	0.3866	0.0328	612.9597

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4537					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	22.9559	0.4483	28.3366	0.0513		3.9731	3.9731		3.9731	3.9731	416.5760	174.7059	591.2818	0.3844	0.0328	610.6571
Landscaping	0.0378	0.0143	1.2435	7.0000e-005		6.9000e-003	6.9000e-003		6.9000e-003	6.9000e-003		2.2482	2.2482	2.1700e-003		2.3026
Total	24.5689	0.4626	29.5801	0.0514		3.9800	3.9800		3.9800	3.9800	416.5760	176.9541	593.5301	0.3866	0.0328	612.9597

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0907					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0262	0.2239	0.0953	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	285.8824	285.8824	5.4800e-003	5.2400e-003	287.5812
Landscaping	0.0378	0.0143	1.2435	7.0000e-005		6.9000e-003	6.9000e-003		6.9000e-003	6.9000e-003		2.2482	2.2482	2.1700e-003		2.3026
Total	1.2763	0.2383	1.3388	1.5000e-003		0.0250	0.0250		0.0250	0.0250	0.0000	288.1306	288.1306	7.6500e-003	5.2400e-003	289.8838

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Summer

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
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

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

User Defined Equipment

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

11.0 Vegetation

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

Tierra Robles - Phase 6 Construction Only
Shasta County AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	91.20	1000sqft	2.09	91,200.00	0
Apartments Low Rise	1.00	Dwelling Unit	0.06	1,200.00	3
Single Family Housing	14.00	Dwelling Unit	4.55	49,700.00	40

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2032
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294

Land Use - Phase 6 includes 14 DU, anticipate 1 secondary unit (apartment), 91,200 sf of internal roadways single family average size 3,550, apartment average size 1,200

Construction Phase - Building construction, paving, and painting are assumed to occur simultaneously

Grading - imported 3,950 cubic yards of rock material

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - Low VOC paint

Energy Mitigation - CEC - 2019 energy standard will reduce residential energy use by 7% or 53% with rooftop solar

Water Mitigation -

Trips and VMT -

Vehicle Trips - CalEEMod Error - default trips = 101%

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	230.00
tblConstructionPhase	NumDays	20.00	230.00
tblGrading	MaterialImported	0.00	3,950.00
tblLandUse	LandUseSquareFeet	1,000.00	1,200.00
tblLandUse	LandUseSquareFeet	25,200.00	49,700.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TTP	37.80	36.80
tblVehicleTrips	HO_TTP	37.80	36.80

2.0 Emissions Summary

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	24.5689	0.4626	29.5801	0.0514		3.9800	3.9800		3.9800	3.9800	416.5760	176.9541	593.5301	0.3866	0.0328	612.9597
Energy	0.0112	0.0960	0.0409	6.1000e-004		7.7600e-003	7.7600e-003		7.7600e-003	7.7600e-003		122.5366	122.5366	2.3500e-003	2.2500e-003	123.2648
Mobile	0.1835	2.0894	2.1666	0.0136	1.1572	7.5500e-003	1.1647	0.3097	7.0800e-003	0.3168		1,392.5660	1,392.5660	0.0704		1,394.3267
Total	24.7637	2.6480	31.7876	0.0656	1.1572	3.9953	5.1524	0.3097	3.9948	4.3045	416.5760	1,692.0567	2,108.6327	0.4594	0.0350	2,130.5512

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	1.2763	0.2383	1.3388	1.5000e-003		0.0250	0.0250		0.0250	0.0250	0.0000	288.1306	288.1306	7.6500e-003	5.2400e-003	289.8838
Energy	0.0106	0.0903	0.0384	5.8000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003		115.2190	115.2190	2.2100e-003	2.1100e-003	115.9037
Mobile	0.1835	2.0894	2.1666	0.0136	1.1572	7.5500e-003	1.1647	0.3097	7.0800e-003	0.3168		1,392.5660	1,392.5660	0.0704		1,394.3267
Total	1.4703	2.4179	3.5439	0.0157	1.1572	0.0399	1.1970	0.3097	0.0394	0.3491	0.0000	1,795.9156	1,795.9156	0.0803	7.3500e-003	1,800.1143

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	94.06	8.69	88.85	76.10	0.00	99.00	76.77	0.00	99.01	91.89	100.00	-6.14	14.83	82.52	79.01	15.51

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/13/2030	1/25/2030	5	10	
2	Grading	Grading	1/26/2030	2/22/2030	5	20	
3	Building Construction	Building Construction	2/23/2030	1/10/2031	5	230	
4	Paving	Paving	1/11/2031	11/28/2031	5	230	
5	Architectural Coating	Architectural Coating	2/8/2031	12/26/2031	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.09

Residential Indoor: 103,073; Residential Outdoor: 34,358; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 5,472 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	494.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	44.00	17.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

Use Cleaner Engines for Construction Equipment

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.7537	4,409.7537	0.2176		4,415.1936
Total	2.4399	13.6680	16.2918	0.0466	18.0663	0.4367	18.5029	9.9307	0.4367	10.3673		4,409.7537	4,409.7537	0.2176		4,415.1936

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0609	0.0359	0.3619	1.5100e-003	0.2299	1.0300e-003	0.2310	0.0610	9.5000e-004	0.0619		150.6317	150.6317	2.4200e-003		150.6923
Total	0.0609	0.0359	0.3619	1.5100e-003	0.2299	1.0300e-003	0.2310	0.0610	9.5000e-004	0.0619		150.6317	150.6317	2.4200e-003		150.6923

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0466		0.0621	0.0621		0.0621	0.0621	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936
Total	0.6967	12.1620	22.9600	0.0466	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.2 Site Preparation - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0609	0.0359	0.3619	1.5100e-003	0.2119	1.0300e-003	0.2130	0.0566	9.5000e-004	0.0575		150.6317	150.6317	2.4200e-003		150.6923
Total	0.0609	0.0359	0.3619	1.5100e-003	0.2119	1.0300e-003	0.2130	0.0566	9.5000e-004	0.0575		150.6317	150.6317	2.4200e-003		150.6923

3.3 Grading - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5815	0.0000	6.5815	3.3719	0.0000	3.3719			0.0000			0.0000
Off-Road	1.6179	7.7501	14.4518	0.0363		0.2340	0.2340		0.2340	0.2340		3,439.7201	3,439.7201	0.1437		3,443.3117
Total	1.6179	7.7501	14.4518	0.0363	6.5815	0.2340	6.8155	3.3719	0.2340	3.6059		3,439.7201	3,439.7201	0.1437		3,443.3117

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2030

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	0.1162	3.6537	0.7336	0.0180	0.4327	6.7200e-003	0.4394	0.1187	6.4300e-003	0.1251		1,891.0989	1,891.0989	0.0863		1,893.2559
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0299	0.3016	1.2600e-003	0.1916	8.6000e-004	0.1925	0.0508	7.9000e-004	0.0516		125.5264	125.5264	2.0200e-003		125.5769
Total	0.1670	3.6836	1.0352	0.0193	0.6243	7.5800e-003	0.6319	0.1695	7.2200e-003	0.1767		2,016.6254	2,016.6254	0.0883		2,018.8328

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5815	0.0000	6.5815	3.3719	0.0000	3.3719			0.0000			0.0000
Off-Road	0.5200	10.3327	18.9906	0.0363		0.0484	0.0484		0.0484	0.0484	0.0000	3,439.7201	3,439.7201	0.1437		3,443.3117
Total	0.5200	10.3327	18.9906	0.0363	6.5815	0.0484	6.6299	3.3719	0.0484	3.4203	0.0000	3,439.7201	3,439.7201	0.1437		3,443.3117

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.3 Grading - 2030

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	0.1162	3.6537	0.7336	0.0180	0.4033	6.7200e-003	0.4101	0.1115	6.4300e-003	0.1179		1,891.0989	1,891.0989	0.0863		1,893.2559
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0299	0.3016	1.2600e-003	0.1766	8.6000e-004	0.1775	0.0471	7.9000e-004	0.0479		125.5264	125.5264	2.0200e-003		125.5769
Total	0.1670	3.6836	1.0352	0.0193	0.5799	7.5800e-003	0.5875	0.1586	7.2200e-003	0.1658		2,016.6254	2,016.6254	0.0883		2,018.8328

3.4 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0342	1.2716	0.2429	4.1500e-003	0.1042	1.3300e-003	0.1056	0.0300	1.2700e-003	0.0313		434.2262	434.2262	0.0302		434.9804
Worker	0.1489	0.0878	0.8847	3.6900e-003	0.5620	2.5200e-003	0.5645	0.1490	2.3200e-003	0.1514		368.2109	368.2109	5.9200e-003		368.3590
Total	0.1832	1.3594	1.1276	7.8400e-003	0.6662	3.8500e-003	0.6701	0.1791	3.5900e-003	0.1827		802.4371	802.4371	0.0361		803.3395

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	0.5335	10.9122	17.8738	0.0310		0.0846	0.0846		0.0846	0.0846	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	0.5335	10.9122	17.8738	0.0310		0.0846	0.0846		0.0846	0.0846	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0342	1.2716	0.2429	4.1500e-003	0.0975	1.3300e-003	0.0989	0.0284	1.2700e-003	0.0297		434.2262	434.2262	0.0302		434.9804
Worker	0.1489	0.0878	0.8847	3.6900e-003	0.5180	2.5200e-003	0.5206	0.1383	2.3200e-003	0.1406		368.2109	368.2109	5.9200e-003		368.3590
Total	0.1832	1.3594	1.1276	7.8400e-003	0.6156	3.8500e-003	0.6194	0.1666	3.5900e-003	0.1702		802.4371	802.4371	0.0361		803.3395

3.4 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0336	1.2617	0.2369	4.1400e-003	0.1042	1.2900e-003	0.1055	0.0300	1.2300e-003	0.0313		433.0313	433.0313	0.0305		433.7938
Worker	0.1365	0.0801	0.8267	3.6000e-003	0.5620	2.3500e-003	0.5644	0.1490	2.1600e-003	0.1512		359.5909	359.5909	5.3600e-003		359.7249
Total	0.1701	1.3417	1.0636	7.7400e-003	0.6662	3.6400e-003	0.6699	0.1791	3.3900e-003	0.1825		792.6223	792.6223	0.0359		793.5187

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	0.5335	10.9122	17.8738	0.0310		0.0846	0.0846		0.0846	0.0846	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	0.5335	10.9122	17.8738	0.0310		0.0846	0.0846		0.0846	0.0846	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.4 Building Construction - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0336	1.2617	0.2369	4.1400e-003	0.0975	1.2900e-003	0.0988	0.0284	1.2300e-003	0.0296		433.0313	433.0313	0.0305		433.7938
Worker	0.1365	0.0801	0.8267	3.6000e-003	0.5180	2.3500e-003	0.5204	0.1383	2.1600e-003	0.1404		359.5909	359.5909	5.3600e-003		359.7249
Total	0.1701	1.3417	1.0636	7.7400e-003	0.6156	3.6400e-003	0.6192	0.1666	3.3900e-003	0.1700		792.6223	792.6223	0.0359		793.5187

3.5 Paving - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4083	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0465	0.0273	0.2818	1.2300e-003	0.1916	8.0000e-004	0.1924	0.0508	7.4000e-004	0.0516		122.5878	122.5878	1.8300e-003		122.6335
Total	0.0465	0.0273	0.2818	1.2300e-003	0.1916	8.0000e-004	0.1924	0.0508	7.4000e-004	0.0516		122.5878	122.5878	1.8300e-003		122.6335

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	0.3341	10.0395	17.2957	0.0281		0.0374	0.0374		0.0374	0.0374	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0238					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3579	10.0395	17.2957	0.0281		0.0374	0.0374		0.0374	0.0374	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.5 Paving - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0465	0.0273	0.2818	1.2300e-003	0.1766	8.0000e-004	0.1774	0.0471	7.4000e-004	0.0479		122.5878	122.5878	1.8300e-003		122.6335
Total	0.0465	0.0273	0.2818	1.2300e-003	0.1766	8.0000e-004	0.1774	0.0471	7.4000e-004	0.0479		122.5878	122.5878	1.8300e-003		122.6335

3.6 Architectural Coating - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.1995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	7.3303	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0279	0.0164	0.1691	7.4000e-004	0.1150	4.8000e-004	0.1154	0.0305	4.4000e-004	0.0309		73.5527	73.5527	1.1000e-003		73.5801
Total	0.0279	0.0164	0.1691	7.4000e-004	0.1150	4.8000e-004	0.1154	0.0305	4.4000e-004	0.0309		73.5527	73.5527	1.1000e-003		73.5801

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.1995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0114		281.7328
Total	7.2540	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0114		281.7328

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

3.6 Architectural Coating - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0279	0.0164	0.1691	7.4000e-004	0.1060	4.8000e-004	0.1064	0.0283	4.4000e-004	0.0287		73.5527	73.5527	1.1000e-003		73.5801
Total	0.0279	0.0164	0.1691	7.4000e-004	0.1060	4.8000e-004	0.1064	0.0283	4.4000e-004	0.0287		73.5527	73.5527	1.1000e-003		73.5801

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1835	2.0894	2.1666	0.0136	1.1572	7.5500e-003	1.1647	0.3097	7.0800e-003	0.3168		1,392.5660	1,392.5660	0.0704		1,394.3267
Unmitigated	0.1835	2.0894	2.1666	0.0136	1.1572	7.5500e-003	1.1647	0.3097	7.0800e-003	0.3168		1,392.5660	1,392.5660	0.0704		1,394.3267

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	6.59	7.16	6.07	24,449	24,449
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	133.28	138.74	120.68	490,150	490,150
Total	139.87	145.90	126.75	514,599	514,599

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
Apartments Low Rise	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	42.00	21.20	36.80	86	11	3

4.4 Fleet Mix

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.567395	0.028804	0.177003	0.085578	0.013298	0.003927	0.012903	0.102744	0.001258	0.000996	0.004304	0.001169	0.000622
Other Asphalt Surfaces	0.567395	0.028804	0.177003	0.085578	0.013298	0.003927	0.012903	0.102744	0.001258	0.000996	0.004304	0.001169	0.000622
Single Family Housing	0.567395	0.028804	0.177003	0.085578	0.013298	0.003927	0.012903	0.102744	0.001258	0.000996	0.004304	0.001169	0.000622

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0106	0.0903	0.0384	5.8000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003		115.2190	115.2190	2.2100e-003	2.1100e-003	115.9037
NaturalGas Unmitigated	0.0112	0.0960	0.0409	6.1000e-004		7.7600e-003	7.7600e-003		7.7600e-003	7.7600e-003		122.5366	122.5366	2.3500e-003	2.2500e-003	123.2648

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	38.73	4.2000e-004	3.5700e-003	1.5200e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004		4.5565	4.5565	9.0000e-005	8.0000e-005	4.5836
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1002.83	0.0108	0.0924	0.0393	5.9000e-004		7.4700e-003	7.4700e-003		7.4700e-003	7.4700e-003		117.9801	117.9801	2.2600e-003	2.1600e-003	118.6812
Total		0.0112	0.0960	0.0409	6.1000e-004		7.7600e-003	7.7600e-003		7.7600e-003	7.7600e-003		122.5366	122.5366	2.3500e-003	2.2400e-003	123.2648

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					
Apartments Low Rise	0.0367329	4.0000e-004	3.3900e-003	1.4400e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		4.3215	4.3215	8.0000e-005	8.0000e-005	4.3472
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.942629	0.0102	0.0869	0.0370	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8975	110.8975	2.1300e-003	2.0300e-003	111.5565
Total		0.0106	0.0903	0.0384	5.7000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003		115.2190	115.2190	2.2100e-003	2.1100e-003	115.9037

6.0 Area Detail

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.2763	0.2383	1.3388	1.5000e-003		0.0250	0.0250		0.0250	0.0250	0.0000	288.1306	288.1306	7.6500e-003	5.2400e-003	289.8838
Unmitigated	24.5689	0.4626	29.5801	0.0514		3.9800	3.9800		3.9800	3.9800	416.5760	176.9541	593.5301	0.3866	0.0328	612.9597

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4537					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	22.9559	0.4483	28.3366	0.0513		3.9731	3.9731		3.9731	3.9731	416.5760	174.7059	591.2818	0.3844	0.0328	610.6571
Landscaping	0.0378	0.0143	1.2435	7.0000e-005		6.9000e-003	6.9000e-003		6.9000e-003	6.9000e-003		2.2482	2.2482	2.1700e-003		2.3026
Total	24.5689	0.4626	29.5801	0.0514		3.9800	3.9800		3.9800	3.9800	416.5760	176.9541	593.5301	0.3866	0.0328	612.9597

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0907					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0262	0.2239	0.0953	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	285.8824	285.8824	5.4800e-003	5.2400e-003	287.5812
Landscaping	0.0378	0.0143	1.2435	7.0000e-005		6.9000e-003	6.9000e-003		6.9000e-003	6.9000e-003		2.2482	2.2482	2.1700e-003		2.3026
Total	1.2763	0.2383	1.3388	1.5000e-003		0.0250	0.0250		0.0250	0.0250	0.0000	288.1306	288.1306	7.6500e-003	5.2400e-003	289.8838

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Phase 6 Construction Only - Shasta County AQMD Air District, Winter

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

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

11.0 Vegetation

Tierra Robles - Operations Only - Shasta County AQMD Air District, Annual

Tierra Robles - Operations Only
Shasta County AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	15.00	Dwelling Unit	0.94	18,000.00	43
Single Family Housing	166.00	Dwelling Unit	471.92	589,300.00	475

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294. <https://www.pgecurrents.com/2018/03/26/independent-registry-confirms-record-low-carbon-emissions-for-pge/>

Land Use - 166 single family homes spread over 471.92 acres (total residential parcel area). Based on historical trends it is assumed 9% will include a secondary unit (15)

single family average size 3,550 x166=589,300 sf

apartment average size 1,200 x 15= 18,000 sf

Construction Phase - Operations only, no construction modeling

Off-road Equipment - Operations only, no construction modeling

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - based on transportation section 1,674/166=10.08433734939759036144578313253, 100/15=6.6666666666666666666666666666666667

CalEEMod error, default trip rate 101%

Area Coating -

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - only Natural Gas and low VOC paint

Energy Mitigation - CEC - 2019 Building Energy Efficiency Standard will reduce residential energy use by 7% or 53 % with rooftop solar

Water Mitigation -

Fleet Mix -

Mobile Land Use Mitigation -

Waste Mitigation - Divert 65% of solid waste to be recycled

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Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstructionPhase	NumDays	7,750.00	1.00
tblLandUse	LandUseSquareFeet	15,000.00	18,000.00
tblLandUse	LandUseSquareFeet	298,800.00	589,300.00
tblLandUse	LotAcreage	53.90	471.92
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HW_TTP	42.00	41.00
tblVehicleTrips	HW_TTP	42.00	41.00
tblVehicleTrips	ST_TR	7.16	6.67
tblVehicleTrips	ST_TR	9.91	10.08
tblVehicleTrips	SU_TR	6.07	6.67
tblVehicleTrips	SU_TR	8.62	10.08
tblVehicleTrips	WD_TR	6.59	6.67
tblVehicleTrips	WD_TR	9.52	10.08

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2030	3-31-2030	0.0040	0.0040
		Highest	0.0040	0.0040

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	14.7190	0.2372	15.3595	0.0255		1.9731	1.9731		1.9731	1.9731	186.9653	80.6059	267.5712	0.1746	0.0147	276.3194
Energy	0.0246	0.2098	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	446.2146	446.2146	0.0247	8.6000e-003	449.3959
Mobile	0.4673	4.7267	5.1721	0.0313	2.4199	0.0189	2.4388	0.6505	0.0177	0.6681	0.0000	2,900.7134	2,900.7134	0.1340	0.0000	2,904.0630
Waste						0.0000	0.0000		0.0000	0.0000	25.5058	0.0000	25.5058	1.5074	0.0000	63.1896
Water						0.0000	0.0000		0.0000	0.0000	3.7413	11.9797	15.7211	0.3855	9.3200e-003	28.1341
Total	15.2109	5.1737	20.6208	0.0581	2.4199	2.0089	4.4288	0.6505	2.0077	2.6582	216.2125	3,439.5136	3,655.7261	2.2261	0.0326	3,721.1020

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.6149	0.1262	1.3875	7.8000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	130.5035	130.5035	4.5500e-003	2.3500e-003	131.3182
Energy	0.0135	0.1150	0.0490	7.3000e-004		9.3000e-003	9.3000e-003		9.3000e-003	9.3000e-003	0.0000	324.1044	324.1044	0.0214	6.3400e-003	326.5277
Mobile	0.4673	4.7267	5.1721	0.0313	2.4199	0.0189	2.4388	0.6505	0.0177	0.6681	0.0000	2,900.7134	2,900.7134	0.1340	0.0000	2,904.0630
Waste						0.0000	0.0000		0.0000	0.0000	8.9270	0.0000	8.9270	0.5276	0.0000	22.1164
Water						0.0000	0.0000		0.0000	0.0000	2.9931	10.0661	13.0592	0.3084	7.4600e-003	22.9938
Total	3.0957	4.9680	6.6085	0.0328	2.4199	0.0446	2.4645	0.6505	0.0434	0.6939	11.9201	3,365.3874	3,377.3075	0.9959	0.0162	3,407.0191

	ROG	NOx	CO	SO2	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	79.65	3.98	67.95	43.57	0.00	97.78	44.35	0.00	97.84	73.90	94.49	2.16	7.62	55.26	50.51	8.44

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2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	- 16,228.20 00
Total	- 16,228.20 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	Building Construction	Building Construction	1/1/2030	1/1/2030	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

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

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

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
Building Construction	9	71.00	19.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

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3.2 Building Construction - 2030

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	6.5000e-004	3.9700e-003	8.0800e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.3143	1.3143	5.0000e-005	0.0000	1.3156
Total	6.5000e-004	3.9700e-003	8.0800e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.3143	1.3143	5.0000e-005	0.0000	1.3156

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	7.1000e-004	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2247	0.2247	1.0000e-005	0.0000	0.2251
Worker	1.1000e-004	6.0000e-005	7.4000e-004	0.0000	4.3000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.2785	0.2785	0.0000	0.0000	0.2787
Total	1.3000e-004	7.7000e-004	8.6000e-004	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.5033	0.5033	1.0000e-005	0.0000	0.5037

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3.2 Building Construction - 2030

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	6.5000e-004	3.9700e-003	8.0800e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.3143	1.3143	5.0000e-005	0.0000	1.3156
Total	6.5000e-004	3.9700e-003	8.0800e-003	2.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.3143	1.3143	5.0000e-005	0.0000	1.3156

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	7.1000e-004	1.2000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2247	0.2247	1.0000e-005	0.0000	0.2251
Worker	1.1000e-004	6.0000e-005	7.4000e-004	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2785	0.2785	0.0000	0.0000	0.2787
Total	1.3000e-004	7.7000e-004	8.6000e-004	0.0000	4.6000e-004	0.0000	4.6000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.5033	0.5033	1.0000e-005	0.0000	0.5037

4.0 Operational Detail - Mobile

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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	0.4673	4.7267	5.1721	0.0313	2.4199	0.0189	2.4388	0.6505	0.0177	0.6681	0.0000	2,900.7134	2,900.7134	0.1340	0.0000	2,904.0630
Unmitigated	0.4673	4.7267	5.1721	0.0313	2.4199	0.0189	2.4388	0.6505	0.0177	0.6681	0.0000	2,900.7134	2,900.7134	0.1340	0.0000	2,904.0630

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	100.00	100.00	100.00	367,721	367,721
Single Family Housing	1,674.00	1,674.00	1,674.00	6,155,645	6,155,645
Total	1,774.00	1,774.00	1,774.00	6,523,366	6,523,366

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
Apartments Low Rise	16.80	7.10	7.90	41.00	21.20	37.80	86	11	3
Single Family Housing	16.80	7.10	7.90	41.00	21.20	37.80	86	11	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698
Single Family Housing	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	190.8731	190.8731	0.0188	3.9000e-003	192.5046
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	203.2942	203.2942	0.0201	4.1500e-003	205.0319
NaturalGas Mitigated	0.0135	0.1150	0.0490	7.3000e-004		9.3000e-003	9.3000e-003		9.3000e-003	9.3000e-003	0.0000	133.2313	133.2313	2.5500e-003	2.4400e-003	134.0231
NaturalGas Unmitigated	0.0246	0.2098	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	242.9204	242.9204	4.6600e-003	4.4500e-003	244.3640

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	212047	1.1400e-003	9.7700e-003	4.1600e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.3156	11.3156	2.2000e-004	2.1000e-004	11.3829
Single Family Housing	4.34011e+006	0.0234	0.2000	0.0851	1.2800e-003		0.0162	0.0162		0.0162	0.0162	0.0000	231.6048	231.6048	4.4400e-003	4.2500e-003	232.9811
Total		0.0245	0.2098	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	242.9204	242.9204	4.6600e-003	4.4600e-003	244.3640

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	129260	7.0000e-004	5.9600e-003	2.5300e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8978	6.8978	1.3000e-004	1.3000e-004	6.9388
Single Family Housing	2.3674e+006	0.0128	0.1091	0.0464	7.0000e-004		8.8200e-003	8.8200e-003		8.8200e-003	8.8200e-003	0.0000	126.3335	126.3335	2.4200e-003	2.3200e-003	127.0843
Total		0.0135	0.1151	0.0490	7.4000e-004		9.3000e-003	9.3000e-003		9.3000e-003	9.3000e-003	0.0000	133.2313	133.2313	2.5500e-003	2.4500e-003	134.0231

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	70162.8	9.3566	9.2000e-004	1.9000e-004	9.4366
Single Family Housing	1.45428e+006	193.9376	0.0191	3.9600e-003	195.5953
Total		203.2942	0.0201	4.1500e-003	205.0319

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	64642.3	8.6205	8.5000e-004	1.8000e-004	8.6941
Single Family Housing	1.36666e+006	182.2527	0.0180	3.7200e-003	183.8105
Total		190.8731	0.0188	3.9000e-003	192.5046

6.0 Area Detail

6.1 Mitigation Measures Area

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Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.6149	0.1262	1.3875	7.8000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	130.5035	130.5035	4.5500e-003	2.3500e-003	131.3182
Unmitigated	14.7190	0.2372	15.3595	0.0255		1.9731	1.9731		1.9731	1.9731	186.9653	80.6059	267.5712	0.1746	0.0147	276.3194

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.9500					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.3718					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	11.3571	0.2218	14.0191	0.0254		1.9656	1.9656		1.9656	1.9656	186.9653	78.4105	265.3759	0.1725	0.0147	274.0718
Landscaping	0.0401	0.0155	1.3404	7.0000e-005		7.4500e-003	7.4500e-003		7.4500e-003	7.4500e-003	0.0000	2.1953	2.1953	2.0900e-003	0.0000	2.2476
Total	14.7190	0.2372	15.3595	0.0255		1.9731	1.9731		1.9731	1.9731	186.9653	80.6059	267.5712	0.1746	0.0147	276.3194

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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	0.1900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.3718					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0130	0.1108	0.0472	7.1000e-004		8.9600e-003	8.9600e-003		8.9600e-003	8.9600e-003	0.0000	128.3082	128.3082	2.4600e-003	2.3500e-003	129.0706
Landscaping	0.0401	0.0155	1.3404	7.0000e-005		7.4500e-003	7.4500e-003		7.4500e-003	7.4500e-003	0.0000	2.1953	2.1953	2.0900e-003	0.0000	2.2476
Total	2.6149	0.1262	1.3875	7.8000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	130.5035	130.5035	4.5500e-003	2.3500e-003	131.3182

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.0592	0.3084	7.4600e-003	22.9938
Unmitigated	15.7211	0.3855	9.3200e-003	28.1341

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.97731 / 0.61613	1.3029	0.0319	7.7000e-004	2.3316
Single Family Housing	10.8156 / 6.81851	14.4182	0.3535	8.5500e-003	25.8026
Total		15.7211	0.3855	9.3200e-003	28.1341

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.781848 / 0.578547	1.0823	0.0256	6.2000e-004	1.9056
Single Family Housing	8.65245 / 6.40258	11.9769	0.2829	6.8500e-003	21.0882
Total		13.0592	0.3084	7.4700e-003	22.9938

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.9270	0.5276	0.0000	22.1164
Unmitigated	25.5058	1.5074	0.0000	63.1896

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	6.9	1.4006	0.0828	0.0000	3.4700
Single Family Housing	118.75	24.1052	1.4246	0.0000	59.7196
Total		25.5058	1.5074	0.0000	63.1896

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	2.415	0.4902	0.0290	0.0000	1.2145
Single Family Housing	41.5625	8.4368	0.4986	0.0000	20.9018
Total		8.9270	0.5276	0.0000	22.1164

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
----------------	--------

11.0 Vegetation

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	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	- 16,228.20 00	0.0000	0.0000	- 16,228.20 00

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Trees	638.3 / 492.1	- 16,228.20 00	0.0000	0.0000	- 16,228.20 00
Total		- 16,228.20 00	0.0000	0.0000	- 16,228.20 00

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

Tierra Robles - Operations Only
Shasta County AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	15.00	Dwelling Unit	0.94	18,000.00	43
Single Family Housing	166.00	Dwelling Unit	471.92	589,300.00	475

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	294	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294. <https://www.pgecurrents.com/2018/03/26/independent-registry-confirms-record-low-carbon-emissions-for-pge/>

Land Use - 166 single family homes spread over 471.92 acres (total residential parcel area). Based on historical trends it is assumed 9% will include a secondary unit (15)

single family average size 3,550 x166=589,300 sf

apartment average size 1,200 x 15= 18,000 sf

Construction Phase - Operations only, no construction modeling

Off-road Equipment - Operations only, no construction modeling

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - based on transportation section $1,674/166=10.08433734939759036144578313253$, $100/15=6.6666666666666666666666666666666667$
CalEEMod error, default trip rate 101%

Area Coating -

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - only Natural Gas and low VOC paint

Energy Mitigation - CEC - 2019 Building Energy Efficiency Standard will reduce residential energy use by 7% or 53 % with rooftop solar

Water Mitigation -

Fleet Mix -

Mobile Land Use Mitigation -

Waste Mitigation - Divert 65% of solid waste to be recycled

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstructionPhase	NumDays	7,750.00	1.00
tblLandUse	LandUseSquareFeet	15,000.00	18,000.00
tblLandUse	LandUseSquareFeet	298,800.00	589,300.00
tblLandUse	LotAcreage	53.90	471.92
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HW_TTP	42.00	41.00
tblVehicleTrips	HW_TTP	42.00	41.00
tblVehicleTrips	ST_TR	7.16	6.67
tblVehicleTrips	ST_TR	9.91	10.08
tblVehicleTrips	SU_TR	6.07	6.67
tblVehicleTrips	SU_TR	8.62	10.08
tblVehicleTrips	WD_TR	6.59	6.67
tblVehicleTrips	WD_TR	9.52	10.08

2.0 Emissions Summary

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	295.6487	5.5812	356.8215	0.6203		48.0244	48.0244		48.0244	48.0244	5,026.6833	2,135.0056	7,161.6889	4.6644	0.3954	7,396.1244
Energy	0.1345	1.1494	0.4891	7.3400e-003		0.0929	0.0929		0.0929	0.0929		1,467.2544	1,467.2544	0.0281	0.0269	1,475.9736
Mobile	3.2324	25.6058	32.6128	0.1827	13.9617	0.1036	14.0652	3.7373	0.0971	3.8344		18,661.5395	18,661.5395	0.7971		18,681.4681
Total	299.0156	32.3364	389.9234	0.8103	13.9617	48.2209	62.1826	3.7373	48.2144	51.9517	5,026.6833	22,263.7995	27,290.4828	5.4897	0.4223	27,553.5660

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	14.7990	2.8739	16.0432	0.0180		0.3013	0.3013		0.3013	0.3013	0.0000	3,476.5350	3,476.5350	0.0917	0.0632	3,497.6750
Energy	0.0738	0.6304	0.2682	4.0200e-003		0.0510	0.0510		0.0510	0.0510		804.7256	804.7256	0.0154	0.0148	809.5076
Mobile	3.2324	25.6058	32.6128	0.1827	13.9617	0.1036	14.0652	3.7373	0.0971	3.8344		18,661.5395	18,661.5395	0.7971		18,681.4681
Total	18.1051	29.1101	48.9242	0.2047	13.9617	0.4558	14.4175	3.7373	0.4493	4.1866	0.0000	22,942.8001	22,942.8001	0.9043	0.0780	22,988.6507

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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	93.95	9.98	87.45	74.73	0.00	99.05	76.81	0.00	99.07	91.94	100.00	-3.05	15.93	83.53	81.53	16.57

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2030	1/1/2030	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

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
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	71.00	19.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

3.2 Building Construction - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0360	1.4171	0.2244	4.8100e-003	0.1165	1.4600e-003	0.1179	0.0335	1.4000e-003	0.0349		502.7206	502.7206	0.0296		503.4601
Worker	0.2480	0.1194	1.8362	6.8700e-003	0.9069	4.0700e-003	0.9110	0.2405	3.7400e-003	0.2442		685.8667	685.8667	0.0115		686.1552
Total	0.2841	1.5364	2.0607	0.0117	1.0234	5.5300e-003	1.0289	0.2740	5.1400e-003	0.2792		1,188.5873	1,188.5873	0.0411		1,189.6153

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

3.2 Building Construction - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0360	1.4171	0.2244	4.8100e-003	0.1115	1.4600e-003	0.1130	0.0323	1.4000e-003	0.0337		502.7206	502.7206	0.0296		503.4601
Worker	0.2480	0.1194	1.8362	6.8700e-003	0.8596	4.0700e-003	0.8636	0.2289	3.7400e-003	0.2326		685.8667	685.8667	0.0115		686.1552
Total	0.2841	1.5364	2.0607	0.0117	0.9711	5.5300e-003	0.9766	0.2612	5.1400e-003	0.2663		1,188.5873	1,188.5873	0.0411		1,189.6153

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.2324	25.6058	32.6128	0.1827	13.9617	0.1036	14.0652	3.7373	0.0971	3.8344		18,661.53 95	18,661.53 95	0.7971		18,681.46 81
Unmitigated	3.2324	25.6058	32.6128	0.1827	13.9617	0.1036	14.0652	3.7373	0.0971	3.8344		18,661.53 95	18,661.53 95	0.7971		18,681.46 81

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	100.00	100.00	100.00	367,721	367,721
Single Family Housing	1,674.00	1,674.00	1,674.00	6,155,645	6,155,645
Total	1,774.00	1,774.00	1,774.00	6,523,366	6,523,366

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
Apartments Low Rise	16.80	7.10	7.90	41.00	21.20	37.80	86	11	3
Single Family Housing	16.80	7.10	7.90	41.00	21.20	37.80	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698
Single Family Housing	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0738	0.6304	0.2682	4.0200e-003		0.0510	0.0510		0.0510	0.0510		804.7256	804.7256	0.0154	0.0148	809.5076
NaturalGas Unmitigated	0.1345	1.1494	0.4891	7.3400e-003		0.0929	0.0929		0.0929	0.0929		1,467.2544	1,467.2544	0.0281	0.0269	1,475.9736

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	580.95	6.2700e-003	0.0535	0.0228	3.4000e-004		4.3300e-003	4.3300e-003		4.3300e-003	4.3300e-003		68.3471	68.3471	1.3100e-003	1.2500e-003	68.7533
Single Family Housing	11890.7	0.1282	1.0958	0.4663	6.9900e-003		0.0886	0.0886		0.0886	0.0886		1,398.9073	1,398.9073	0.0268	0.0257	1,407.2203
Total		0.1345	1.1494	0.4891	7.3300e-003		0.0929	0.0929		0.0929	0.0929		1,467.2544	1,467.2544	0.0281	0.0269	1,475.9736

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					
Apartments Low Rise	0.354137	3.8200e-003	0.0326	0.0139	2.1000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		41.6631	41.6631	8.0000e-004	7.6000e-004	41.9107
Single Family Housing	6.48603	0.0700	0.5977	0.2544	3.8200e-003		0.0483	0.0483		0.0483	0.0483		763.0624	763.0624	0.0146	0.0140	767.5969
Total		0.0738	0.6304	0.2682	4.0300e-003		0.0510	0.0510		0.0510	0.0510		804.7256	804.7256	0.0154	0.0148	809.5076

6.0 Area Detail

6.1 Mitigation Measures Area

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	14.7990	2.8739	16.0432	0.0180		0.3013	0.3013		0.3013	0.3013	0.0000	3,476.5350	3,476.5350	0.0917	0.0632	3,497.6750
Unmitigated	295.6487	5.5812	356.8215	0.6203		48.0244	48.0244		48.0244	48.0244	5,026.6833	2,135.0056	7,161.6889	4.6644	0.3954	7,396.1244

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.2055					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.9962					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	277.0015	5.4095	341.9283	0.6195		47.9416	47.9416		47.9416	47.9416	5,026.683 3	2,108.1177	7,134.800 9	4.6388	0.3954	7,368.596 0
Landscaping	0.4455	0.1717	14.8933	7.9000e-004		0.0828	0.0828		0.0828	0.0828		26.8880	26.8880	0.0256		27.5284
Total	295.6487	5.5812	356.8215	0.6203		48.0244	48.0244		48.0244	48.0244	5,026.683 3	2,135.005 6	7,161.688 9	4.6644	0.3954	7,396.124 4

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0411					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.9962					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.3162	2.7022	1.1499	0.0173		0.2185	0.2185		0.2185	0.2185	0.0000	3,449.6471	3,449.6471	0.0661	0.0632	3,470.1466
Landscaping	0.4455	0.1717	14.8933	7.9000e-004		0.0828	0.0828		0.0828	0.0828		26.8880	26.8880	0.0256		27.5284
Total	14.7990	2.8739	16.0432	0.0180		0.3013	0.3013		0.3013	0.3013	0.0000	3,476.5350	3,476.5350	0.0917	0.0632	3,497.6750

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Robles - Operations Only - Shasta County AQMD Air District, Summer

Institute Recycling and Composting Services

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
----------------	--------

11.0 Vegetation

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

Tierra Robles - Operations Only
Shasta County AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	15.00	Dwelling Unit	0.94	18,000.00	43
Single Family Housing	166.00	Dwelling Unit	471.92	589,300.00	475

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	294	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

Project Characteristics - Adjusted for PG&E's 2016 CO2 Intensity Factor of 294. <https://www.pgecurrents.com/2018/03/26/independent-registry-confirms-record-low-carbon-emissions-for-pge/>

Land Use - 166 single family homes spread over 471.92 acres (total residential parcel area). Based on historical trends it is assumed 9% will include a secondary unit (15)

single family average size 3,550 x166=589,300 sf

apartment average size 1,200 x 15= 18,000 sf

Construction Phase - Operations only, no construction modeling

Off-road Equipment - Operations only, no construction modeling

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - based on transportation section 1,674/166=10.08433734939759036144578313253, 100/15=6.6666666666666666666666666666666667

CalEEMod error, default trip rate 101%

Area Coating -

Energy Use -

Land Use Change - Based on Impacts to Primary On-Site Habitats

Construction Off-road Equipment Mitigation - Shasta County AQMD

Area Mitigation - only Natural Gas and low VOC paint

Energy Mitigation - CEC - 2019 Building Energy Efficiency Standard will reduce residential energy use by 7% or 53 % with rooftop solar

Water Mitigation -

Fleet Mix -

Mobile Land Use Mitigation -

Waste Mitigation - Divert 65% of solid waste to be recycled

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstructionPhase	NumDays	7,750.00	1.00
tblLandUse	LandUseSquareFeet	15,000.00	18,000.00
tblLandUse	LandUseSquareFeet	298,800.00	589,300.00
tblLandUse	LotAcreage	53.90	471.92
tblProjectCharacteristics	CO2IntensityFactor	641.35	294
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HW_TTP	42.00	41.00
tblVehicleTrips	HW_TTP	42.00	41.00
tblVehicleTrips	ST_TR	7.16	6.67
tblVehicleTrips	ST_TR	9.91	10.08
tblVehicleTrips	SU_TR	6.07	6.67
tblVehicleTrips	SU_TR	8.62	10.08
tblVehicleTrips	WD_TR	6.59	6.67
tblVehicleTrips	WD_TR	9.52	10.08

2.0 Emissions Summary

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	295.6487	5.5812	356.8215	0.6203		48.0244	48.0244		48.0244	48.0244	5,026.6833	2,135.0056	7,161.6889	4.6644	0.3954	7,396.1244
Energy	0.1345	1.1494	0.4891	7.3400e-003		0.0929	0.0929		0.0929	0.0929		1,467.2544	1,467.2544	0.0281	0.0269	1,475.9736
Mobile	2.4541	26.1403	28.8975	0.1676	13.9617	0.1041	14.0657	3.7373	0.0975	3.8348		17,143.3617	17,143.3617	0.8561		17,164.7645
Total	298.2373	32.8709	386.2081	0.7952	13.9617	48.2214	62.1830	3.7373	48.2149	51.9521	5,026.6833	20,745.6217	25,772.3049	5.5486	0.4223	26,036.8624

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	14.7990	2.8739	16.0432	0.0180		0.3013	0.3013		0.3013	0.3013	0.0000	3,476.5350	3,476.5350	0.0917	0.0632	3,497.6750
Energy	0.0738	0.6304	0.2682	4.0200e-003		0.0510	0.0510		0.0510	0.0510		804.7256	804.7256	0.0154	0.0148	809.5076
Mobile	2.4541	26.1403	28.8975	0.1676	13.9617	0.1041	14.0657	3.7373	0.0975	3.8348		17,143.3617	17,143.3617	0.8561		17,164.7645
Total	17.3269	29.6446	45.2089	0.1897	13.9617	0.4563	14.4180	3.7373	0.4498	4.1871	0.0000	21,424.6222	21,424.6222	0.9633	0.0780	21,471.9472

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	94.19	9.81	88.29	76.15	0.00	99.05	76.81	0.00	99.07	91.94	100.00	-3.27	16.87	82.64	81.53	17.53

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2030	1/1/2030	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

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
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	71.00	19.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

3.2 Building Construction - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	1.4212	0.2715	4.6400e-003	0.1165	1.4900e-003	0.1180	0.0335	1.4200e-003	0.0350		485.3117	485.3117	0.0337		486.1546
Worker	0.2403	0.1416	1.4275	5.9500e-003	0.9069	4.0700e-003	0.9110	0.2405	3.7400e-003	0.2442		594.1585	594.1585	9.5600e-003		594.3975
Total	0.2786	1.5629	1.6990	0.0106	1.0234	5.5600e-003	1.0289	0.2740	5.1600e-003	0.2792		1,079.4701	1,079.4701	0.0433		1,080.5521

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

3.2 Building Construction - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	1.4212	0.2715	4.6400e-003	0.1115	1.4900e-003	0.1130	0.0323	1.4200e-003	0.0338		485.3117	485.3117	0.0337		486.1546
Worker	0.2403	0.1416	1.4275	5.9500e-003	0.8596	4.0700e-003	0.8636	0.2289	3.7400e-003	0.2326		594.1585	594.1585	9.5600e-003		594.3975
Total	0.2786	1.5629	1.6990	0.0106	0.9711	5.5600e-003	0.9766	0.2612	5.1600e-003	0.2664		1,079.4701	1,079.4701	0.0433		1,080.5521

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4541	26.1403	28.8975	0.1676	13.9617	0.1041	14.0657	3.7373	0.0975	3.8348		17,143.36 17	17,143.36 17	0.8561		17,164.76 45
Unmitigated	2.4541	26.1403	28.8975	0.1676	13.9617	0.1041	14.0657	3.7373	0.0975	3.8348		17,143.36 17	17,143.36 17	0.8561		17,164.76 45

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	100.00	100.00	100.00	367,721	367,721
Single Family Housing	1,674.00	1,674.00	1,674.00	6,155,645	6,155,645
Total	1,774.00	1,774.00	1,774.00	6,523,366	6,523,366

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
Apartments Low Rise	16.80	7.10	7.90	41.00	21.20	37.80	86	11	3
Single Family Housing	16.80	7.10	7.90	41.00	21.20	37.80	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698
Single Family Housing	0.564185	0.029150	0.177607	0.087315	0.015298	0.004171	0.012676	0.100964	0.001262	0.001031	0.004455	0.001189	0.000698

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0738	0.6304	0.2682	4.0200e-003		0.0510	0.0510		0.0510	0.0510		804.7256	804.7256	0.0154	0.0148	809.5076
NaturalGas Unmitigated	0.1345	1.1494	0.4891	7.3400e-003		0.0929	0.0929		0.0929	0.0929		1,467.2544	1,467.2544	0.0281	0.0269	1,475.9736

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	580.95	6.2700e-003	0.0535	0.0228	3.4000e-004		4.3300e-003	4.3300e-003		4.3300e-003	4.3300e-003		68.3471	68.3471	1.3100e-003	1.2500e-003	68.7533
Single Family Housing	11890.7	0.1282	1.0958	0.4663	6.9900e-003		0.0886	0.0886		0.0886	0.0886		1,398.9073	1,398.9073	0.0268	0.0257	1,407.2203
Total		0.1345	1.1494	0.4891	7.3300e-003		0.0929	0.0929		0.0929	0.0929		1,467.2544	1,467.2544	0.0281	0.0269	1,475.9736

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					
Apartments Low Rise	0.354137	3.8200e-003	0.0326	0.0139	2.1000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		41.6631	41.6631	8.0000e-004	7.6000e-004	41.9107
Single Family Housing	6.48603	0.0700	0.5977	0.2544	3.8200e-003		0.0483	0.0483		0.0483	0.0483		763.0624	763.0624	0.0146	0.0140	767.5969
Total		0.0738	0.6304	0.2682	4.0300e-003		0.0510	0.0510		0.0510	0.0510		804.7256	804.7256	0.0154	0.0148	809.5076

6.0 Area Detail

6.1 Mitigation Measures Area

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	14.7990	2.8739	16.0432	0.0180		0.3013	0.3013		0.3013	0.3013	0.0000	3,476.5350	3,476.5350	0.0917	0.0632	3,497.6750
Unmitigated	295.6487	5.5812	356.8215	0.6203		48.0244	48.0244		48.0244	48.0244	5,026.6833	2,135.0056	7,161.6889	4.6644	0.3954	7,396.1244

Tierra Robles - Operations Only - Shasta County AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.2055					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.9962					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	277.0015	5.4095	341.9283	0.6195		47.9416	47.9416		47.9416	47.9416	5,026.6833	2,108.1177	7,134.8009	4.6388	0.3954	7,368.5960
Landscaping	0.4455	0.1717	14.8933	7.9000e-004		0.0828	0.0828		0.0828	0.0828		26.8880	26.8880	0.0256		27.5284
Total	295.6487	5.5812	356.8215	0.6203		48.0244	48.0244		48.0244	48.0244	5,026.6833	2,135.0056	7,161.6889	4.6644	0.3954	7,396.1244

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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	lb/day										lb/day					
Architectural Coating	1.0411					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.9962					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.3162	2.7022	1.1499	0.0173		0.2185	0.2185		0.2185	0.2185	0.0000	3,449.6471	3,449.6471	0.0661	0.0632	3,470.1466
Landscaping	0.4455	0.1717	14.8933	7.9000e-004		0.0828	0.0828		0.0828	0.0828		26.8880	26.8880	0.0256		27.5284
Total	14.7990	2.8739	16.0432	0.0180		0.3013	0.3013		0.3013	0.3013	0.0000	3,476.5350	3,476.5350	0.0917	0.0632	3,497.6750

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Institute Recycling and Composting Services

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
