

Ursa Residential Development Project - Alameda County, Annual

Ursa Residential Development Project
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	18.00	Dwelling Unit	2.67	28,728.00	51

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	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 -

Land Use - Lot acreage based on project site parcel including all lots. Building square footage estimated based on approximate residential square footages (1,596 sf/home). Analysis conservatively includes the relocation and rehabilitation of the existing house in dwelling unit count.

Construction Phase - Site Prep phase - Soil remediation phase. Project specific construction schedule.

Off-road Equipment - Assuming CalEEMod defaults.

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Off-road Equipment - Per project specific construction equipment list.

Grading - Acres graded based on project site acreage. (Approx. 850 CY export of shallow soils during soils remediation phase, approx. 1,300 CY during site grading)

Demolition - Barn and shed building square footage estimated based on existing site plan (Figure 2-2).

Trips and VMT - Number of worker trips based on average of 30 workers/maximum of 50 workers during overlapping phases. Assumes 25 daily truck trips (trip length: 20 miles).

Woodstoves - No woodstoves assumed to be installed. Default number of wood fireplaces assumed to be gas.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	306.00
tblConstructionPhase	NumDays	220.00	436.00
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	10.00
tblConstructionPhase	PhaseEndDate	5/31/2018	5/1/2020
tblConstructionPhase	PhaseEndDate	5/31/2018	6/1/2020
tblConstructionPhase	PhaseEndDate	5/31/2018	8/28/2018

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tblConstructionPhase	PhaseEndDate	5/31/2018	9/28/2018
tblConstructionPhase	PhaseEndDate	5/31/2018	12/28/2018
tblConstructionPhase	PhaseEndDate	5/31/2018	6/14/2018
tblConstructionPhase	PhaseStartDate	6/1/2018	3/1/2019
tblConstructionPhase	PhaseStartDate	6/1/2018	10/1/2018
tblConstructionPhase	PhaseStartDate	6/1/2018	8/1/2018
tblConstructionPhase	PhaseStartDate	6/1/2018	9/1/2018
tblConstructionPhase	PhaseStartDate	6/1/2018	12/1/2018
tblFireplaces	NumberGas	4.50	12.24
tblFireplaces	NumberWood	7.74	0.00
tblGrading	AcresOfGrading	10.00	2.67
tblGrading	AcresOfGrading	15.00	0.00
tblGrading	MaterialExported	0.00	1,300.00
tblGrading	MaterialExported	0.00	850.00
tblLandUse	BuildingSpaceSquareFeet	32,400.00	28,728.00
tblLandUse	LandUseSquareFeet	32,400.00	28,728.00
tblLandUse	LotAcreage	5.84	2.67
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblProjectCharacteristics	OperationalYear	2018	2020
tblTripsAndVMT	HaulingTripNumber	163.00	162.00
tblTripsAndVMT	VendorTripLength	7.30	20.00
tblTripsAndVMT	VendorTripLength	7.30	20.00
tblTripsAndVMT	VendorTripNumber	2.00	50.00
tblTripsAndVMT	VendorTripNumber	0.00	50.00
tblTripsAndVMT	WorkerTripNumber	1.00	10.00
tblTripsAndVMT	WorkerTripNumber	6.00	50.00

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tblTripsAndVMT	WorkerTripNumber	13.00	60.00
tblTripsAndVMT	WorkerTripNumber	10.00	60.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	8.00	60.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.2228	2.1423	1.3078	3.4100e-003	0.1282	0.0989	0.2271	0.0516	0.0930	0.1446	0.0000	310.6476	310.6476	0.0449	0.0000	311.7695
2019	0.6057	4.2764	2.7925	8.6100e-003	0.1773	0.1726	0.3499	0.0499	0.1661	0.2159	0.0000	775.3956	775.3956	0.0768	0.0000	777.3165
2020	0.2288	1.6263	1.1176	3.5600e-003	0.0739	0.0614	0.1353	0.0208	0.0591	0.0799	0.0000	320.0385	320.0385	0.0306	0.0000	320.8043
Maximum	0.6057	4.2764	2.7925	8.6100e-003	0.1773	0.1726	0.3499	0.0516	0.1661	0.2159	0.0000	775.3956	775.3956	0.0768	0.0000	777.3165

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					
2018	0.2228	2.1423	1.3078	3.4100e-003	0.0936	0.0989	0.1925	0.0332	0.0930	0.1262	0.0000	310.6475	310.6475	0.0449	0.0000	311.7693
2019	0.6057	4.2764	2.7925	8.6100e-003	0.1773	0.1726	0.3499	0.0499	0.1661	0.2159	0.0000	775.3952	775.3952	0.0768	0.0000	777.3162
2020	0.2288	1.6263	1.1176	3.5600e-003	0.0739	0.0614	0.1353	0.0208	0.0591	0.0799	0.0000	320.0384	320.0384	0.0306	0.0000	320.8042
Maximum	0.6057	4.2764	2.7925	8.6100e-003	0.1773	0.1726	0.3499	0.0499	0.1661	0.2159	0.0000	775.3952	775.3952	0.0768	0.0000	777.3162

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	9.12	0.00	4.86	15.04	0.00	4.18	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2018	8-31-2018	0.4859	0.4859
2	9-1-2018	11-30-2018	1.2929	1.2929
3	12-1-2018	2-28-2019	1.3060	1.3060
4	3-1-2019	5-31-2019	1.2430	1.2430
5	6-1-2019	8-31-2019	1.2382	1.2382
6	9-1-2019	11-30-2019	1.2342	1.2342
7	12-1-2019	2-29-2020	1.1675	1.1675
8	3-1-2020	5-31-2020	1.0996	1.0996
9	6-1-2020	8-31-2020	0.0111	0.0111
		Highest	1.3060	1.3060

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1413	3.5600e-003	0.1769	1.5000e-004		7.7300e-003	7.7300e-003		7.7300e-003	7.7300e-003	0.9224	1.7464	2.6688	4.5500e-003	3.0000e-005	2.7910
Energy	5.1300e-003	0.0439	0.0187	2.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	95.4899	95.4899	2.9900e-003	1.3500e-003	95.9668
Mobile	0.0537	0.3456	0.5894	1.9900e-003	0.1469	2.4100e-003	0.1493	0.0395	2.2800e-003	0.0418	0.0000	183.2817	183.2817	8.4000e-003	0.0000	183.4918
Waste						0.0000	0.0000		0.0000	0.0000	4.3481	0.0000	4.3481	0.2570	0.0000	10.7722
Water						0.0000	0.0000		0.0000	0.0000	0.3721	2.5989	2.9710	0.0383	9.3000e-004	4.2054
Total	0.2001	0.3930	0.7850	2.4200e-003	0.1469	0.0137	0.1606	0.0395	0.0136	0.0531	5.6426	283.1168	288.7594	0.3112	2.3100e-003	297.2271

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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	0.1413	3.5600e-003	0.1769	1.5000e-004		7.7300e-003	7.7300e-003		7.7300e-003	7.7300e-003	0.9224	1.7464	2.6688	4.5500e-003	3.0000e-005	2.7910
Energy	5.1300e-003	0.0439	0.0187	2.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	95.4899	95.4899	2.9900e-003	1.3500e-003	95.9668
Mobile	0.0537	0.3456	0.5894	1.9900e-003	0.1469	2.4100e-003	0.1493	0.0395	2.2800e-003	0.0418	0.0000	183.2817	183.2817	8.4000e-003	0.0000	183.4918
Waste						0.0000	0.0000		0.0000	0.0000	4.3481	0.0000	4.3481	0.2570	0.0000	10.7722
Water						0.0000	0.0000		0.0000	0.0000	0.3721	2.5989	2.9710	0.0383	9.3000e-004	4.2054
Total	0.2001	0.3930	0.7850	2.4200e-003	0.1469	0.0137	0.1606	0.0395	0.0136	0.0531	5.6426	283.1168	288.7594	0.3112	2.3100e-003	297.2271

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	3/1/2019	5/1/2020	5	306	
2	Building Construction	Building Construction	10/1/2018	6/1/2020	5	436	
3	Demolition	Demolition	8/1/2018	8/28/2018	5	20	
4	Grading	Grading	9/1/2018	9/28/2018	5	20	
5	Paving	Paving	12/1/2018	12/28/2018	5	20	
6	Site Preparation	Site Preparation	6/1/2018	6/14/2018	5	10	
7	Trenching/Utilities	Trenching	10/1/2018	11/23/2018	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.67

Acres of Paving: 0

Residential Indoor: 58,174; Residential Outdoor: 19,391; 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
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45
Trenching/Utilities	Trenchers	2	8.00	78	0.50
Building Construction	Signal Boards	1	8.00	6	0.82

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
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	50.00	50.00	0.00	10.80	20.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	60.00	0.00	10.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	60.00	0.00	162.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	60.00	50.00	106.00	10.80	20.00	20.00	LD_Mix	HDT_Mix	HHDT
Trenching/Utilities	2	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1441					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0290	0.2001	0.2007	3.2000e-004		0.0140	0.0140		0.0140	0.0140	0.0000	27.8305	27.8305	2.3500e-003	0.0000	27.8892
Total	0.1731	0.2001	0.2007	3.2000e-004		0.0140	0.0140		0.0140	0.0140	0.0000	27.8305	27.8305	2.3500e-003	0.0000	27.8892

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3.2 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1300e-003	3.1500e-003	0.0318	9.0000e-005	8.6200e-003	6.0000e-005	8.6800e-003	2.2900e-003	6.0000e-005	2.3500e-003	0.0000	7.9057	7.9057	2.3000e-004	0.0000	7.9113
Total	4.1300e-003	3.1500e-003	0.0318	9.0000e-005	8.6200e-003	6.0000e-005	8.6800e-003	2.2900e-003	6.0000e-005	2.3500e-003	0.0000	7.9057	7.9057	2.3000e-004	0.0000	7.9113

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1441					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0290	0.2001	0.2007	3.2000e-004		0.0140	0.0140		0.0140	0.0140	0.0000	27.8304	27.8304	2.3500e-003	0.0000	27.8892
Total	0.1731	0.2001	0.2007	3.2000e-004		0.0140	0.0140		0.0140	0.0140	0.0000	27.8304	27.8304	2.3500e-003	0.0000	27.8892

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3.2 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1300e-003	3.1500e-003	0.0318	9.0000e-005	8.6200e-003	6.0000e-005	8.6800e-003	2.2900e-003	6.0000e-005	2.3500e-003	0.0000	7.9057	7.9057	2.3000e-004	0.0000	7.9113
Total	4.1300e-003	3.1500e-003	0.0318	9.0000e-005	8.6200e-003	6.0000e-005	8.6800e-003	2.2900e-003	6.0000e-005	2.3500e-003	0.0000	7.9057	7.9057	2.3000e-004	0.0000	7.9113

3.2 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	0.0582					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0107	0.0741	0.0806	1.3000e-004		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	11.2343	11.2343	8.7000e-004	0.0000	11.2561
Total	0.0688	0.0741	0.0806	1.3000e-004		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	11.2343	11.2343	8.7000e-004	0.0000	11.2561

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3.2 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	1.5200e-003	1.1200e-003	0.0115	3.0000e-005	3.4800e-003	2.0000e-005	3.5000e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	3.0926	3.0926	8.0000e-005	0.0000	3.0946
Total	1.5200e-003	1.1200e-003	0.0115	3.0000e-005	3.4800e-003	2.0000e-005	3.5000e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	3.0926	3.0926	8.0000e-005	0.0000	3.0946

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0582					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0107	0.0741	0.0806	1.3000e-004		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	11.2343	11.2343	8.7000e-004	0.0000	11.2561
Total	0.0688	0.0741	0.0806	1.3000e-004		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	11.2343	11.2343	8.7000e-004	0.0000	11.2561

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3.2 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	1.5200e-003	1.1200e-003	0.0115	3.0000e-005	3.4800e-003	2.0000e-005	3.5000e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	3.0926	3.0926	8.0000e-005	0.0000	3.0946
Total	1.5200e-003	1.1200e-003	0.0115	3.0000e-005	3.4800e-003	2.0000e-005	3.5000e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	3.0926	3.0926	8.0000e-005	0.0000	3.0946

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0980	0.6952	0.5286	8.5000e-004		0.0420	0.0420		0.0402	0.0402	0.0000	71.2230	71.2230	0.0152	0.0000	71.6025
Total	0.0980	0.6952	0.5286	8.5000e-004		0.0420	0.0420		0.0402	0.0402	0.0000	71.2230	71.2230	0.0152	0.0000	71.6025

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3.3 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0175	0.4166	0.0932	1.1000e-003	0.0296	4.1800e-003	0.0338	8.5600e-003	4.0000e-003	0.0126	0.0000	105.1975	105.1975	4.0500e-003	0.0000	105.2988
Worker	6.9200e-003	5.4300e-003	0.0542	1.4000e-004	0.0131	1.0000e-004	0.0131	3.4700e-003	9.0000e-005	3.5600e-003	0.0000	12.3278	12.3278	3.9000e-004	0.0000	12.3375
Total	0.0244	0.4220	0.1474	1.2400e-003	0.0427	4.2800e-003	0.0469	0.0120	4.0900e-003	0.0161	0.0000	117.5252	117.5252	4.4400e-003	0.0000	117.6362

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0980	0.6952	0.5286	8.5000e-004		0.0420	0.0420		0.0402	0.0402	0.0000	71.2230	71.2230	0.0152	0.0000	71.6024
Total	0.0980	0.6952	0.5286	8.5000e-004		0.0420	0.0420		0.0402	0.0402	0.0000	71.2230	71.2230	0.0152	0.0000	71.6024

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3.3 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0175	0.4166	0.0932	1.1000e-003	0.0296	4.1800e-003	0.0338	8.5600e-003	4.0000e-003	0.0126	0.0000	105.1975	105.1975	4.0500e-003	0.0000	105.2988
Worker	6.9200e-003	5.4300e-003	0.0542	1.4000e-004	0.0131	1.0000e-004	0.0131	3.4700e-003	9.0000e-005	3.5600e-003	0.0000	12.3278	12.3278	3.9000e-004	0.0000	12.3375
Total	0.0244	0.4220	0.1474	1.2400e-003	0.0427	4.2800e-003	0.0469	0.0120	4.0900e-003	0.0161	0.0000	117.5252	117.5252	4.4400e-003	0.0000	117.6362

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3413	2.5147	2.0300	3.3500e-003		0.1441	0.1441		0.1382	0.1382	0.0000	279.5675	279.5675	0.0576	0.0000	281.0063
Total	0.3413	2.5147	2.0300	3.3500e-003		0.1441	0.1441		0.1382	0.1382	0.0000	279.5675	279.5675	0.0576	0.0000	281.0063

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3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0624	1.5397	0.3397	4.3200e-003	0.1171	0.0140	0.1311	0.0338	0.0134	0.0473	0.0000	412.7667	412.7667	0.0154	0.0000	413.1507
Worker	0.0247	0.0188	0.1903	5.2000e-004	0.0516	3.7000e-004	0.0520	0.0137	3.4000e-004	0.0141	0.0000	47.3253	47.3253	1.3500e-003	0.0000	47.3590
Total	0.0871	1.5585	0.5300	4.8400e-003	0.1687	0.0144	0.1831	0.0476	0.0138	0.0613	0.0000	460.0920	460.0920	0.0167	0.0000	460.5097

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3413	2.5147	2.0300	3.3500e-003		0.1441	0.1441		0.1382	0.1382	0.0000	279.5672	279.5672	0.0576	0.0000	281.0059
Total	0.3413	2.5147	2.0300	3.3500e-003		0.1441	0.1441		0.1382	0.1382	0.0000	279.5672	279.5672	0.0576	0.0000	281.0059

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3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0624	1.5397	0.3397	4.3200e-003	0.1171	0.0140	0.1311	0.0338	0.0134	0.0473	0.0000	412.7667	412.7667	0.0154	0.0000	413.1507
Worker	0.0247	0.0188	0.1903	5.2000e-004	0.0516	3.7000e-004	0.0520	0.0137	3.4000e-004	0.0141	0.0000	47.3253	47.3253	1.3500e-003	0.0000	47.3590
Total	0.0871	1.5585	0.5300	4.8400e-003	0.1687	0.0144	0.1831	0.0476	0.0138	0.0613	0.0000	460.0920	460.0920	0.0167	0.0000	460.5097

3.3 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	0.1278	0.9697	0.8283	1.4000e-003		0.0524	0.0524		0.0503	0.0503	0.0000	115.6043	115.6043	0.0232	0.0000	116.1849
Total	0.1278	0.9697	0.8283	1.4000e-003		0.0524	0.0524		0.0503	0.0503	0.0000	115.6043	115.6043	0.0232	0.0000	116.1849

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3.3 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	0.0212	0.5745	0.1259	1.7900e-003	0.0489	3.9100e-003	0.0528	0.0141	3.7400e-003	0.0179	0.0000	170.9545	170.9545	5.9700e-003	0.0000	171.1037
Worker	9.4200e-003	6.9500e-003	0.0713	2.1000e-004	0.0216	1.5000e-004	0.0217	5.7300e-003	1.4000e-004	5.8700e-003	0.0000	19.1528	19.1528	4.9000e-004	0.0000	19.1652
Total	0.0306	0.5814	0.1972	2.0000e-003	0.0705	4.0600e-003	0.0745	0.0199	3.8800e-003	0.0237	0.0000	190.1073	190.1073	6.4600e-003	0.0000	190.2688

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1278	0.9697	0.8283	1.4000e-003		0.0524	0.0524		0.0503	0.0503	0.0000	115.6042	115.6042	0.0232	0.0000	116.1847
Total	0.1278	0.9697	0.8283	1.4000e-003		0.0524	0.0524		0.0503	0.0503	0.0000	115.6042	115.6042	0.0232	0.0000	116.1847

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3.3 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	0.0212	0.5745	0.1259	1.7900e-003	0.0489	3.9100e-003	0.0528	0.0141	3.7400e-003	0.0179	0.0000	170.9545	170.9545	5.9700e-003	0.0000	171.1037
Worker	9.4200e-003	6.9500e-003	0.0713	2.1000e-004	0.0216	1.5000e-004	0.0217	5.7300e-003	1.4000e-004	5.8700e-003	0.0000	19.1528	19.1528	4.9000e-004	0.0000	19.1652
Total	0.0306	0.5814	0.1972	2.0000e-003	0.0705	4.0600e-003	0.0745	0.0199	3.8800e-003	0.0237	0.0000	190.1073	190.1073	6.4600e-003	0.0000	190.2688

3.4 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1300e-003	0.0000	1.1300e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2436	0.1511	2.4000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	21.6923	21.6923	5.5000e-003	0.0000	21.8297
Total	0.0248	0.2436	0.1511	2.4000e-004	1.1300e-003	0.0144	0.0155	1.7000e-004	0.0134	0.0136	0.0000	21.6923	21.6923	5.5000e-003	0.0000	21.8297

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3.4 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.6300e-003	2.7000e-004	0.0000	8.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3908	0.3908	2.0000e-005	0.0000	0.3913
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5100e-003	1.9700e-003	0.0197	5.0000e-005	4.7400e-003	3.0000e-005	4.7800e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	4.4828	4.4828	1.4000e-004	0.0000	4.4863
Total	2.5600e-003	3.6000e-003	0.0200	5.0000e-005	4.8200e-003	4.0000e-005	4.8700e-003	1.2800e-003	4.0000e-005	1.3200e-003	0.0000	4.8736	4.8736	1.6000e-004	0.0000	4.8776

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					5.1000e-004	0.0000	5.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2436	0.1511	2.4000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	21.6923	21.6923	5.5000e-003	0.0000	21.8297
Total	0.0248	0.2436	0.1511	2.4000e-004	5.1000e-004	0.0144	0.0149	8.0000e-005	0.0134	0.0135	0.0000	21.6923	21.6923	5.5000e-003	0.0000	21.8297

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3.4 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.6300e-003	2.7000e-004	0.0000	8.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3908	0.3908	2.0000e-005	0.0000	0.3913
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5100e-003	1.9700e-003	0.0197	5.0000e-005	4.7400e-003	3.0000e-005	4.7800e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	4.4828	4.4828	1.4000e-004	0.0000	4.4863
Total	2.5600e-003	3.6000e-003	0.0200	5.0000e-005	4.8200e-003	4.0000e-005	4.8700e-003	1.2800e-003	4.0000e-005	1.3200e-003	0.0000	4.8736	4.8736	1.6000e-004	0.0000	4.8776

3.5 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0617	0.0000	0.0617	0.0333	0.0000	0.0333	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0215	0.2429	0.1038	2.1000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	18.8465	18.8465	5.8700e-003	0.0000	18.9931
Total	0.0215	0.2429	0.1038	2.1000e-004	0.0617	0.0117	0.0734	0.0333	0.0108	0.0440	0.0000	18.8465	18.8465	5.8700e-003	0.0000	18.9931

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3.5 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.7000e-004	0.0265	4.3800e-003	7.0000e-005	1.3700e-003	1.0000e-004	1.4700e-003	3.8000e-004	1.0000e-004	4.7000e-004	0.0000	6.3305	6.3305	3.3000e-004	0.0000	6.3389
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5100e-003	1.9700e-003	0.0197	5.0000e-005	4.7400e-003	3.0000e-005	4.7800e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	4.4828	4.4828	1.4000e-004	0.0000	4.4863
Total	3.2800e-003	0.0284	0.0241	1.2000e-004	6.1100e-003	1.3000e-004	6.2500e-003	1.6400e-003	1.3000e-004	1.7600e-003	0.0000	10.8134	10.8134	4.7000e-004	0.0000	10.8252

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0278	0.0000	0.0278	0.0150	0.0000	0.0150	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0215	0.2429	0.1038	2.1000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	18.8464	18.8464	5.8700e-003	0.0000	18.9931
Total	0.0215	0.2429	0.1038	2.1000e-004	0.0278	0.0117	0.0395	0.0150	0.0108	0.0257	0.0000	18.8464	18.8464	5.8700e-003	0.0000	18.9931

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3.5 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.7000e-004	0.0265	4.3800e-003	7.0000e-005	1.3700e-003	1.0000e-004	1.4700e-003	3.8000e-004	1.0000e-004	4.7000e-004	0.0000	6.3305	6.3305	3.3000e-004	0.0000	6.3389
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5100e-003	1.9700e-003	0.0197	5.0000e-005	4.7400e-003	3.0000e-005	4.7800e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	4.4828	4.4828	1.4000e-004	0.0000	4.4863
Total	3.2800e-003	0.0284	0.0241	1.2000e-004	6.1100e-003	1.3000e-004	6.2500e-003	1.6400e-003	1.3000e-004	1.7600e-003	0.0000	10.8134	10.8134	4.7000e-004	0.0000	10.8252

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0141	0.1425	0.1198	1.8000e-004		8.5000e-003	8.5000e-003		7.8400e-003	7.8400e-003	0.0000	16.0957	16.0957	4.9200e-003	0.0000	16.2186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0141	0.1425	0.1198	1.8000e-004		8.5000e-003	8.5000e-003		7.8400e-003	7.8400e-003	0.0000	16.0957	16.0957	4.9200e-003	0.0000	16.2186

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3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2600e-003	9.9000e-004	9.8500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.2414	2.2414	7.0000e-005	0.0000	2.2432
Total	1.2600e-003	9.9000e-004	9.8500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.2414	2.2414	7.0000e-005	0.0000	2.2432

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0141	0.1425	0.1198	1.8000e-004		8.5000e-003	8.5000e-003		7.8400e-003	7.8400e-003	0.0000	16.0956	16.0956	4.9200e-003	0.0000	16.2185
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0141	0.1425	0.1198	1.8000e-004		8.5000e-003	8.5000e-003		7.8400e-003	7.8400e-003	0.0000	16.0956	16.0956	4.9200e-003	0.0000	16.2185

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3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2600e-003	9.9000e-004	9.8500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.2414	2.2414	7.0000e-005	0.0000	2.2432
Total	1.2600e-003	9.9000e-004	9.8500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.2414	2.2414	7.0000e-005	0.0000	2.2432

3.7 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-003	0.1181	0.0637	1.2000e-004		4.7700e-003	4.7700e-003		4.3900e-003	4.3900e-003	0.0000	11.1965	11.1965	3.4900e-003	0.0000	11.2837
Total	9.5000e-003	0.1181	0.0637	1.2000e-004	5.0000e-005	4.7700e-003	4.8200e-003	1.0000e-005	4.3900e-003	4.4000e-003	0.0000	11.1965	11.1965	3.4900e-003	0.0000	11.2837

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3.7 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-004	0.0173	2.8700e-003	4.0000e-005	9.0000e-004	7.0000e-005	9.6000e-004	2.5000e-004	6.0000e-005	3.1000e-004	0.0000	4.1422	4.1422	2.2000e-004	0.0000	4.1477
Vendor	2.6500e-003	0.0631	0.0141	1.7000e-004	4.4900e-003	6.3000e-004	5.1200e-003	1.3000e-003	6.1000e-004	1.9000e-003	0.0000	15.9390	15.9390	6.1000e-004	0.0000	15.9544
Worker	1.2600e-003	9.9000e-004	9.8500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.2414	2.2414	7.0000e-005	0.0000	2.2432
Total	4.4100e-003	0.0814	0.0268	2.3000e-004	7.7600e-003	7.2000e-004	8.4700e-003	2.1800e-003	6.9000e-004	2.8600e-003	0.0000	22.3226	22.3226	9.0000e-004	0.0000	22.3452

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-003	0.1181	0.0637	1.2000e-004		4.7700e-003	4.7700e-003		4.3900e-003	4.3900e-003	0.0000	11.1965	11.1965	3.4900e-003	0.0000	11.2837
Total	9.5000e-003	0.1181	0.0637	1.2000e-004	2.0000e-005	4.7700e-003	4.7900e-003	0.0000	4.3900e-003	4.3900e-003	0.0000	11.1965	11.1965	3.4900e-003	0.0000	11.2837

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3.7 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-004	0.0173	2.8700e-003	4.0000e-005	9.0000e-004	7.0000e-005	9.6000e-004	2.5000e-004	6.0000e-005	3.1000e-004	0.0000	4.1422	4.1422	2.2000e-004	0.0000	4.1477
Vendor	2.6500e-003	0.0631	0.0141	1.7000e-004	4.4900e-003	6.3000e-004	5.1200e-003	1.3000e-003	6.1000e-004	1.9000e-003	0.0000	15.9390	15.9390	6.1000e-004	0.0000	15.9544
Worker	1.2600e-003	9.9000e-004	9.8500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.2414	2.2414	7.0000e-005	0.0000	2.2432
Total	4.4100e-003	0.0814	0.0268	2.3000e-004	7.7600e-003	7.2000e-004	8.4700e-003	2.1800e-003	6.9000e-004	2.8600e-003	0.0000	22.3226	22.3226	9.0000e-004	0.0000	22.3452

3.8 Trenching/Utilities - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0181	0.1628	0.1061	1.3000e-004		0.0124	0.0124		0.0114	0.0114	0.0000	12.3231	12.3231	3.8400e-003	0.0000	12.4190
Total	0.0181	0.1628	0.1061	1.3000e-004		0.0124	0.0124		0.0114	0.0114	0.0000	12.3231	12.3231	3.8400e-003	0.0000	12.4190

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3.8 Trenching/Utilities - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4000e-004	6.6000e-004	6.5700e-003	2.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4943	1.4943	5.0000e-005	0.0000	1.4955
Total	8.4000e-004	6.6000e-004	6.5700e-003	2.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4943	1.4943	5.0000e-005	0.0000	1.4955

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0181	0.1628	0.1061	1.3000e-004		0.0124	0.0124		0.0114	0.0114	0.0000	12.3231	12.3231	3.8400e-003	0.0000	12.4190
Total	0.0181	0.1628	0.1061	1.3000e-004		0.0124	0.0124		0.0114	0.0114	0.0000	12.3231	12.3231	3.8400e-003	0.0000	12.4190

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3.8 Trenching/Utilities - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4000e-004	6.6000e-004	6.5700e-003	2.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4943	1.4943	5.0000e-005	0.0000	1.4955
Total	8.4000e-004	6.6000e-004	6.5700e-003	2.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4943	1.4943	5.0000e-005	0.0000	1.4955

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	0.0537	0.3456	0.5894	1.9900e-003	0.1469	2.4100e-003	0.1493	0.0395	2.2800e-003	0.0418	0.0000	183.2817	183.2817	8.4000e-003	0.0000	183.4918
Unmitigated	0.0537	0.3456	0.5894	1.9900e-003	0.1469	2.4100e-003	0.1493	0.0395	2.2800e-003	0.0418	0.0000	183.2817	183.2817	8.4000e-003	0.0000	183.4918

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	171.36	178.38	155.16	392,745	392,745
Total	171.36	178.38	155.16	392,745	392,745

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
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.558186	0.040947	0.190770	0.110456	0.017401	0.005228	0.022658	0.042795	0.002118	0.002805	0.005569	0.000308	0.000759

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	44.6968	44.6968	2.0200e-003	4.2000e-004	44.8719
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	44.6968	44.6968	2.0200e-003	4.2000e-004	44.8719
NaturalGas Mitigated	5.1300e-003	0.0439	0.0187	2.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	50.7931	50.7931	9.7000e-004	9.3000e-004	51.0949
NaturalGas Unmitigated	5.1300e-003	0.0439	0.0187	2.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	50.7931	50.7931	9.7000e-004	9.3000e-004	51.0949

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					
Single Family Housing	951827	5.1300e-003	0.0439	0.0187	2.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	50.7931	50.7931	9.7000e-004	9.3000e-004	51.0949
Total		5.1300e-003	0.0439	0.0187	2.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	50.7931	50.7931	9.7000e-004	9.3000e-004	51.0949

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	951827	5.1300e-003	0.0439	0.0187	2.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	50.7931	50.7931	9.7000e-004	9.3000e-004	51.0949
Total		5.1300e-003	0.0439	0.0187	2.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	50.7931	50.7931	9.7000e-004	9.3000e-004	51.0949

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	153644	44.6968	2.0200e-003	4.2000e-004	44.8719
Total		44.6968	2.0200e-003	4.2000e-004	44.8719

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	153644	44.6968	2.0200e-003	4.2000e-004	44.8719
Total		44.6968	2.0200e-003	4.2000e-004	44.8719

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1413	3.5600e-003	0.1769	1.5000e-004		7.7300e-003	7.7300e-003		7.7300e-003	7.7300e-003	0.9224	1.7464	2.6688	4.5500e-003	3.0000e-005	2.7910
Unmitigated	0.1413	3.5600e-003	0.1769	1.5000e-004		7.7300e-003	7.7300e-003		7.7300e-003	7.7300e-003	0.9224	1.7464	2.6688	4.5500e-003	3.0000e-005	2.7910

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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	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1122					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.8000e-003	2.0100e-003	0.0428	1.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003	0.9224	1.5280	2.4505	4.3400e-003	3.0000e-005	2.5674
Landscaping	4.0800e-003	1.5500e-003	0.1341	1.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	0.2183	0.2183	2.1000e-004	0.0000	0.2236
Total	0.1413	3.5600e-003	0.1769	1.6000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.9224	1.7464	2.6688	4.5500e-003	3.0000e-005	2.7910

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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	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1122					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.8000e-003	2.0100e-003	0.0428	1.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003	0.9224	1.5280	2.4505	4.3400e-003	3.0000e-005	2.5674
Landscaping	4.0800e-003	1.5500e-003	0.1341	1.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	0.2183	0.2183	2.1000e-004	0.0000	0.2236
Total	0.1413	3.5600e-003	0.1769	1.6000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.9224	1.7464	2.6688	4.5500e-003	3.0000e-005	2.7910

7.0 Water Detail

7.1 Mitigation Measures Water

Ursa Residential Development Project - Alameda County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.9710	0.0383	9.3000e-004	4.2054
Unmitigated	2.9710	0.0383	9.3000e-004	4.2054

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.17277 / 0.739357	2.9710	0.0383	9.3000e-004	4.2054
Total		2.9710	0.0383	9.3000e-004	4.2054

Ursa Residential Development Project - Alameda County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.17277 / 0.739357	2.9710	0.0383	9.3000e-004	4.2054
Total		2.9710	0.0383	9.3000e-004	4.2054

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.3481	0.2570	0.0000	10.7722
Unmitigated	4.3481	0.2570	0.0000	10.7722

Ursa Residential Development Project - Alameda County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	21.42	4.3481	0.2570	0.0000	10.7722
Total		4.3481	0.2570	0.0000	10.7722

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	21.42	4.3481	0.2570	0.0000	10.7722
Total		4.3481	0.2570	0.0000	10.7722

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Ursa Residential Development Project - Alameda County, Annual

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

Ursa Residential Development Project - Alameda County, Winter

Ursa Residential Development Project
Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	18.00	Dwelling Unit	2.67	28,728.00	51

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Ursa Residential Development Project - Alameda County, Winter

Project Characteristics -

Land Use - Lot acreage based on project site parcel including all lots. Building square footage estimated based on approximate residential square footages (1,596 sf/home). Analysis conservatively includes the relocation and rehabilitation of the existing house in dwelling unit count.

Construction Phase - Site Prep phase - Soil remediation phase. Project specific construction schedule.

Off-road Equipment - Assuming CalEEMod defaults.

Off-road Equipment - Assuming CalEEMod defaults.

Off-road Equipment - Assuming CalEEMod defaults.

Off-road Equipment - Assuming CalEEMod defaults.

Off-road Equipment - Assuming CalEEMod defaults.

Off-road Equipment - Assuming CalEEMod defaults.

Off-road Equipment - Per project specific construction equipment list.

Grading - Acres graded based on project site acreage. (Approx. 850 CY export of shallow soils during soils remediation phase, approx. 1,300 CY during site grading)

Demolition - Barn and shed building square footage estimated based on existing site plan (Figure 2-2).

Trips and VMT - Number of worker trips based on average of 30 workers/maximum of 50 workers during overlapping phases. Assumes 25 daily truck trips (trip length: 20 miles).

Woodstoves - No woodstoves assumed to be installed. Default number of wood fireplaces assumed to be gas.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	306.00
tblConstructionPhase	NumDays	220.00	436.00
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	10.00
tblConstructionPhase	PhaseEndDate	5/31/2018	5/1/2020
tblConstructionPhase	PhaseEndDate	5/31/2018	6/1/2020
tblConstructionPhase	PhaseEndDate	5/31/2018	8/28/2018

Ursa Residential Development Project - Alameda County, Winter

tblConstructionPhase	PhaseEndDate	5/31/2018	9/28/2018
tblConstructionPhase	PhaseEndDate	5/31/2018	12/28/2018
tblConstructionPhase	PhaseEndDate	5/31/2018	6/14/2018
tblConstructionPhase	PhaseStartDate	6/1/2018	3/1/2019
tblConstructionPhase	PhaseStartDate	6/1/2018	10/1/2018
tblConstructionPhase	PhaseStartDate	6/1/2018	8/1/2018
tblConstructionPhase	PhaseStartDate	6/1/2018	9/1/2018
tblConstructionPhase	PhaseStartDate	6/1/2018	12/1/2018
tblFireplaces	NumberGas	4.50	12.24
tblFireplaces	NumberWood	7.74	0.00
tblGrading	AcresOfGrading	10.00	2.67
tblGrading	AcresOfGrading	15.00	0.00
tblGrading	MaterialExported	0.00	1,300.00
tblGrading	MaterialExported	0.00	850.00
tblLandUse	BuildingSpaceSquareFeet	32,400.00	28,728.00
tblLandUse	LandUseSquareFeet	32,400.00	28,728.00
tblLandUse	LotAcreage	5.84	2.67
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblProjectCharacteristics	OperationalYear	2018	2020
tblTripsAndVMT	HaulingTripNumber	163.00	162.00
tblTripsAndVMT	VendorTripLength	7.30	20.00
tblTripsAndVMT	VendorTripLength	7.30	20.00
tblTripsAndVMT	VendorTripNumber	2.00	50.00
tblTripsAndVMT	VendorTripNumber	0.00	50.00
tblTripsAndVMT	WorkerTripNumber	1.00	10.00
tblTripsAndVMT	WorkerTripNumber	6.00	50.00

Ursa Residential Development Project - Alameda County, Winter

tblTripsAndVMT	WorkerTripNumber	13.00	60.00
tblTripsAndVMT	WorkerTripNumber	10.00	60.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	8.00	60.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00

2.0 Emissions Summary

Ursa Residential Development Project - Alameda County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	5.2829	48.3268	33.6472	0.0833	6.8057	2.2537	7.9876	3.4963	2.1285	4.5839	0.0000	8,297.7266	8,297.7266	1.2101	0.0000	8,327.9792
2019	4.9403	33.1787	21.9067	0.0663	1.4188	1.3442	2.7630	0.3971	1.2940	1.6911	0.0000	6,582.0563	6,582.0563	0.6583	0.0000	6,598.5129
2020	4.5342	30.2544	21.0488	0.0659	1.4188	1.1483	2.5671	0.3971	1.1056	1.5027	0.0000	6,515.0816	6,515.0816	0.6287	0.0000	6,530.7985
Maximum	5.2829	48.3268	33.6472	0.0833	6.8057	2.2537	7.9876	3.4963	2.1285	4.5839	0.0000	8,297.7266	8,297.7266	1.2101	0.0000	8,327.9792

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					
2018	5.2829	48.3268	33.6472	0.0833	3.4117	2.2537	4.5935	1.6666	2.1285	2.7543	0.0000	8,297.7266	8,297.7266	1.2101	0.0000	8,327.9792
2019	4.9403	33.1787	21.9067	0.0663	1.4188	1.3442	2.7630	0.3971	1.2940	1.6911	0.0000	6,582.0563	6,582.0563	0.6583	0.0000	6,598.5129
2020	4.5342	30.2544	21.0488	0.0659	1.4188	1.1483	2.5671	0.3971	1.1056	1.5027	0.0000	6,515.0816	6,515.0816	0.6287	0.0000	6,530.7985
Maximum	5.2829	48.3268	33.6472	0.0833	3.4117	2.2537	4.5935	1.6666	2.1285	2.7543	0.0000	8,297.7266	8,297.7266	1.2101	0.0000	8,327.9792

Ursa Residential Development Project - Alameda County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	35.20	0.00	25.49	42.65	0.00	23.52	0.00	0.00	0.00	0.00	0.00	0.00

Ursa Residential Development Project - Alameda County, 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	1.2403	0.3195	5.6011	0.0147		0.6816	0.6816		0.6816	0.6816	96.5632	305.0739	401.6371	0.4598	5.5400e-003	414.7847
Energy	0.0281	0.2403	0.1023	1.5300e-003		0.0194	0.0194		0.0194	0.0194		306.7934	306.7934	5.8800e-003	5.6200e-003	308.6165
Mobile	0.3077	2.0181	3.5825	0.0114	0.8790	0.0140	0.8930	0.2355	0.0132	0.2487		1,152.8730	1,152.8730	0.0554		1,154.2569
Total	1.5761	2.5779	9.2859	0.0276	0.8790	0.7150	1.5940	0.2355	0.7142	0.9497	96.5632	1,764.7403	1,861.3035	0.5211	0.0112	1,877.6581

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	1.2403	0.3195	5.6011	0.0147		0.6816	0.6816		0.6816	0.6816	96.5632	305.0739	401.6371	0.4598	5.5400e-003	414.7847
Energy	0.0281	0.2403	0.1023	1.5300e-003		0.0194	0.0194		0.0194	0.0194		306.7934	306.7934	5.8800e-003	5.6200e-003	308.6165
Mobile	0.3077	2.0181	3.5825	0.0114	0.8790	0.0140	0.8930	0.2355	0.0132	0.2487		1,152.8730	1,152.8730	0.0554		1,154.2569
Total	1.5761	2.5779	9.2859	0.0276	0.8790	0.7150	1.5940	0.2355	0.7142	0.9497	96.5632	1,764.7403	1,861.3035	0.5211	0.0112	1,877.6581

Ursa Residential Development Project - Alameda County, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	3/1/2019	5/1/2020	5	306	
2	Building Construction	Building Construction	10/1/2018	6/1/2020	5	436	
3	Demolition	Demolition	8/1/2018	8/28/2018	5	20	
4	Grading	Grading	9/1/2018	9/28/2018	5	20	
5	Paving	Paving	12/1/2018	12/28/2018	5	20	
6	Site Preparation	Site Preparation	6/1/2018	6/14/2018	5	10	
7	Trenching/Utilities	Trenching	10/1/2018	11/23/2018	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.67

Acres of Paving: 0

Residential Indoor: 58,174; Residential Outdoor: 19,391; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Ursa Residential Development Project - Alameda County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45
Trenching/Utilities	Trenchers	2	8.00	78	0.50
Building Construction	Signal Boards	1	8.00	6	0.82

Trips and VMT

Ursa Residential Development Project - Alameda County, 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
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	50.00	50.00	0.00	10.80	20.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	60.00	0.00	10.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	60.00	0.00	162.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	60.00	50.00	106.00	10.80	20.00	20.00	LD_Mix	HDT_Mix	HHDT
Trenching/Utilities	2	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3217					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	1.5882	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

Ursa Residential Development Project - Alameda County, Winter

3.2 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0418	0.0317	0.3007	8.0000e-004	0.0822	5.6000e-004	0.0827	0.0218	5.2000e-004	0.0223		79.3251	79.3251	2.2900e-003		79.3824
Total	0.0418	0.0317	0.3007	8.0000e-004	0.0822	5.6000e-004	0.0827	0.0218	5.2000e-004	0.0223		79.3251	79.3251	2.2900e-003		79.3824

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.3217					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	1.5882	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

Ursa Residential Development Project - Alameda County, Winter

3.2 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0418	0.0317	0.3007	8.0000e-004	0.0822	5.6000e-004	0.0827	0.0218	5.2000e-004	0.0223		79.3251	79.3251	2.2900e-003		79.3824
Total	0.0418	0.0317	0.3007	8.0000e-004	0.0822	5.6000e-004	0.0827	0.0218	5.2000e-004	0.0223		79.3251	79.3251	2.2900e-003		79.3824

3.2 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	1.3217					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	1.5639	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Ursa Residential Development Project - Alameda County, Winter

3.2 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	0.0382	0.0280	0.2694	7.7000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		76.8709	76.8709	2.0100e-003		76.9210
Total	0.0382	0.0280	0.2694	7.7000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		76.8709	76.8709	2.0100e-003		76.9210

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.3217					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	0.0000	281.4481	281.4481	0.0218		281.9928
Total	1.5639	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

Ursa Residential Development Project - Alameda County, Winter

3.2 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	0.0382	0.0280	0.2694	7.7000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		76.8709	76.8709	2.0100e-003			76.9210
Total	0.0382	0.0280	0.2694	7.7000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		76.8709	76.8709	2.0100e-003			76.9210

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.9701	21.0671	16.0193	0.0257		1.2715	1.2715		1.2191	1.2191		2,379.0895	2,379.0895	0.5070			2,391.7648
Total	2.9701	21.0671	16.0193	0.0257		1.2715	1.2715		1.2191	1.2191		2,379.0895	2,379.0895	0.5070			2,391.7648

Ursa Residential Development Project - Alameda County, Winter

3.3 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5378	12.7192	2.9347	0.0331	0.9259	0.1272	1.0530	0.2663	0.1216	0.3880		3,490.672 2	3,490.672 2	0.1404		3,494.182 6
Worker	0.2315	0.1804	1.6965	4.1100e-003	0.4107	2.8900e-003	0.4136	0.1090	2.6600e-003	0.1116		408.5762	408.5762	0.0130		408.9014
Total	0.7693	12.8997	4.6312	0.0372	1.3366	0.1300	1.4666	0.3753	0.1243	0.4996		3,899.248 4	3,899.248 4	0.1534		3,903.084 0

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.9701	21.0671	16.0193	0.0257		1.2715	1.2715		1.2191	1.2191	0.0000	2,379.089 5	2,379.089 5	0.5070		2,391.764 8
Total	2.9701	21.0671	16.0193	0.0257		1.2715	1.2715		1.2191	1.2191	0.0000	2,379.089 5	2,379.089 5	0.5070		2,391.764 8

Ursa Residential Development Project - Alameda County, Winter

3.3 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.5378	12.7192	2.9347	0.0331	0.9259	0.1272	1.0530	0.2663	0.1216	0.3880		3,490.672 2	3,490.672 2	0.1404			3,494.182 6
Worker	0.2315	0.1804	1.6965	4.1100e-003	0.4107	2.8900e-003	0.4136	0.1090	2.6600e-003	0.1116		408.5762	408.5762	0.0130			408.9014
Total	0.7693	12.8997	4.6312	0.0372	1.3366	0.1300	1.4666	0.3753	0.1243	0.4996		3,899.248 4	3,899.248 4	0.1534			3,903.084 0

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.6154	19.2697	15.5556	0.0257		1.1041	1.1041		1.0589	1.0589		2,361.459 0	2,361.459 0	0.4861			2,373.612 0
Total	2.6154	19.2697	15.5556	0.0257		1.1041	1.1041		1.0589	1.0589		2,361.459 0	2,361.459 0	0.4861			2,373.612 0

Ursa Residential Development Project - Alameda County, Winter

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4860	11.8836	2.7054	0.0329	0.9259	0.1079	1.0338	0.2663	0.1033	0.3696		3,463.1986	3,463.1986	0.1346		3,466.5639
Worker	0.2089	0.1584	1.5037	3.9800e-003	0.4107	2.8200e-003	0.4136	0.1090	2.6000e-003	0.1115		396.6256	396.6256	0.0115		396.9122
Total	0.6949	12.0420	4.2090	0.0368	1.3366	0.1108	1.4474	0.3753	0.1059	0.4812		3,859.8242	3,859.8242	0.1461		3,863.4761

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.6154	19.2697	15.5556	0.0257		1.1041	1.1041		1.0589	1.0589	0.0000	2,361.4590	2,361.4590	0.4861		2,373.6120
Total	2.6154	19.2697	15.5556	0.0257		1.1041	1.1041		1.0589	1.0589	0.0000	2,361.4590	2,361.4590	0.4861		2,373.6120

Ursa Residential Development Project - Alameda County, Winter

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4860	11.8836	2.7054	0.0329	0.9259	0.1079	1.0338	0.2663	0.1033	0.3696		3,463.1986	3,463.1986	0.1346		3,466.5639
Worker	0.2089	0.1584	1.5037	3.9800e-003	0.4107	2.8200e-003	0.4136	0.1090	2.6000e-003	0.1115		396.6256	396.6256	0.0115		396.9122
Total	0.6949	12.0420	4.2090	0.0368	1.3366	0.1108	1.4474	0.3753	0.1059	0.4812		3,859.8242	3,859.8242	0.1461		3,863.4761

3.3 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	2.3452	17.7930	15.1982	0.0257		0.9622	0.9622		0.9229	0.9229		2,338.2013	2,338.2013	0.4697		2,349.9429
Total	2.3452	17.7930	15.1982	0.0257		0.9622	0.9622		0.9229	0.9229		2,338.2013	2,338.2013	0.4697		2,349.9429

Ursa Residential Development Project - Alameda County, Winter

3.3 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	0.3961	10.6096	2.4031	0.0326	0.9259	0.0719	0.9978	0.2664	0.0688	0.3352		3,434.207 2	3,434.207 2	0.1252		3,437.336 7
Worker	0.1908	0.1400	1.3468	3.8600e-003	0.4107	2.7400e-003	0.4135	0.1090	2.5300e-003	0.1115		384.3542	384.3542	0.0100		384.6050
Total	0.5869	10.7496	3.7499	0.0364	1.3366	0.0747	1.4113	0.3753	0.0713	0.4466		3,818.561 4	3,818.561 4	0.1352		3,821.941 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					
Off-Road	2.3452	17.7930	15.1982	0.0257		0.9622	0.9622		0.9229	0.9229	0.0000	2,338.201 3	2,338.201 3	0.4697		2,349.942 9
Total	2.3452	17.7930	15.1982	0.0257		0.9622	0.9622		0.9229	0.9229	0.0000	2,338.201 3	2,338.201 3	0.4697		2,349.942 9

Ursa Residential Development Project - Alameda County, Winter

3.3 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	0.3961	10.6096	2.4031	0.0326	0.9259	0.0719	0.9978	0.2664	0.0688	0.3352		3,434.207 2	3,434.207 2	0.1252		3,437.336 7
Worker	0.1908	0.1400	1.3468	3.8600e-003	0.4107	2.7400e-003	0.4135	0.1090	2.5300e-003	0.1115		384.3542	384.3542	0.0100		384.6050
Total	0.5869	10.7496	3.7499	0.0364	1.3366	0.0747	1.4113	0.3753	0.0713	0.4466		3,818.561 4	3,818.561 4	0.1352		3,821.941 7

3.4 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1132	0.0000	0.1132	0.0171	0.0000	0.0171			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429		2,391.165 9	2,391.165 9	0.6058		2,406.310 5
Total	2.4838	24.3641	15.1107	0.0241	0.1132	1.4365	1.5497	0.0171	1.3429	1.3600		2,391.165 9	2,391.165 9	0.6058		2,406.310 5

Ursa Residential Development Project - Alameda County, Winter

3.4 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.8400e-003	0.1640	0.0286	4.0000e-004	8.7500e-003	6.2000e-004	9.3800e-003	2.4000e-003	6.0000e-004	3.0000e-003		42.6248	42.6248	2.3700e-003		42.6840
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2778	0.2165	2.0358	4.9300e-003	0.4929	3.4600e-003	0.4964	0.1307	3.1900e-003	0.1339		490.2914	490.2914	0.0156		490.6817
Total	0.2826	0.3806	2.0644	5.3300e-003	0.5016	4.0800e-003	0.5057	0.1331	3.7900e-003	0.1369		532.9162	532.9162	0.0180		533.3657

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0509	0.0000	0.0509	7.7100e-003	0.0000	7.7100e-003			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429	0.0000	2,391.1659	2,391.1659	0.6058		2,406.3105
Total	2.4838	24.3641	15.1107	0.0241	0.0509	1.4365	1.4874	7.7100e-003	1.3429	1.3506	0.0000	2,391.1659	2,391.1659	0.6058		2,406.3105

Ursa Residential Development Project - Alameda County, Winter

3.4 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.8400e-003	0.1640	0.0286	4.0000e-004	8.7500e-003	6.2000e-004	9.3800e-003	2.4000e-003	6.0000e-004	3.0000e-003		42.6248	42.6248	2.3700e-003		42.6840
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2778	0.2165	2.0358	4.9300e-003	0.4929	3.4600e-003	0.4964	0.1307	3.1900e-003	0.1339		490.2914	490.2914	0.0156		490.6817
Total	0.2826	0.3806	2.0644	5.3300e-003	0.5016	4.0800e-003	0.5057	0.1331	3.7900e-003	0.1369		532.9162	532.9162	0.0180		533.3657

3.5 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1710	0.0000	6.1710	3.3266	0.0000	3.3266			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748		2,077.4666	2,077.4666	0.6467		2,093.6352
Total	2.1515	24.2895	10.3804	0.0206	6.1710	1.1683	7.3393	3.3266	1.0748	4.4015		2,077.4666	2,077.4666	0.6467		2,093.6352

Ursa Residential Development Project - Alameda County, Winter

3.5 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0784	2.6575	0.4629	6.5100e-003	0.1418	0.0101	0.1519	0.0389	9.6600e-003	0.0486		690.5219	690.5219	0.0384		691.4814
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2778	0.2165	2.0358	4.9300e-003	0.4929	3.4600e-003	0.4964	0.1307	3.1900e-003	0.1339		490.2914	490.2914	0.0156		490.6817
Total	0.3562	2.8740	2.4987	0.0114	0.6347	0.0136	0.6483	0.1696	0.0129	0.1825		1,180.8133	1,180.8133	0.0540		1,182.1631

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.7770	0.0000	2.7770	1.4970	0.0000	1.4970			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748	0.0000	2,077.4666	2,077.4666	0.6467		2,093.6352
Total	2.1515	24.2895	10.3804	0.0206	2.7770	1.1683	3.9453	1.4970	1.0748	2.5718	0.0000	2,077.4666	2,077.4666	0.6467		2,093.6352

Ursa Residential Development Project - Alameda County, Winter

3.5 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0784	2.6575	0.4629	6.5100e-003	0.1418	0.0101	0.1519	0.0389	9.6600e-003	0.0486		690.5219	690.5219	0.0384		691.4814
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2778	0.2165	2.0358	4.9300e-003	0.4929	3.4600e-003	0.4964	0.1307	3.1900e-003	0.1339		490.2914	490.2914	0.0156		490.6817
Total	0.3562	2.8740	2.4987	0.0114	0.6347	0.0136	0.6483	0.1696	0.0129	0.1825		1,180.8133	1,180.8133	0.0540		1,182.1631

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4046	14.2518	11.9787	0.0178		0.8505	0.8505		0.7836	0.7836		1,774.2430	1,774.2430	0.5419		1,787.7896
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4046	14.2518	11.9787	0.0178		0.8505	0.8505		0.7836	0.7836		1,774.2430	1,774.2430	0.5419		1,787.7896

Ursa Residential Development Project - Alameda County, Winter

3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1389	0.1083	1.0179	2.4600e-003	0.2464	1.7300e-003	0.2482	0.0654	1.6000e-003	0.0670		245.1457	245.1457	7.8100e-003		245.3408
Total	0.1389	0.1083	1.0179	2.4600e-003	0.2464	1.7300e-003	0.2482	0.0654	1.6000e-003	0.0670		245.1457	245.1457	7.8100e-003		245.3408

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.4046	14.2518	11.9787	0.0178		0.8505	0.8505		0.7836	0.7836	0.0000	1,774.2430	1,774.2430	0.5419		1,787.7896
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4046	14.2518	11.9787	0.0178		0.8505	0.8505		0.7836	0.7836	0.0000	1,774.2430	1,774.2430	0.5419		1,787.7896

Ursa Residential Development Project - Alameda County, Winter

3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1389	0.1083	1.0179	2.4600e-003	0.2464	1.7300e-003	0.2482	0.0654	1.6000e-003	0.0670		245.1457	245.1457	7.8100e-003		245.3408
Total	0.1389	0.1083	1.0179	2.4600e-003	0.2464	1.7300e-003	0.2482	0.0654	1.6000e-003	0.0670		245.1457	245.1457	7.8100e-003		245.3408

3.7 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.6100e-003	0.0000	9.6100e-003	1.4600e-003	0.0000	1.4600e-003			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777		2,468.4131	2,468.4131	0.7685		2,487.6244
Total	1.8995	23.6201	12.7461	0.0245	9.6100e-003	0.9540	0.9636	1.4600e-003	0.8777	0.8791		2,468.4131	2,468.4131	0.7685		2,487.6244

Ursa Residential Development Project - Alameda County, Winter

3.7 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1026	3.4777	0.6058	8.5200e-003	0.1856	0.0132	0.1988	0.0509	0.0127	0.0635		903.6459	903.6459	0.0502		904.9016
Vendor	0.5378	12.7192	2.9347	0.0331	0.9259	0.1272	1.0530	0.2663	0.1216	0.3880		3,490.6722	3,490.6722	0.1404		3,494.1826
Worker	0.2778	0.2165	2.0358	4.9300e-003	0.4929	3.4600e-003	0.4964	0.1307	3.1900e-003	0.1339		490.2914	490.2914	0.0156		490.6817
Total	0.9182	16.4135	5.5764	0.0466	1.6043	0.1438	1.7481	0.4480	0.1375	0.5854		4,884.6095	4,884.6095	0.2063		4,889.7658

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.3300e-003	0.0000	4.3300e-003	6.6000e-004	0.0000	6.6000e-004			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777	0.0000	2,468.4131	2,468.4131	0.7685		2,487.6244
Total	1.8995	23.6201	12.7461	0.0245	4.3300e-003	0.9540	0.9583	6.6000e-004	0.8777	0.8783	0.0000	2,468.4131	2,468.4131	0.7685		2,487.6244

Ursa Residential Development Project - Alameda County, Winter

3.7 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1026	3.4777	0.6058	8.5200e-003	0.1856	0.0132	0.1988	0.0509	0.0127	0.0635		903.6459	903.6459	0.0502		904.9016
Vendor	0.5378	12.7192	2.9347	0.0331	0.9259	0.1272	1.0530	0.2663	0.1216	0.3880		3,490.6722	3,490.6722	0.1404		3,494.1826
Worker	0.2778	0.2165	2.0358	4.9300e-003	0.4929	3.4600e-003	0.4964	0.1307	3.1900e-003	0.1339		490.2914	490.2914	0.0156		490.6817
Total	0.9182	16.4135	5.5764	0.0466	1.6043	0.1438	1.7481	0.4480	0.1375	0.5854		4,884.6095	4,884.6095	0.2063		4,889.7658

3.8 Trenching/Utilities - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9053	8.1376	5.3031	6.7400e-003		0.6190	0.6190		0.5695	0.5695		679.1961	679.1961	0.2114		684.4822
Total	0.9053	8.1376	5.3031	6.7400e-003		0.6190	0.6190		0.5695	0.5695		679.1961	679.1961	0.2114		684.4822

Ursa Residential Development Project - Alameda County, Winter

3.8 Trenching/Utilities - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0463	0.0361	0.3393	8.2000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		81.7152	81.7152	2.6000e-003		81.7803
Total	0.0463	0.0361	0.3393	8.2000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		81.7152	81.7152	2.6000e-003		81.7803

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.9053	8.1376	5.3031	6.7400e-003		0.6190	0.6190		0.5695	0.5695	0.0000	679.1961	679.1961	0.2114		684.4822
Total	0.9053	8.1376	5.3031	6.7400e-003		0.6190	0.6190		0.5695	0.5695	0.0000	679.1961	679.1961	0.2114		684.4822

Ursa Residential Development Project - Alameda County, Winter

3.8 Trenching/Utilities - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0463	0.0361	0.3393	8.2000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		81.7152	81.7152	2.6000e-003		81.7803
Total	0.0463	0.0361	0.3393	8.2000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		81.7152	81.7152	2.6000e-003		81.7803

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Ursa Residential Development Project - Alameda County, 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	0.3077	2.0181	3.5825	0.0114	0.8790	0.0140	0.8930	0.2355	0.0132	0.2487		1,152.8730	1,152.8730	0.0554		1,154.2569
Unmitigated	0.3077	2.0181	3.5825	0.0114	0.8790	0.0140	0.8930	0.2355	0.0132	0.2487		1,152.8730	1,152.8730	0.0554		1,154.2569

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	171.36	178.38	155.16	392,745	392,745
Total	171.36	178.38	155.16	392,745	392,745

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
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.558186	0.040947	0.190770	0.110456	0.017401	0.005228	0.022658	0.042795	0.002118	0.002805	0.005569	0.000308	0.000759

5.0 Energy Detail

Historical Energy Use: N

Ursa Residential Development Project - Alameda County, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0281	0.2403	0.1023	1.5300e-003		0.0194	0.0194		0.0194	0.0194		306.7934	306.7934	5.8800e-003	5.6200e-003	308.6165
NaturalGas Unmitigated	0.0281	0.2403	0.1023	1.5300e-003		0.0194	0.0194		0.0194	0.0194		306.7934	306.7934	5.8800e-003	5.6200e-003	308.6165

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					
Single Family Housing	2607.74	0.0281	0.2403	0.1023	1.5300e-003		0.0194	0.0194		0.0194	0.0194		306.7934	306.7934	5.8800e-003	5.6200e-003	308.6165
Total		0.0281	0.2403	0.1023	1.5300e-003		0.0194	0.0194		0.0194	0.0194		306.7934	306.7934	5.8800e-003	5.6200e-003	308.6165

Ursa Residential Development Project - Alameda County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	2.60774	0.0281	0.2403	0.1023	1.5300e-003		0.0194	0.0194		0.0194	0.0194		306.7934	306.7934	5.8800e-003	5.6200e-003	308.6165
Total		0.0281	0.2403	0.1023	1.5300e-003		0.0194	0.0194		0.0194	0.0194		306.7934	306.7934	5.8800e-003	5.6200e-003	308.6165

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2403	0.3195	5.6011	0.0147		0.6816	0.6816		0.6816	0.6816	96.5632	305.0739	401.6371	0.4598	5.5400e-003	414.7847
Unmitigated	1.2403	0.3195	5.6011	0.0147		0.6816	0.6816		0.6816	0.6816	96.5632	305.0739	401.6371	0.4598	5.5400e-003	414.7847

Ursa Residential Development Project - Alameda County, 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	0.1108					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4693	0.3023	4.1112	0.0146		0.6734	0.6734		0.6734	0.6734	96.5632	302.4000	398.9632	0.4572	5.5400e-003	412.0456
Landscaping	0.0454	0.0172	1.4900	8.0000e-005		8.1900e-003	8.1900e-003		8.1900e-003	8.1900e-003		2.6739	2.6739	2.6100e-003		2.7391
Total	1.2403	0.3195	5.6011	0.0147		0.6816	0.6816		0.6816	0.6816	96.5632	305.0739	401.6371	0.4598	5.5400e-003	414.7847

Ursa Residential Development Project - Alameda County, 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	0.1108					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4693	0.3023	4.1112	0.0146		0.6734	0.6734		0.6734	0.6734	96.5632	302.4000	398.9632	0.4572	5.5400e-003	412.0456
Landscaping	0.0454	0.0172	1.4900	8.0000e-005		8.1900e-003	8.1900e-003		8.1900e-003	8.1900e-003		2.6739	2.6739	2.6100e-003		2.7391
Total	1.2403	0.3195	5.6011	0.0147		0.6816	0.6816		0.6816	0.6816	96.5632	305.0739	401.6371	0.4598	5.5400e-003	414.7847

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Ursa Residential Development Project - Alameda County, Winter

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
