

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

University Research Park Mixed Use
Yolo/Solano AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	160.00	Dwelling Unit	4.50	138,431.00	458
Research & Development	27.00	1000sqft	0.00	27,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	55
Climate Zone	2			Operational Year	2022
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

Project Characteristics -
 Land Use - Mixed Use Multi-Story Building.
 Construction Phase - No Demolition.
 Road Dust - Project located in urbanized portion of the city.
 Woodstoves - No woodstoves or fireplaces.
 Land Use Change -
 Sequestration -

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	PhaseEndDate	6/28/2021	5/31/2021
tblFireplaces	NumberGas	88.00	0.00
tblFireplaces	NumberNoFireplace	16.00	160.00
tblFireplaces	NumberWood	56.00	0.00
tblLandUse	LandUseSquareFeet	160,000.00	138,431.00
tblLandUse	LotAcreage	4.21	4.50
tblLandUse	LotAcreage	0.62	0.00
tblRoadDust	RoadPercentPave	94	100
tblSequestration	NumberOfNewTrees	0.00	80.00
tblWoodstoves	NumberCatalytic	8.00	0.00
tblWoodstoves	NumberNoncatalytic	8.00	0.00

2.0 Emissions Summary

University Research Park Mixed Use - Yolo/Solano 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	4.5171	0.1524	13.2172	7.0000e-004		0.0730	0.0730		0.0730	0.0730	0.0000	23.7743	23.7743	0.0230	0.0000	24.3479
Energy	0.0610	0.5290	0.2811	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9399	664.9399	0.0127	0.0122	668.8913
Mobile	2.0951	16.2403	23.9605	0.0937	7.0118	0.0818	7.0936	1.8823	0.0769	1.9592		9,545.4256	9,545.4256	0.5172		9,558.3564
Total	6.6731	16.9217	37.4588	0.0977	7.0118	0.1969	7.2087	1.8823	0.1920	2.0743	0.0000	10,234.1397	10,234.1397	0.5529	0.0122	10,251.5956

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	4.5171	0.1524	13.2172	7.0000e-004		0.0730	0.0730		0.0730	0.0730	0.0000	23.7743	23.7743	0.0230	0.0000	24.3479
Energy	0.0610	0.5290	0.2811	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9399	664.9399	0.0127	0.0122	668.8913
Mobile	2.0951	16.2403	23.9605	0.0937	7.0118	0.0818	7.0936	1.8823	0.0769	1.9592		9,545.4256	9,545.4256	0.5172		9,558.3564
Total	6.6731	16.9217	37.4588	0.0977	7.0118	0.1969	7.2087	1.8823	0.1920	2.0743	0.0000	10,234.1397	10,234.1397	0.5529	0.0122	10,251.5956

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2021	5/31/2021	5	0	None
2	Site Preparation	Site Preparation	6/29/2021	7/5/2021	5	5	
3	Grading	Grading	7/6/2021	7/15/2021	5	8	
4	Building Construction	Building Construction	7/16/2021	6/2/2022	5	230	
5	Paving	Paving	6/3/2022	6/28/2022	5	18	
6	Architectural Coating	Architectural Coating	6/29/2022	7/22/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 280,323; Residential Outdoor: 93,441; Non-Residential Indoor: 40,500; Non-Residential Outdoor: 13,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

University Research Park Mixed Use - Yolo/Solano AQMD Air District, 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	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.2 Demolition - 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	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Site Preparation - 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.3 Site Preparation - 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	0.0627	0.0428	0.4052	1.2600e-003	16.0239	9.1000e-004	16.0248	1.6206	8.4000e-004	1.6214		125.2497	125.2497	2.9900e-003		125.3244
Total	0.0627	0.0428	0.4052	1.2600e-003	16.0239	9.1000e-004	16.0248	1.6206	8.4000e-004	1.6214		125.2497	125.2497	2.9900e-003		125.3244

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.3 Site Preparation - 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	0.0627	0.0428	0.4052	1.2600e-003	0.1298	9.1000e-004	0.1307	0.0346	8.4000e-004	0.0354		125.2497	125.2497	2.9900e-003		125.3244
Total	0.0627	0.0428	0.4052	1.2600e-003	0.1298	9.1000e-004	0.1307	0.0346	8.4000e-004	0.0354		125.2497	125.2497	2.9900e-003		125.3244

3.4 Grading - 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					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.9285	2,871.9285	0.9288		2,895.1495

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.4 Grading - 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	0.0523	0.0357	0.3377	1.0500e-003	13.3533	7.6000e-004	13.3540	1.3505	7.0000e-004	1.3512		104.3747	104.3747	2.4900e-003		104.4370
Total	0.0523	0.0357	0.3377	1.0500e-003	13.3533	7.6000e-004	13.3540	1.3505	7.0000e-004	1.3512		104.3747	104.3747	2.4900e-003		104.4370

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.4 Grading - 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	0.0523	0.0357	0.3377	1.0500e-003	0.1082	7.6000e-004	0.1089	0.0288	7.0000e-004	0.0295		104.3747	104.3747	2.4900e-003		104.4370
Total	0.0523	0.0357	0.3377	1.0500e-003	0.1082	7.6000e-004	0.1089	0.0288	7.0000e-004	0.0295		104.3747	104.3747	2.4900e-003		104.4370

3.5 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

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.5 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	0.0680	2.3076	0.4836	5.9800e-003	13.7350	5.6100e-003	13.7406	1.3966	5.3600e-003	1.4019		625.6722	625.6722	0.0405		626.6857
Worker	0.4319	0.2950	2.7917	8.6600e-003	110.3870	6.2600e-003	110.3932	11.1641	5.7700e-003	11.1699		862.8310	862.8310	0.0206		863.3461
Total	0.4999	2.6026	3.2753	0.0146	124.1220	0.0119	124.1339	12.5607	0.0111	12.5718		1,488.5032	1,488.5032	0.0612		1,490.0318

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	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	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.5 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	0.0680	2.3076	0.4836	5.9800e-003	0.1367	5.6100e-003	0.1423	0.0396	5.3600e-003	0.0450		625.6722	625.6722	0.0405		626.6857
Worker	0.4319	0.2950	2.7917	8.6600e-003	0.8941	6.2600e-003	0.9003	0.2381	5.7700e-003	0.2439		862.8310	862.8310	0.0206		863.3461
Total	0.4999	2.6026	3.2753	0.0146	1.0308	0.0119	1.0427	0.2778	0.0111	0.2889		1,488.5032	1,488.5032	0.0612		1,490.0318

3.5 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		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.5 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	0.0630	2.1906	0.4447	5.9200e-003	13.7350	4.8100e-003	13.7398	1.3966	4.6000e-003	1.4012		619.6409	619.6409	0.0384		620.6003
Worker	0.4035	0.2648	2.5563	8.3400e-003	110.3870	6.1000e-003	110.3931	11.1641	5.6200e-003	11.1698		831.3179	831.3179	0.0185		831.7794
Total	0.4665	2.4553	3.0010	0.0143	124.1220	0.0109	124.1329	12.5607	0.0102	12.5709		1,450.9588	1,450.9588	0.0568		1,452.3797

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.5 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	0.0630	2.1906	0.4447	5.9200e-003	0.1367	4.8100e-003	0.1415	0.0396	4.6000e-003	0.0442		619.6409	619.6409	0.0384		620.6003
Worker	0.4035	0.2648	2.5563	8.3400e-003	0.8941	6.1000e-003	0.9002	0.2381	5.6200e-003	0.2438		831.3179	831.3179	0.0185		831.7794
Total	0.4665	2.4553	3.0010	0.0143	1.0308	0.0109	1.0417	0.2778	0.0102	0.2880		1,450.9588	1,450.9588	0.0568		1,452.3797

3.6 Paving - 2022

Unmitigated Construction On-Site

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

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0427	0.4123	1.3400e-003	17.8044	9.8000e-004	17.8053	1.8007	9.1000e-004	1.8016		134.0835	134.0835	2.9800e-003		134.1580
Total	0.0651	0.0427	0.4123	1.3400e-003	17.8044	9.8000e-004	17.8053	1.8007	9.1000e-004	1.8016		134.0835	134.0835	2.9800e-003		134.1580

Mitigated Construction On-Site

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

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0427	0.4123	1.3400e-003	0.1442	9.8000e-004	0.1452	0.0384	9.1000e-004	0.0393		134.0835	134.0835	2.9800e-003		134.1580
Total	0.0651	0.0427	0.4123	1.3400e-003	0.1442	9.8000e-004	0.1452	0.0384	9.1000e-004	0.0393		134.0835	134.0835	2.9800e-003		134.1580

3.7 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	117.1017					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	117.3063	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.7 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	0.0814	0.0534	0.5154	1.6800e-003	22.2554	1.2300e-003	22.2567	2.2508	1.1300e-003	2.2520		167.6044	167.6044	3.7200e-003		167.6975
Total	0.0814	0.0534	0.5154	1.6800e-003	22.2554	1.2300e-003	22.2567	2.2508	1.1300e-003	2.2520		167.6044	167.6044	3.7200e-003		167.6975

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	117.1017					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	0.0000	281.4481	281.4481	0.0183		281.9062
Total	117.3063	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

3.7 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	0.0814	0.0534	0.5154	1.6800e-003	0.1803	1.2300e-003	0.1815	0.0480	1.1300e-003	0.0491		167.6044	167.6044	3.7200e-003		167.6975
Total	0.0814	0.0534	0.5154	1.6800e-003	0.1803	1.2300e-003	0.1815	0.0480	1.1300e-003	0.0491		167.6044	167.6044	3.7200e-003		167.6975

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

University Research Park Mixed Use - Yolo/Solano 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	2.0951	16.2403	23.9605	0.0937	7.0118	0.0818	7.0936	1.8823	0.0769	1.9592		9,545.4256	9,545.4256	0.5172		9,558.3564
Unmitigated	2.0951	16.2403	23.9605	0.0937	7.0118	0.0818	7.0936	1.8823	0.0769	1.9592		9,545.4256	9,545.4256	0.5172		9,558.3564

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,064.00	1,022.40	937.60	2,729,228	2,729,228
Research & Development	218.97	51.30	29.97	368,859	368,859
Total	1,282.97	1,073.70	967.57	3,098,087	3,098,087

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 Mid Rise	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Research & Development	10.00	5.00	7.00	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929
Research & Development	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0610	0.5290	0.2811	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9399	664.9399	0.0127	0.0122	668.8913
NaturalGas Unmitigated	0.0610	0.5290	0.2811	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9399	664.9399	0.0127	0.0122	668.8913

University Research Park Mixed Use - Yolo/Solano 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 Mid Rise	4273.14	0.0461	0.3938	0.1676	2.5100e-003		0.0318	0.0318		0.0318	0.0318		502.7223	502.7223	9.6400e-003	9.2200e-003	505.7098
Research & Development	1378.85	0.0149	0.1352	0.1136	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.2176	162.2176	3.1100e-003	2.9700e-003	163.1815
Total		0.0610	0.5290	0.2811	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9399	664.9399	0.0128	0.0122	668.8913

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 Mid Rise	4.27314	0.0461	0.3938	0.1676	2.5100e-003		0.0318	0.0318		0.0318	0.0318		502.7223	502.7223	9.6400e-003	9.2200e-003	505.7098
Research & Development	1.37885	0.0149	0.1352	0.1136	8.1000e-004		0.0103	0.0103		0.0103	0.0103		162.2176	162.2176	3.1100e-003	2.9700e-003	163.1815
Total		0.0610	0.5290	0.2811	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9399	664.9399	0.0128	0.0122	668.8913

6.0 Area Detail

6.1 Mitigation Measures Area

University Research Park Mixed Use - Yolo/Solano 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	4.5171	0.1524	13.2172	7.0000e-004		0.0730	0.0730		0.0730	0.0730	0.0000	23.7743	23.7743	0.0230	0.0000	24.3479
Unmitigated	4.5171	0.1524	13.2172	7.0000e-004		0.0730	0.0730		0.0730	0.0730	0.0000	23.7743	23.7743	0.0230	0.0000	24.3479

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	0.5775					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3994	0.1524	13.2172	7.0000e-004		0.0730	0.0730		0.0730	0.0730		23.7743	23.7743	0.0230		24.3479
Total	4.5171	0.1524	13.2172	7.0000e-004		0.0730	0.0730		0.0730	0.0730	0.0000	23.7743	23.7743	0.0230	0.0000	24.3479

University Research Park Mixed Use - Yolo/Solano 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	0.5775					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3994	0.1524	13.2172	7.0000e-004		0.0730	0.0730		0.0730	0.0730		23.7743	23.7743	0.0230		24.3479
Total	4.5171	0.1524	13.2172	7.0000e-004		0.0730	0.0730		0.0730	0.0730	0.0000	23.7743	23.7743	0.0230	0.0000	24.3479

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

10.0 Stationary Equipment

University Research Park Mixed Use - Yolo/Solano AQMD Air District, Winter

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
