

APPENDIX A

Houston School - Joe Serna Charter - Transition and Expansion Project - San Joaquin County, Annual

Houston School - Joe Serna Charter - Transition and Expansion Project

San Joaquin County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	8.00	1000sqft	0.18	8,000.00	0
Parking Lot	0.50	Acre	0.50	21,780.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	3			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 -

Construction Phase - The entire construction project is scheduled for June 1, 2019 to July 31, 2019.

Grading - Site Preparation: removal of shrubs

Grading: conservative estimate regarding approximately 0.6 inches of top soil to be removed from site during foundation and other earthwork activities. The soil onsite has been determined suitable for engineered fill; no imported fill is anticipated.

Demolition - One modular to be demolished.

Architectural Coating -

Road Dust -

Energy Use -

Land Use Change -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Area Coating -

Mobile Commute Mitigation - LUSD will provide financing for bussing for the first year. Per LUSD, the trend is families tend to continue bussing after financing is discontinued. It is estimated in the Traffic Impact Analysis for the Joe Serna Relocation Project only 10 percent of families won't participate, thus 80 percent family bussing is a conservative estimate.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	PhaseEndDate	8/8/2019	7/31/2019
tblConstructionPhase	PhaseEndDate	8/1/2019	7/26/2019
tblConstructionPhase	PhaseStartDate	8/2/2019	7/24/2019
tblConstructionPhase	PhaseStartDate	7/26/2019	7/15/2019
tblGrading	MaterialExported	0.00	806.00
tblGrading	MaterialExported	0.00	60.00
tblProjectCharacteristics	OperationalYear	2018	2020

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					
2019	0.0993	0.2551	0.2025	3.8000e-004	5.6200e-003	0.0140	0.0196	1.6200e-003	0.0131	0.0147	0.0000	34.1529	34.1529	7.3800e-003	0.0000	34.3374
Maximum	0.0993	0.2551	0.2025	3.8000e-004	5.6200e-003	0.0140	0.0196	1.6200e-003	0.0131	0.0147	0.0000	34.1529	34.1529	7.3800e-003	0.0000	34.3374

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					
2019	0.0993	0.2551	0.2025	3.8000e-004	4.6500e-003	0.0140	0.0187	1.3000e-003	0.0131	0.0144	0.0000	34.1528	34.1528	7.3800e-003	0.0000	34.3373
Maximum	0.0993	0.2551	0.2025	3.8000e-004	4.6500e-003	0.0140	0.0187	1.3000e-003	0.0131	0.0144	0.0000	34.1528	34.1528	7.3800e-003	0.0000	34.3373

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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	17.26	0.00	4.89	19.75	0.00	2.25	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	6-2-2019	9-1-2019	0.3382	0.3382
		Highest	0.3382	0.3382

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	0.0387	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Energy	1.0900e-003	9.8900e-003	8.3100e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	33.1497	33.1497	1.2200e-003	4.1000e-004	33.3014
Mobile	0.0295	0.1965	0.3030	1.0500e-003	0.0731	1.1100e-003	0.0742	0.0196	1.0500e-003	0.0207	0.0000	96.3553	96.3553	5.3300e-003	0.0000	96.4885
Waste						0.0000	0.0000		0.0000	0.0000	2.1111	0.0000	2.1111	0.1248	0.0000	5.2302
Water						0.0000	0.0000		0.0000	0.0000	0.0736	0.9725	1.0461	7.6000e-003	1.9000e-004	1.2921
Total	0.0692	0.2064	0.3114	1.1100e-003	0.0731	1.8600e-003	0.0750	0.0196	1.8000e-003	0.0214	2.1847	130.4777	132.6624	0.1389	6.0000e-004	136.3123

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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	0.0387	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Energy	1.0900e-003	9.8900e-003	8.3100e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	33.1497	33.1497	1.2200e-003	4.1000e-004	33.3014
Mobile	0.0280	0.1825	0.2709	9.1000e-004	0.0621	9.6000e-004	0.0631	0.0167	9.1000e-004	0.0176	0.0000	83.7132	83.7132	4.9600e-003	0.0000	83.8371
Waste						0.0000	0.0000		0.0000	0.0000	2.1111	0.0000	2.1111	0.1248	0.0000	5.2302
Water						0.0000	0.0000		0.0000	0.0000	0.0736	0.9725	1.0461	7.6000e-003	1.9000e-004	1.2921
Total	0.0678	0.1924	0.2793	9.7000e-004	0.0621	1.7100e-003	0.0638	0.0167	1.6600e-003	0.0183	2.1847	117.8356	120.0203	0.1385	6.0000e-004	123.6609

	ROG	NOx	CO	SO2	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	2.07	6.79	10.31	12.61	15.06	8.06	14.88	15.05	7.78	14.44	0.00	9.69	9.53	0.27	0.00	9.28

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	Demolition	Demolition	6/2/2019	6/14/2019	5	10	
2	Site Preparation	Site Preparation	6/15/2019	6/17/2019	5	1	
3	Grading	Grading	6/18/2019	6/19/2019	5	2	
4	Building Construction	Building Construction	6/20/2019	7/25/2019	5	100	
5	Paving	Paving	7/15/2019	7/26/2019	5	5	
6	Architectural Coating	Architectural Coating	7/24/2019	7/31/2019	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 12,000; Non-Residential Outdoor: 4,000; Striped Parking Area: 1,307 (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	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	13.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	5.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	101.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 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					
Fugitive Dust					5.0000e-004	0.0000	5.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7700e-003	0.0430	0.0385	6.0000e-005		2.6900e-003	2.6900e-003		2.5600e-003	2.5600e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852
Total	4.7700e-003	0.0430	0.0385	6.0000e-005	5.0000e-004	2.6900e-003	3.1900e-003	8.0000e-005	2.5600e-003	2.6400e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852

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3.2 Demolition - 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	2.0000e-005	7.5000e-004	1.1000e-004	0.0000	4.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1922	0.1922	1.0000e-005	0.0000	0.1925
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.5900e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3643	0.3643	1.0000e-005	0.0000	0.3646
Total	2.4000e-004	9.1000e-004	1.7000e-003	0.0000	4.4000e-004	0.0000	4.5000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.5566	0.5566	2.0000e-005	0.0000	0.5571

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.9000e-004	0.0000	1.9000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7700e-003	0.0430	0.0385	6.0000e-005		2.6900e-003	2.6900e-003		2.5600e-003	2.5600e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852
Total	4.7700e-003	0.0430	0.0385	6.0000e-005	1.9000e-004	2.6900e-003	2.8800e-003	3.0000e-005	2.5600e-003	2.5900e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852

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3.2 Demolition - 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	2.0000e-005	7.5000e-004	1.1000e-004	0.0000	4.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1922	0.1922	1.0000e-005	0.0000	0.1925
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.5900e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3643	0.3643	1.0000e-005	0.0000	0.3646
Total	2.4000e-004	9.1000e-004	1.7000e-003	0.0000	4.4000e-004	0.0000	4.5000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.5566	0.5566	2.0000e-005	0.0000	0.5571

3.3 Site Preparation - 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					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	4.4600e-003	2.0700e-003	0.0000		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413
Total	3.6000e-004	4.4600e-003	2.0700e-003	0.0000	2.7000e-004	1.8000e-004	4.5000e-004	3.0000e-005	1.7000e-004	2.0000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413

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3.3 Site Preparation - 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	3.0000e-005	1.2000e-003	1.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.3076	0.3076	1.0000e-005	0.0000	0.3080
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0182	0.0182	0.0000	0.0000	0.0182
Total	4.0000e-005	1.2100e-003	2.6000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	0.3258	0.3258	1.0000e-005	0.0000	0.3262

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					1.1000e-004	0.0000	1.1000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	4.4600e-003	2.0700e-003	0.0000		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413
Total	3.6000e-004	4.4600e-003	2.0700e-003	0.0000	1.1000e-004	1.8000e-004	2.9000e-004	1.0000e-005	1.7000e-004	1.8000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413

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3.3 Site Preparation - 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	3.0000e-005	1.2000e-003	1.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.3076	0.3076	1.0000e-005	0.0000	0.3080
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0182	0.0182	0.0000	0.0000	0.0182
Total	4.0000e-005	1.2100e-003	2.6000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	0.3258	0.3258	1.0000e-005	0.0000	0.3262

3.4 Grading - 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					
Fugitive Dust					8.1000e-004	0.0000	8.1000e-004	4.2000e-004	0.0000	4.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570
Total	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005	8.1000e-004	5.4000e-004	1.3500e-003	4.2000e-004	5.1000e-004	9.3000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570

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3.4 Grading - 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	4.4000e-004	0.0151	2.2700e-003	4.0000e-005	8.6000e-004	6.0000e-005	9.2000e-004	2.4000e-004	6.0000e-005	2.9000e-004	0.0000	3.8833	3.8833	1.8000e-004	0.0000	3.8879
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0729	0.0729	0.0000	0.0000	0.0729
Total	4.8000e-004	0.0151	2.5900e-003	4.0000e-005	9.4000e-004	6.0000e-005	1.0000e-003	2.6000e-004	6.0000e-005	3.1000e-004	0.0000	3.9562	3.9562	1.8000e-004	0.0000	3.9608

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					3.2000e-004	0.0000	3.2000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570
Total	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005	3.2000e-004	5.4000e-004	8.6000e-004	1.6000e-004	5.1000e-004	6.7000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570

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3.4 Grading - 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	4.4000e-004	0.0151	2.2700e-003	4.0000e-005	8.6000e-004	6.0000e-005	9.2000e-004	2.4000e-004	6.0000e-005	2.9000e-004	0.0000	3.8833	3.8833	1.8000e-004	0.0000	3.8879
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0729	0.0729	0.0000	0.0000	0.0729
Total	4.8000e-004	0.0151	2.5900e-003	4.0000e-005	9.4000e-004	6.0000e-005	1.0000e-003	2.6000e-004	6.0000e-005	3.1000e-004	0.0000	3.9562	3.9562	1.8000e-004	0.0000	3.9608

3.5 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	0.0125	0.1277	0.0981	1.5000e-004		7.8700e-003	7.8700e-003		7.2400e-003	7.2400e-003	0.0000	13.2991	13.2991	4.2100e-003	0.0000	13.4043
Total	0.0125	0.1277	0.0981	1.5000e-004		7.8700e-003	7.8700e-003		7.2400e-003	7.2400e-003	0.0000	13.2991	13.2991	4.2100e-003	0.0000	13.4043

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3.5 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	3.3000e-004	8.4600e-003	1.8900e-003	2.0000e-005	4.3000e-004	6.0000e-005	4.9000e-004	1.2000e-004	6.0000e-005	1.9000e-004	0.0000	1.7602	1.7602	1.2000e-004	0.0000	1.7632
Worker	7.4000e-004	5.5000e-004	5.3600e-003	1.0000e-005	1.3500e-003	1.0000e-005	1.3600e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2315	1.2315	4.0000e-005	0.0000	1.2324
Total	1.0700e-003	9.0100e-003	7.2500e-003	3.0000e-005	1.7800e-003	7.0000e-005	1.8500e-003	4.8000e-004	7.0000e-005	5.6000e-004	0.0000	2.9917	2.9917	1.6000e-004	0.0000	2.9956

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	0.0125	0.1277	0.0981	1.5000e-004		7.8700e-003	7.8700e-003		7.2400e-003	7.2400e-003	0.0000	13.2990	13.2990	4.2100e-003	0.0000	13.4042
Total	0.0125	0.1277	0.0981	1.5000e-004		7.8700e-003	7.8700e-003		7.2400e-003	7.2400e-003	0.0000	13.2990	13.2990	4.2100e-003	0.0000	13.4042

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3.5 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	3.3000e-004	8.4600e-003	1.8900e-003	2.0000e-005	4.3000e-004	6.0000e-005	4.9000e-004	1.2000e-004	6.0000e-005	1.9000e-004	0.0000	1.7602	1.7602	1.2000e-004	0.0000	1.7632
Worker	7.4000e-004	5.5000e-004	5.3600e-003	1.0000e-005	1.3500e-003	1.0000e-005	1.3600e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2315	1.2315	4.0000e-005	0.0000	1.2324
Total	1.0700e-003	9.0100e-003	7.2500e-003	3.0000e-005	1.7800e-003	7.0000e-005	1.8500e-003	4.8000e-004	7.0000e-005	5.6000e-004	0.0000	2.9917	2.9917	1.6000e-004	0.0000	2.9956

3.6 Paving - 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	4.1500e-003	0.0392	0.0357	6.0000e-005		2.2100e-003	2.2100e-003		2.0500e-003	2.0500e-003	0.0000	4.7862	4.7862	1.3700e-003	0.0000	4.8204
Paving	1.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.4600e-003	0.0392	0.0357	6.0000e-005		2.2100e-003	2.2100e-003		2.0500e-003	2.0500e-003	0.0000	4.7862	4.7862	1.3700e-003	0.0000	4.8204

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3.6 Paving - 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	3.9000e-004	2.9000e-004	2.8600e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6558	0.6558	2.0000e-005	0.0000	0.6563
Total	3.9000e-004	2.9000e-004	2.8600e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6558	0.6558	2.0000e-005	0.0000	0.6563

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1500e-003	0.0392	0.0357	6.0000e-005		2.2100e-003	2.2100e-003		2.0500e-003	2.0500e-003	0.0000	4.7862	4.7862	1.3700e-003	0.0000	4.8204
Paving	1.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.4600e-003	0.0392	0.0357	6.0000e-005		2.2100e-003	2.2100e-003		2.0500e-003	2.0500e-003	0.0000	4.7862	4.7862	1.3700e-003	0.0000	4.8204

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3.6 Paving - 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	3.9000e-004	2.9000e-004	2.8600e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6558	0.6558	2.0000e-005	0.0000	0.6563
Total	3.9000e-004	2.9000e-004	2.8600e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6558	0.6558	2.0000e-005	0.0000	0.6563

3.7 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	0.0722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	5.5100e-003	5.5200e-003	1.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	0.7660	0.7660	6.0000e-005	0.0000	0.7676
Total	0.0730	5.5100e-003	5.5200e-003	1.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	0.7660	0.7660	6.0000e-005	0.0000	0.7676

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3.7 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	4.0000e-005	3.0000e-005	2.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0656	0.0656	0.0000	0.0000	0.0656
Total	4.0000e-005	3.0000e-005	2.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0656	0.0656	0.0000	0.0000	0.0656

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	0.0722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	5.5100e-003	5.5200e-003	1.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	0.7660	0.7660	6.0000e-005	0.0000	0.7676
Total	0.0730	5.5100e-003	5.5200e-003	1.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	0.7660	0.7660	6.0000e-005	0.0000	0.7676

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3.7 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	4.0000e-005	3.0000e-005	2.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0656	0.0656	0.0000	0.0000	0.0656
Total	4.0000e-005	3.0000e-005	2.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0656	0.0656	0.0000	0.0000	0.0656

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Implement School Bus Program

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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	0.0280	0.1825	0.2709	9.1000e-004	0.0621	9.6000e-004	0.0631	0.0167	9.1000e-004	0.0176	0.0000	83.7132	83.7132	4.9600e-003	0.0000	83.8371
Unmitigated	0.0295	0.1965	0.3030	1.0500e-003	0.0731	1.1100e-003	0.0742	0.0196	1.0500e-003	0.0207	0.0000	96.3553	96.3553	5.3300e-003	0.0000	96.4885

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	123.44	0.00	0.00	194,413	165,139
Parking Lot	0.00	0.00	0.00		
Total	123.44	0.00	0.00	194,413	165,139

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
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.546554	0.037008	0.181258	0.129446	0.020679	0.005026	0.016032	0.054515	0.001184	0.001555	0.005196	0.000618	0.000931
Parking Lot	0.546554	0.037008	0.181258	0.129446	0.020679	0.005026	0.016032	0.054515	0.001184	0.001555	0.005196	0.000618	0.000931

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	22.3788	22.3788	1.0100e-003	2.1000e-004	22.4665
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	22.3788	22.3788	1.0100e-003	2.1000e-004	22.4665
NaturalGas Mitigated	1.0900e-003	9.8900e-003	8.3100e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7710	10.7710	2.1000e-004	2.0000e-004	10.8350
NaturalGas Unmitigated	1.0900e-003	9.8900e-003	8.3100e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7710	10.7710	2.1000e-004	2.0000e-004	10.8350

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	201840	1.0900e-003	9.8900e-003	8.3100e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7710	10.7710	2.1000e-004	2.0000e-004	10.8350
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.0900e-003	9.8900e-003	8.3100e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7710	10.7710	2.1000e-004	2.0000e-004	10.8350

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	201840	1.0900e-003	9.8900e-003	8.3100e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7710	10.7710	2.1000e-004	2.0000e-004	10.8350
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.0900e-003	9.8900e-003	8.3100e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	10.7710	10.7710	2.1000e-004	2.0000e-004	10.8350

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	57760	16.8031	7.6000e-004	1.6000e-004	16.8689
Parking Lot	19166.4	5.5757	2.5000e-004	5.0000e-005	5.5976
Total		22.3788	1.0100e-003	2.1000e-004	22.4665

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	57760	16.8031	7.6000e-004	1.6000e-004	16.8689
Parking Lot	19166.4	5.5757	2.5000e-004	5.0000e-005	5.5976
Total		22.3788	1.0100e-003	2.1000e-004	22.4665

6.0 Area Detail**6.1 Mitigation Measures Area**

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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	0.0387	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Unmitigated	0.0387	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

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	6.0200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0327					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Total	0.0387	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

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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	6.0200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0327					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Total	0.0387	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0461	7.6000e-003	1.9000e-004	1.2921
Unmitigated	1.0461	7.6000e-003	1.9000e-004	1.2921

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.231975 / 0.596508	1.0461	7.6000e-003	1.9000e-004	1.2921
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.0461	7.6000e-003	1.9000e-004	1.2921

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.231975 / 0.596508	1.0461	7.6000e-003	1.9000e-004	1.2921
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.0461	7.6000e-003	1.9000e-004	1.2921

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.1111	0.1248	0.0000	5.2302
Unmitigated	2.1111	0.1248	0.0000	5.2302

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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	10.4	2.1111	0.1248	0.0000	5.2302
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		2.1111	0.1248	0.0000	5.2302

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	10.4	2.1111	0.1248	0.0000	5.2302
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		2.1111	0.1248	0.0000	5.2302

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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Houston School - Joe Serna Charter - Transition and Expansion Project

San Joaquin, Summary Report

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	8.00	1000sqft	0.18	8,000.00	0
Parking Lot	0.50	Acre	0.50	21,780.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	3			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

Only CalEEMod defaults were used.

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Project Characteristics -

Land Use -

Construction Phase - The entire construction project is scheduled for June 1, 2019 to July 31, 2019.

Grading - Site Preparation: removal of shrubs

Grading: conservative estimate regarding approximately 0.6 inches of top soil to be removed from site during foundation and other earthwork activities. The soil onsite has been determined suitable for engineered fill; no imported fill is anticipated.

Demolition - One modular to be demolished.

Architectural Coating -

Road Dust -

Energy Use -

Land Use Change -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Area Coating -

Mobile Commute Mitigation - LUSD will provide financing for bussing for the first year. Per LUSD, the trend is families tend to continue bussing after financing is discontinued. It is estimated in the Traffic Impact Analysis for the Joe Serna Relocation Project only 10 percent of families won't participate, thus 80 percent family bussing is a conservative estimate.

2.0 Peak Daily Emissions

Peak Daily Construction Emissions

Peak Daily Construction Emissions

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		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Year	Phase	lb/day											
2019	Demolition	1.0058 S	8.7897 W	8.0699 S	0.0133 S	0.7291 W	0.5529 W	1.0058 S	8.7897 W	8.0699 S	0.0133 S	0.6681 W	0.5437 W
2019	Site Preparation	0.8143 W	11.3354 W	4.6839 W	0.0167 S	1.0973 W	0.4551 W	0.8143 W	11.3354 W	4.6839 W	0.0167 S	0.7684 W	0.4194 W
2019	Grading	1.4492 W	23.7934 W	10.4333 W	0.0540 S	2.3763 W	1.2576 W	1.4492 W	23.7934 W	10.4333 W	0.0540 S	1.8808 W	0.9998 W
2019	Building Construction	1.0453 S	10.5174 W	8.1429 S	0.0140 S	0.7518 W	0.6005 W	1.0453 S	10.5174 W	8.1429 S	0.0140 S	0.7518 W	0.6005 W
2019	Paving	1.1792 S	7.9089 W	7.7901 S	0.0128 S	0.5914 S	0.4507 S	1.1792 S	7.9089 W	7.7901 S	0.0128 S	0.5914 S	0.4507 S
2019	Architectural Coating	24.3464 S	1.8461 W	1.9484 S	3.2300e-003 S	0.1536 S	0.1355 S	24.3464 S	1.8461 W	1.9484 S	3.2300e-003 S	0.1536 S	0.1355 S
	Peak Daily Total	24.3464 S	23.7934 W	10.4333 W	0.0540 S	2.3763 W	1.2576 W	24.3464 S	23.7934 W	10.4333 W	0.0540 S	1.8808 W	0.9998 W
	Air District Threshold												
	Exceed Significance?												

Peak Daily Operational Emissions**Peak Daily Operational Emissions**

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
	Operational Activity	lb/day											
On-Site	Area	0.2120 S	1.0000e-005 S	8.7000e-004 S	0.0000 S	0.0000 S	0.0000 S	0.2120 S	1.0000e-005 S	8.7000e-004 S	0.0000 S	0.0000 S	0.0000 S
On-Site	Energy	5.9600e-003 S	0.0542 S	0.0455 S	3.3000e-004 S	4.1200e-003 S	4.1200e-003 S	5.9600e-003 S	0.0542 S	0.0455 S	3.3000e-004 S	4.1200e-003 S	4.1200e-003 S
Off-Site	Mobile	0.2709 S	1.5281 W	2.4705 S	8.5500e-003 S	0.5881 W	0.1632 W	0.2595 S	1.4163 W	2.1894 W	7.4200e-003 S	0.4998 W	0.1388 W
	Peak Daily Total	0.4888 S	1.5824 W	2.5169 S	8.8800e-003 S	0.5923 W	0.1673 W	0.4774 S	1.4705 W	2.2358 W	7.7500e-003 S	0.5039 W	0.1429 W
	Air District Threshold												
	Exceed Significance?												

3.0 Annual GHG Emissions

Houston School - Joe Serna Charter - Transition and Expansion Project - San Joaquin County, Summary Report

Annual GHG**Annual GHG**

		Unmitigated				Mitigated			
		CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
GHG Activity	Year	MT/yr							
Construction	2019	34.1529	7.3845e-003	0.0000	34.3375	34.1528	7.3845e-003	0.0000	34.3374
Operational	2020	132.6624	0.1389	5.9874e-004	136.3136	120.0203	0.1385	5.9874e-004	123.6621
	Total								
	Significance Threshold								
	Exceed Significance?								