

Butte College FMP - Butte County AQMD Air District, Annual

Butte College FMP
Butte County AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	462.00	Student	3.44	150,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	71
Climate Zone	3			Operational Year	2019
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

Butte College FMP - Butte County AQMD Air District, Annual

Project Characteristics -

Land Use - Project involves 150,000 sqft of new space

Construction Phase - Demolition is only 9,300 sq ft of space.

Off-road Equipment - Demolition involves a relatively small amount, unit amount should be sufficient.

Off-road Equipment - Very little raw land development

Off-road Equipment -

Off-road Equipment - Very little raw land development, unit amount sufficient

Demolition -

Architectural Coating - Low VOC paint, 150 g/L

Area Coating - Low VOC paint, 150 g/L

Water And Wastewater - No septic on-site

Solid Waste - Butte County estimates 90-95% of gas emitted by landfill are captured and turned to energy in the gas capture system present at the landfill

Construction Off-road Equipment Mitigation - Tier 4 engines and water exposed areas.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation - Butte College has exceeded Title 24 by approximately 15% for a number of years. Butte College was the first grid positive college in the US producing over 100% of the energy necessary for operations.

Water Mitigation - Install low flow faucets and sinks, use water efficient irrigation systems for landscaping.

Waste Mitigation - The recycling program diverts between 75 and 93 percent of waste from the landfill

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	DPF	No Change	Level 3

Butte College FMP - Butte County AQMD Air District, Annual

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Butte College FMP - Butte County AQMD Air District, Annual

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	PhaseEndDate	4/30/2017	5/4/2018
tblConstructionPhase	PhaseEndDate	4/30/2017	4/10/2018
tblConstructionPhase	PhaseEndDate	4/30/2017	5/12/2017
tblConstructionPhase	PhaseEndDate	4/30/2017	5/24/2017
tblConstructionPhase	PhaseEndDate	4/30/2017	5/4/2018
tblConstructionPhase	PhaseEndDate	4/30/2017	5/5/2017
tblConstructionPhase	PhaseStartDate	5/1/2017	4/11/2018
tblConstructionPhase	PhaseStartDate	5/1/2017	5/24/2017
tblConstructionPhase	PhaseStartDate	5/1/2017	5/15/2017
tblConstructionPhase	PhaseStartDate	5/1/2017	4/11/2018
tblLandUse	BuildingSpaceSquareFeet	20,167.33	150,000.00
tblLandUse	LandUseSquareFeet	20,167.33	150,000.00
tblLandUse	LotAcreage	0.46	3.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

Butte College FMP - Butte County AQMD Air District, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblSolidWaste	LandfillCaptureGasEnergyRecovery	0.00	95.00
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	5.00
tblTripsAndVMT	WorkerTripNumber	8.00	15.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	5.00	18.00
tblWater	AerobicPercent	87.46	95.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	5.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

Butte College FMP - Butte County AQMD Air District, Annual

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					
2017	0.3343	2.7915	2.0566	3.6700e-003	0.1120	0.1596	0.2716	0.0405	0.1498	0.1903	0.0000	333.0765	333.0765	0.0628	0.0000	334.6461
2018	1.1811	1.1719	0.9660	1.7700e-003	0.0319	0.0648	0.0967	8.6900e-003	0.0609	0.0695	0.0000	159.5289	159.5289	0.0302	0.0000	160.2849
Maximum	1.1811	2.7915	2.0566	3.6700e-003	0.1120	0.1596	0.2716	0.0405	0.1498	0.1903	0.0000	333.0765	333.0765	0.0628	0.0000	334.6461

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					
2017	0.0238	-0.1500	1.8686	3.6700e-003	0.0840	-0.0441	0.0399	0.0268	-0.0404	-0.0136	0.0000	318.2068	318.2068	0.0596	0.0000	319.6960
2018	1.0617	0.0223	0.9015	1.7700e-003	0.0319	-0.0138	0.0181	8.6900e-003	-0.0126	-0.0039	0.0000	150.4549	150.4549	0.0287	0.0000	151.1730
Maximum	1.0617	0.0223	1.8686	3.6700e-003	0.0840	-0.0138	0.0399	0.0268	-0.0126	-0.0039	0.0000	318.2068	318.2068	0.0596	0.0000	319.6960

	ROG	NOx	CO	SO2	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	28.37	103.22	8.36	0.00	19.47	125.83	84.26	27.87	125.16	106.75	0.00	4.86	4.86	5.10	0.00	4.86

Butte College FMP - Butte County AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2017	7-31-2017	1.1309	-0.1424
2	8-1-2017	10-31-2017	1.1761	0.0250
3	11-1-2017	1-31-2018	1.1359	0.0358
4	2-1-2018	4-30-2018	1.7450	0.8574
5	5-1-2018	7-31-2018	0.1923	0.1647
		Highest	1.7450	0.8574

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	0.6905	4.0000e-005	4.2900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.2600e-003	8.2600e-003	2.0000e-005	0.0000	8.8100e-003
Energy	0.0180	0.1632	0.1371	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	688.6875	688.6875	0.0265	8.0400e-003	691.7457
Mobile	0.2922	2.1484	3.5401	9.3600e-003	0.5870	0.0150	0.6019	0.1582	0.0142	0.1724	0.0000	862.6413	862.6413	0.0727	0.0000	864.4596
Waste						0.0000	0.0000		0.0000	0.0000	14.2262	0.0000	14.2262	0.9875	0.0000	38.9148
Water						0.0000	0.0000		0.0000	0.0000	0.3500	3.1324	3.4824	0.0193	7.9000e-004	4.2009
Total	1.0007	2.3116	3.6815	0.0103	0.5870	0.0274	0.6144	0.1582	0.0266	0.1848	14.5761	1,554.4695	1,569.0456	1.1061	8.8300e-003	1,599.3298

Butte College FMP - Butte County AQMD Air District, Annual

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	0.6467	4.0000e-005	4.2900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.2600e-003	8.2600e-003	2.0000e-005	0.0000	8.8100e-003
Energy	0.0154	0.1402	0.1178	8.4000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	152.6552	152.6552	2.9300e-003	2.8000e-003	153.5623
Mobile	0.2216	1.4580	2.0820	5.0700e-003	0.2860	8.0000e-003	0.2940	0.0771	7.5800e-003	0.0847	0.0000	467.9547	467.9547	0.0558	0.0000	469.3488
Waste						0.0000	0.0000		0.0000	0.0000	3.5565	0.0000	3.5565	0.2469	0.0000	9.7287
Water						0.0000	0.0000		0.0000	0.0000	0.3067	2.8439	3.1506	0.0169	6.9000e-004	3.7807
Total	0.8837	1.5983	2.2040	5.9100e-003	0.2860	0.0187	0.3047	0.0771	0.0183	0.0954	3.8633	623.4621	627.3253	0.3225	3.4900e-003	636.4294

	ROG	NOx	CO	SO2	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	11.69	30.86	40.13	42.84	51.27	31.85	50.40	51.27	31.43	48.41	73.50	59.89	60.02	70.84	60.48	60.21

3.0 Construction Detail

Construction Phase

Butte College FMP - Butte County AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/11/2018	5/4/2018	5	18	
2	Building Construction	Building Construction	5/24/2017	4/10/2018	5	230	
3	Demolition	Demolition	5/1/2017	5/12/2017	5	10	
4	Grading	Grading	5/15/2017	5/24/2017	5	8	
5	Paving	Paving	4/11/2018	5/4/2018	5	18	
6	Site Preparation	Site Preparation	5/1/2017	5/5/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 225,000; Non-Residential Outdoor: 75,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Butte College FMP - Butte County AQMD Air District, Annual

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	1	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	1	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	1	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	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	1	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Butte College FMP - Butte County AQMD Air District, Annual

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	13.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	63.00	25.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	3	15.00	0.00	43.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	15.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	18.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Alternative Fuel for Construction Equipment
- Use Cleaner Engines for Construction Equipment
- Use DPF for Construction Equipment
- Water Exposed Area
- Clean Paved Roads

3.2 Architectural Coating - 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					
Archit. Coating	1.0429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3034
Total	1.0456	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3034

Butte College FMP - Butte County AQMD Air District, Annual

3.2 Architectural Coating - 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	8.7000e-004	8.1000e-004	7.5800e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0380	1.0380	6.0000e-005	0.0000	1.0396
Total	8.7000e-004	8.1000e-004	7.5800e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0380	1.0380	6.0000e-005	0.0000	1.0396

3.3 Building Construction - 2017

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	0.2461	2.0978	1.4364	2.1300e-003		0.1412	0.1412		0.1327	0.1327	0.0000	189.9893	189.9893	0.0468	0.0000	191.1595
Total	0.2461	2.0978	1.4364	2.1300e-003		0.1412	0.1412		0.1327	0.1327	0.0000	189.9893	189.9893	0.0468	0.0000	191.1595

Butte College FMP - Butte County AQMD Air District, Annual

3.3 Building Construction - 2017

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	0.0186	0.3844	0.0994	7.8000e-004	0.0186	4.5500e-003	0.0232	5.3800e-003	4.3500e-003	9.7300e-003	0.0000	73.9522	73.9522	6.9100e-003	0.0000	74.1250
Worker	0.0433	0.0401	0.3805	5.1000e-004	0.0455	4.7000e-004	0.0459	0.0121	4.3000e-004	0.0125	0.0000	45.3153	45.3153	3.1400e-003	0.0000	45.3937
Total	0.0619	0.4245	0.4799	1.2900e-003	0.0641	5.0200e-003	0.0691	0.0175	4.7800e-003	0.0223	0.0000	119.2675	119.2675	0.0101	0.0000	119.5186

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	-0.0256	-0.3984	1.2522	2.1300e-003		-0.0388	-0.0388		-0.0357	-0.0357	0.0000	175.1197	175.1197	0.0436	0.0000	176.2094
Total	-0.0256	-0.3984	1.2522	2.1300e-003		-0.0388	-0.0388		-0.0357	-0.0357	0.0000	175.1197	175.1197	0.0436	0.0000	176.2094

Butte College FMP - Butte County AQMD Air District, Annual

3.3 Building Construction - 2017

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	0.0186	0.3844	0.0994	7.8000e-004	0.0186	4.5500e-003	0.0232	5.3800e-003	4.3500e-003	9.7300e-003	0.0000	73.9522	73.9522	6.9100e-003	0.0000	74.1250
Worker	0.0433	0.0401	0.3805	5.1000e-004	0.0455	4.7000e-004	0.0459	0.0121	4.3000e-004	0.0125	0.0000	45.3153	45.3153	3.1400e-003	0.0000	45.3937
Total	0.0619	0.4245	0.4799	1.2900e-003	0.0641	5.0200e-003	0.0691	0.0175	4.7800e-003	0.0223	0.0000	119.2675	119.2675	0.0101	0.0000	119.5186

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	0.0965	0.8420	0.6329	9.7000e-004		0.0540	0.0540		0.0508	0.0508	0.0000	85.5962	85.5962	0.0210	0.0000	86.1205
Total	0.0965	0.8420	0.6329	9.7000e-004		0.0540	0.0540		0.0508	0.0508	0.0000	85.5962	85.5962	0.0210	0.0000	86.1205

Butte College FMP - Butte County AQMD Air District, Annual

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	7.1900e-003	0.1634	0.0383	3.5000e-004	8.4800e-003	1.6700e-003	0.0101	2.4500e-003	1.6000e-003	4.0500e-003	0.0000	33.5903	33.5903	3.0300e-003	0.0000	33.6660
Worker	0.0168	0.0157	0.1470	2.2000e-004	0.0207	1.9000e-004	0.0209	5.5100e-003	1.8000e-004	5.6900e-003	0.0000	20.1208	20.1208	1.2300e-003	0.0000	20.1517
Total	0.0240	0.1791	0.1853	5.7000e-004	0.0292	1.8600e-003	0.0311	7.9600e-003	1.7800e-003	9.7400e-003	0.0000	53.7111	53.7111	4.2600e-003	0.0000	53.8176

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	-0.0077	-0.1491	0.5751	9.7000e-004		-0.0144	-0.0144		-0.0132	-0.0132	0.0000	78.8202	78.8202	0.0197	0.0000	79.3120
Total	-0.0077	-0.1491	0.5751	9.7000e-004		-0.0144	-0.0144		-0.0132	-0.0132	0.0000	78.8202	78.8202	0.0197	0.0000	79.3120

Butte College FMP - Butte County AQMD Air District, Annual

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	7.1900e-003	0.1634	0.0383	3.5000e-004	8.4800e-003	1.6700e-003	0.0101	2.4500e-003	1.6000e-003	4.0500e-003	0.0000	33.5903	33.5903	3.0300e-003	0.0000	33.6660
Worker	0.0168	0.0157	0.1470	2.2000e-004	0.0207	1.9000e-004	0.0209	5.5100e-003	1.8000e-004	5.6900e-003	0.0000	20.1208	20.1208	1.2300e-003	0.0000	20.1517
Total	0.0240	0.1791	0.1853	5.7000e-004	0.0292	1.8600e-003	0.0311	7.9600e-003	1.7800e-003	9.7400e-003	0.0000	53.7111	53.7111	4.2600e-003	0.0000	53.8176

3.4 Demolition - 2017

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					4.6800e-003	0.0000	4.6800e-003	7.1000e-004	0.0000	7.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.1077	0.0586	1.0000e-004		5.7700e-003	5.7700e-003		5.4300e-003	5.4300e-003	0.0000	9.0470	9.0470	2.1800e-003	0.0000	9.1016
Total	0.0108	0.1077	0.0586	1.0000e-004	4.6800e-003	5.7700e-003	0.0105	7.1000e-004	5.4300e-003	6.1400e-003	0.0000	9.0470	9.0470	2.1800e-003	0.0000	9.1016

Butte College FMP - Butte County AQMD Air District, Annual

3.4 Demolition - 2017

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	2.6000e-004	7.7400e-003	1.1200e-003	2.0000e-005	3.6000e-004	6.0000e-005	4.2000e-004	1.0000e-004	5.0000e-005	1.5000e-004	0.0000	1.7158	1.7158	1.4000e-004	0.0000	1.7192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	6.0000e-004	5.7300e-003	1.0000e-005	6.9000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.6829	0.6829	5.0000e-005	0.0000	0.6841
Total	9.1000e-004	8.3400e-003	6.8500e-003	3.0000e-005	1.0500e-003	7.0000e-005	1.1100e-003	2.8000e-004	6.0000e-005	3.4000e-004	0.0000	2.3987	2.3987	1.9000e-004	0.0000	2.4033

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					1.8200e-003	0.0000	1.8200e-003	2.8000e-004	0.0000	2.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	-0.0059	-0.0778	0.0570	1.0000e-004		-0.0042	-0.0042		-0.0039	-0.0039	0.0000	9.0470	9.0470	2.1800e-003	0.0000	9.1016
Total	-0.0059	-0.0778	0.0570	1.0000e-004	1.8200e-003	-0.0042	-0.0024	2.8000e-004	-0.0039	-0.0036	0.0000	9.0470	9.0470	2.1800e-003	0.0000	9.1016

Butte College FMP - Butte County AQMD Air District, Annual

3.4 Demolition - 2017

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	2.6000e-004	7.7400e-003	1.1200e-003	2.0000e-005	3.6000e-004	6.0000e-005	4.2000e-004	1.0000e-004	5.0000e-005	1.5000e-004	0.0000	1.7158	1.7158	1.4000e-004	0.0000	1.7192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	6.0000e-004	5.7300e-003	1.0000e-005	6.9000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.6829	0.6829	5.0000e-005	0.0000	0.6841
Total	9.1000e-004	8.3400e-003	6.8500e-003	3.0000e-005	1.0500e-003	7.0000e-005	1.1100e-003	2.8000e-004	6.0000e-005	3.4000e-004	0.0000	2.3987	2.3987	1.9000e-004	0.0000	2.4033

3.5 Grading - 2017

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					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7500e-003	0.1112	0.0493	9.0000e-005		5.2800e-003	5.2800e-003		4.8600e-003	4.8600e-003	0.0000	8.7140	8.7140	2.6700e-003	0.0000	8.7807
Total	9.7500e-003	0.1112	0.0493	9.0000e-005	0.0262	5.2800e-003	0.0315	0.0135	4.8600e-003	0.0183	0.0000	8.7140	8.7140	2.6700e-003	0.0000	8.7807

Butte College FMP - Butte County AQMD Air District, Annual

3.5 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.8000e-004	4.5900e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5463	0.5463	4.0000e-005	0.0000	0.5472
Total	5.2000e-004	4.8000e-004	4.5900e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5463	0.5463	4.0000e-005	0.0000	0.5472

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					0.0102	0.0000	0.0102	5.2500e-003	0.0000	5.2500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	-0.0054	-0.0708	0.0513	9.0000e-005		-0.0041	-0.0041		-0.0038	-0.0038	0.0000	8.7140	8.7140	2.6700e-003	0.0000	8.7807
Total	-0.0054	-0.0708	0.0513	9.0000e-005	0.0102	-0.0041	6.1100e-003	5.2500e-003	-0.0038	1.4700e-003	0.0000	8.7140	8.7140	2.6700e-003	0.0000	8.7807

Butte College FMP - Butte County AQMD Air District, Annual

3.5 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.8000e-004	4.5900e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5463	0.5463	4.0000e-005	0.0000	0.5472
Total	5.2000e-004	4.8000e-004	4.5900e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5463	0.5463	4.0000e-005	0.0000	0.5472

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	0.0128	0.1307	0.1119	1.7000e-004		7.5300e-003	7.5300e-003		6.9500e-003	6.9500e-003	0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0128	0.1307	0.1119	1.7000e-004		7.5300e-003	7.5300e-003		6.9500e-003	6.9500e-003	0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045

Butte College FMP - Butte County AQMD Air District, Annual

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	1.3300e-003	1.2500e-003	0.0117	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5969	1.5969	1.0000e-004	0.0000	1.5993
Total	1.3300e-003	1.2500e-003	0.0117	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5969	1.5969	1.0000e-004	0.0000	1.5993

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.7000e-004	-0.0099	0.1218	1.7000e-004		-0.0014	-0.0014		-0.0012	-0.0012	0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.7000e-004	-0.0099	0.1218	1.7000e-004		-0.0014	-0.0014		-0.0012	-0.0012	0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045

Butte College FMP - Butte County AQMD Air District, Annual

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	1.3300e-003	1.2500e-003	0.0117	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5969	1.5969	1.0000e-004	0.0000	1.5993
Total	1.3300e-003	1.2500e-003	0.0117	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5969	1.5969	1.0000e-004	0.0000	1.5993

3.7 Site Preparation - 2017

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					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8700e-003	0.0410	0.0176	3.0000e-005		2.2100e-003	2.2100e-003		2.0300e-003	2.0300e-003	0.0000	2.7039	2.7039	8.3000e-004	0.0000	2.7246
Total	3.8700e-003	0.0410	0.0176	3.0000e-005	0.0151	2.2100e-003	0.0173	8.2800e-003	2.0300e-003	0.0103	0.0000	2.7039	2.7039	8.3000e-004	0.0000	2.7246

Butte College FMP - Butte County AQMD Air District, Annual

3.7 Site Preparation - 2017

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	3.6000e-004	3.4400e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.4097	0.4097	3.0000e-005	0.0000	0.4104
Total	3.9000e-004	3.6000e-004	3.4400e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.4097	0.4097	3.0000e-005	0.0000	0.4104

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					5.8700e-003	0.0000	5.8700e-003	3.2300e-003	0.0000	3.2300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	-0.0030	-0.0367	0.0134	3.0000e-005		-0.0021	-0.0021		-0.0019	-0.0019	0.0000	2.7039	2.7039	8.3000e-004	0.0000	2.7246
Total	-0.0030	-0.0367	0.0134	3.0000e-005	5.8700e-003	-0.0021	3.7700e-003	3.2300e-003	-0.0019	1.3000e-003	0.0000	2.7039	2.7039	8.3000e-004	0.0000	2.7246

Butte College FMP - Butte County AQMD Air District, Annual

3.7 Site Preparation - 2017

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	3.6000e-004	3.4400e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.4097	0.4097	3.0000e-005	0.0000	0.4104
Total	3.9000e-004	3.6000e-004	3.4400e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.4097	0.4097	3.0000e-005	0.0000	0.4104

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

- Increase Transit Accessibility
- Improve Pedestrian Network
- Limit Parking Supply
- Provide BRT System
- Implement Trip Reduction Program
- Encourage Telecommuting and Alternative Work Schedules
- Provide Ride Sharing Program
- Implement School Bus Program

Butte College FMP - Butte County AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2216	1.4580	2.0820	5.0700e-003	0.2860	8.0000e-003	0.2940	0.0771	7.5800e-003	0.0847	0.0000	467.9547	467.9547	0.0558	0.0000	469.3488
Unmitigated	0.2922	2.1484	3.5401	9.3600e-003	0.5870	0.0150	0.6019	0.1582	0.0142	0.1724	0.0000	862.6413	862.6413	0.0727	0.0000	864.4596

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	568.26	194.04	18.48	1,566,310	763,265
Total	568.26	194.04	18.48	1,566,310	763,265

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
Junior College (2Yr)	10.52	10.52	10.52	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.488379	0.037237	0.184894	0.132358	0.042014	0.007577	0.018418	0.076572	0.001721	0.001591	0.006262	0.001327	0.001651

5.0 Energy Detail

Historical Energy Use: N

Butte College FMP - Butte County AQMD Air District, Annual

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	510.9860	510.9860	0.0231	4.7800e-003	512.9882
NaturalGas Mitigated	0.0154	0.1402	0.1178	8.4000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	152.6552	152.6552	2.9300e-003	2.8000e-003	153.5623
NaturalGas Unmitigated	0.0180	0.1632	0.1371	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	177.7015	177.7015	3.4100e-003	3.2600e-003	178.7575

Butte College FMP - Butte County AQMD Air District, Annual

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					
Junior College (2Yr)	3.33e+006	0.0180	0.1632	0.1371	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	177.7015	177.7015	3.4100e-003	3.2600e-003	178.7575
Total		0.0180	0.1632	0.1371	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	177.7015	177.7015	3.4100e-003	3.2600e-003	178.7575

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					
Junior College (2Yr)	2.86065e+006	0.0154	0.1402	0.1178	8.4000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	152.6552	152.6552	2.9300e-003	2.8000e-003	153.5623
Total		0.0154	0.1402	0.1178	8.4000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	152.6552	152.6552	2.9300e-003	2.8000e-003	153.5623

Butte College FMP - Butte County AQMD Air District, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.7565e+006	510.9860	0.0231	4.7800e-003	512.9882
Total		510.9860	0.0231	4.7800e-003	512.9882

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Butte College FMP - Butte County AQMD Air District, Annual

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.6467	4.0000e-005	4.2900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.2600e-003	8.2600e-003	2.0000e-005	0.0000	8.8100e-003
Unmitigated	0.6905	4.0000e-005	4.2900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.2600e-003	8.2600e-003	2.0000e-005	0.0000	8.8100e-003

Butte College FMP - Butte County AQMD Air District, Annual

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	0.1043					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5858					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e-004	4.0000e-005	4.2900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.2600e-003	8.2600e-003	2.0000e-005	0.0000	8.8100e-003
Total	0.6905	4.0000e-005	4.2900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.2600e-003	8.2600e-003	2.0000e-005	0.0000	8.8100e-003

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	0.1043					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5420					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e-004	4.0000e-005	4.2900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.2600e-003	8.2600e-003	2.0000e-005	0.0000	8.8100e-003
Total	0.6467	4.0000e-005	4.2900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.2600e-003	8.2600e-003	2.0000e-005	0.0000	8.8100e-003

7.0 Water Detail

Butte College FMP - Butte County AQMD Air District, Annual

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.1506	0.0169	6.9000e-004	3.7807
Unmitigated	3.4824	0.0193	7.9000e-004	4.2009

Butte College FMP - Butte County AQMD Air District, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0.989188 / 1.54719	3.4824	0.0193	7.9000e-004	4.2009
Total		3.4824	0.0193	7.9000e-004	4.2009

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0.866925 / 1.45281	3.1506	0.0169	6.9000e-004	3.7807
Total		3.1506	0.0169	6.9000e-004	3.7807

8.0 Waste Detail

8.1 Mitigation Measures Waste

Butte College FMP - Butte County AQMD Air District, Annual

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.5565	0.2469	0.0000	9.7287
Unmitigated	14.2262	0.9875	0.0000	38.9148

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	84.31	14.2262	0.9875	0.0000	38.9148
Total		14.2262	0.9875	0.0000	38.9148

Butte College FMP - Butte County AQMD Air District, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	21.0775	3.5565	0.2469	0.0000	9.7287
Total		3.5565	0.2469	0.0000	9.7287

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

Butte College FMP - Butte County AQMD Air District, Annual

Butte College FMP - Butte County AQMD Air District, Summer

Butte College FMP
Butte County AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	462.00	Student	3.44	150,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	71
Climate Zone	3			Operational Year	2019
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

Butte College FMP - Butte County AQMD Air District, Summer

Project Characteristics -

Land Use - Project involves 150,000 sqft of new space

Construction Phase - Demolition is only 9,300 sq ft of space.

Off-road Equipment - Demolition involves a relatively small amount, unit amount should be sufficient.

Off-road Equipment - Very little raw land development

Off-road Equipment -

Off-road Equipment - Very little raw land development, unit amount sufficient

Demolition -

Architectural Coating - Low VOC paint, 150 g/L

Area Coating - Low VOC paint, 150 g/L

Water And Wastewater - No septic on-site

Solid Waste - Butte County estimates 90-95% of gas emitted by landfill are captured and turned to energy in the gas capture system present at the landfill

Construction Off-road Equipment Mitigation - Tier 4 engines and water exposed areas.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation - Butte College has exceeded Title 24 by approximately 15% for a number of years. Butte College was the first grid positive college in the US producing over 100% of the energy necessary for operations.

Water Mitigation - Install low flow faucets and sinks, use water efficient irrigation systems for landscaping.

Waste Mitigation - The recycling program diverts between 75 and 93 percent of waste from the landfill

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	DPF	No Change	Level 3

Butte College FMP - Butte County AQMD Air District, Summer

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Butte College FMP - Butte County AQMD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	PhaseEndDate	4/30/2017	5/4/2018
tblConstructionPhase	PhaseEndDate	4/30/2017	4/10/2018
tblConstructionPhase	PhaseEndDate	4/30/2017	5/12/2017
tblConstructionPhase	PhaseEndDate	4/30/2017	5/24/2017
tblConstructionPhase	PhaseEndDate	4/30/2017	5/4/2018
tblConstructionPhase	PhaseEndDate	4/30/2017	5/5/2017
tblConstructionPhase	PhaseStartDate	5/1/2017	4/11/2018
tblConstructionPhase	PhaseStartDate	5/1/2017	5/24/2017
tblConstructionPhase	PhaseStartDate	5/1/2017	5/15/2017
tblConstructionPhase	PhaseStartDate	5/1/2017	4/11/2018
tblLandUse	BuildingSpaceSquareFeet	20,167.33	150,000.00
tblLandUse	LandUseSquareFeet	20,167.33	150,000.00
tblLandUse	LotAcreage	0.46	3.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

Butte College FMP - Butte County AQMD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblSolidWaste	LandfillCaptureGasEnergyRecovery	0.00	95.00
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	5.00
tblTripsAndVMT	WorkerTripNumber	8.00	15.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	5.00	18.00
tblWater	AerobicPercent	87.46	95.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	5.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

Butte College FMP - Butte County AQMD Air District, Summer

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					
2017	6.5650	59.6392	38.7036	0.0691	7.5401	3.1720	10.7121	3.6350	2.9547	6.5896	0.0000	6,963.0066	6,963.0066	1.5420	0.0000	7,001.5567
2018	117.8809	28.1929	23.4110	0.0438	0.8447	1.5513	2.3960	0.2296	1.4590	1.6885	0.0000	4,343.9491	4,343.9491	0.7732	0.0000	4,363.2794
Maximum	117.8809	59.6392	38.7036	0.0691	7.5401	3.1720	10.7121	3.6350	2.9547	6.5896	0.0000	6,963.0066	6,963.0066	1.5420	0.0000	7,001.5567

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					
2017	0.5399	0.1335	36.8691	0.0691	3.5432	-0.4283	2.0890	1.5808	-0.3913	0.4082	0.0000	6,755.5289	6,755.5289	1.4971	0.0000	6,792.9563
2018	116.1884	0.6627	21.8056	0.0438	0.8447	-0.1468	0.4976	0.2296	-0.1346	0.0000	0.0000	4,136.4713	4,136.4713	0.7334	0.0000	4,154.8068
Maximum	116.1884	0.6627	36.8691	0.0691	3.5432	-0.1468	2.0890	1.5808	-0.1346	0.4082	0.0000	6,755.5289	6,755.5289	1.4971	0.0000	6,792.9563

	ROG	NOx	CO	SO2	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	6.20	99.09	5.54	0.00	47.67	112.17	80.27	53.15	111.92	95.07	0.00	3.67	3.67	3.66	0.00	3.67

Butte College FMP - Butte County AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.7860	4.4000e-004	0.0476	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1011	0.1011	2.7000e-004		0.1080
Energy	0.0984	0.8944	0.7513	5.3700e-003		0.0680	0.0680		0.0680	0.0680		1,073.3280	1,073.3280	0.0206	0.0197	1,079.7062
Mobile	2.5455	14.8119	28.7153	0.0717	4.3811	0.1066	4.4877	1.1763	0.1010	1.2773		7,269.6059	7,269.6059	0.5812		7,284.1368
Total	6.4298	15.7068	29.5143	0.0770	4.3811	0.1747	4.5558	1.1763	0.1692	1.3455		8,343.0350	8,343.0350	0.6021	0.0197	8,363.9509

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.5460	4.4000e-004	0.0476	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1011	0.1011	2.7000e-004		0.1080
Energy	0.0845	0.7684	0.6454	4.6100e-003		0.0584	0.0584		0.0584	0.0584		922.0467	922.0467	0.0177	0.0169	927.5260
Mobile	2.0089	10.1960	16.0964	0.0388	2.1349	0.0566	2.1915	0.5732	0.0536	0.6269		3,937.4932	3,937.4932	0.4334		3,948.3271
Total	5.6394	10.9648	16.7895	0.0434	2.1349	0.1152	2.2501	0.5732	0.1122	0.6854		4,859.6410	4,859.6410	0.4513	0.0169	4,875.9610

Butte College FMP - Butte County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	12.29	30.19	43.11	43.72	51.27	34.09	50.61	51.27	33.68	49.06	0.00	41.75	41.75	25.04	14.13	41.70

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	4/11/2018	5/4/2018	5	18	
2	Building Construction	Building Construction	5/24/2017	4/10/2018	5	230	
3	Demolition	Demolition	5/1/2017	5/12/2017	5	10	
4	Grading	Grading	5/15/2017	5/24/2017	5	8	
5	Paving	Paving	4/11/2018	5/4/2018	5	18	
6	Site Preparation	Site Preparation	5/1/2017	5/5/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 225,000; Non-Residential Outdoor: 75,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Butte College FMP - Butte County AQMD Air District, Summer

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	1	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	1	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	1	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	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	1	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Butte College FMP - Butte County AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	13.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	63.00	25.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	3	15.00	0.00	43.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	15.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	18.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Alternative Fuel for Construction Equipment
- Use Cleaner Engines for Construction Equipment
- Use DPF for Construction Equipment
- Water Exposed Area
- Clean Paved Roads

3.2 Architectural Coating - 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					
Archit. Coating	115.8750					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	116.1736	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171

Butte College FMP - Butte County AQMD Air District, Summer

3.2 Architectural Coating - 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	0.1116	0.0817	0.9941	1.4200e-003	0.1240	1.1200e-003	0.1251	0.0329	1.0300e-003	0.0339		141.0767	141.0767	8.8200e-003		141.2973
Total	0.1116	0.0817	0.9941	1.4200e-003	0.1240	1.1200e-003	0.1251	0.0329	1.0300e-003	0.0339		141.0767	141.0767	8.8200e-003		141.2973

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	115.8750					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	2.9700e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	115.8750	0.0000	0.0000	2.9700e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Butte College FMP - Butte County AQMD Air District, Summer

3.2 Architectural Coating - 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	0.1116	0.0817	0.9941	1.4200e-003	0.1240	1.1200e-003	0.1251	0.0329	1.0300e-003	0.0339		141.0767	141.0767	8.8200e-003		141.2973
Total	0.1116	0.0817	0.9941	1.4200e-003	0.1240	1.1200e-003	0.1251	0.0329	1.0300e-003	0.0339		141.0767	141.0767	8.8200e-003		141.2973

3.3 Building Construction - 2017

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	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078

Butte College FMP - Butte County AQMD Air District, Summer

3.3 Building Construction - 2017

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	0.2338	4.7159	1.2093	9.9700e-003	0.2439	0.0572	0.3011	0.0702	0.0548	0.1249		1,042.3458	1,042.3458	0.0922		1,044.6517
Worker	0.6296	0.4601	5.6500	7.0900e-003	0.6008	5.9300e-003	0.6067	0.1594	5.4900e-003	0.1648		701.3195	701.3195	0.0492		702.5484
Total	0.8634	5.1760	6.8593	0.0171	0.8447	0.0632	0.9079	0.2296	0.0602	0.2898		1,743.6653	1,743.6653	0.1414		1,747.2002

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	-0.3235	-5.0425	15.8506	0.0269		-0.4914	-0.4914		-0.4515	-0.4515	0.0000	2,443.5020	2,443.5020	0.6082		2,458.7075
Total	-0.3235	-5.0425	15.8506	0.0269		-0.4914	-0.4914		-0.4515	-0.4515	0.0000	2,443.5020	2,443.5020	0.6082		2,458.7075

Butte College FMP - Butte County AQMD Air District, Summer

3.3 Building Construction - 2017

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	0.2338	4.7159	1.2093	9.9700e-003	0.2439	0.0572	0.3011	0.0702	0.0548	0.1249		1,042.3458	1,042.3458	0.0922		1,044.6517
Worker	0.6296	0.4601	5.6500	7.0900e-003	0.6008	5.9300e-003	0.6067	0.1594	5.4900e-003	0.1648		701.3195	701.3195	0.0492		702.5484
Total	0.8634	5.1760	6.8593	0.0171	0.8447	0.0632	0.9079	0.2296	0.0602	0.2898		1,743.6653	1,743.6653	0.1414		1,747.2002

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	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883

Butte College FMP - Butte County AQMD Air District, Summer

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	0.1980	4.4072	1.0132	9.9400e-003	0.2439	0.0461	0.2899	0.0702	0.0441	0.1143		1,039.3348	1,039.3348	0.0883		1,041.5428
Worker	0.5409	0.3957	4.8174	6.9000e-003	0.6008	5.4100e-003	0.6062	0.1594	5.0000e-003	0.1644		683.6792	683.6792	0.0428		684.7483
Total	0.7389	4.8029	5.8306	0.0168	0.8447	0.0515	0.8962	0.2296	0.0491	0.2786		1,723.0140	1,723.0140	0.1311		1,726.2911

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	-0.2130	-4.1402	15.9751	0.0269		-0.3986	-0.3986		-0.3661	-0.3661	0.0000	2,413.4574	2,413.4574	0.6023		2,428.5157
Total	-0.2130	-4.1402	15.9751	0.0269		-0.3986	-0.3986		-0.3661	-0.3661	0.0000	2,413.4574	2,413.4574	0.6023		2,428.5157

Butte College FMP - Butte County AQMD Air District, Summer

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	0.1980	4.4072	1.0132	9.9400e-003	0.2439	0.0461	0.2899	0.0702	0.0441	0.1143		1,039.3348	1,039.3348	0.0883		1,041.5428
Worker	0.5409	0.3957	4.8174	6.9000e-003	0.6008	5.4100e-003	0.6062	0.1594	5.0000e-003	0.1644		683.6792	683.6792	0.0428		684.7483
Total	0.7389	4.8029	5.8306	0.0168	0.8447	0.0515	0.8962	0.2296	0.0491	0.2786		1,723.0140	1,723.0140	0.1311		1,726.2911

3.4 Demolition - 2017

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					0.9351	0.0000	0.9351	0.1416	0.0000	0.1416			0.0000			0.0000
Off-Road	2.1654	21.5455	11.7124	0.0200		1.1537	1.1537		1.0859	1.0859		1,994.5253	1,994.5253	0.4817		2,006.5671
Total	2.1654	21.5455	11.7124	0.0200	0.9351	1.1537	2.0888	0.1416	1.0859	1.2275		1,994.5253	1,994.5253	0.4817		2,006.5671

Butte College FMP - Butte County AQMD Air District, Summer

3.4 Demolition - 2017

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	0.0505	1.4984	0.2121	3.6400e-003	0.0753	0.0114	0.0867	0.0207	0.0109	0.0315		381.7781	381.7781	0.0286		382.4924
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	0.1499	0.1095	1.3452	1.6900e-003	0.1431	1.4100e-003	0.1445	0.0379	1.3100e-003	0.0393		166.9808	166.9808	0.0117		167.2734
Total	0.2004	1.6079	1.5573	5.3300e-003	0.2184	0.0128	0.2311	0.0586	0.0122	0.0708		548.7589	548.7589	0.0403		549.7659

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					0.3647	0.0000	0.3647	0.0552	0.0000	0.0552			0.0000			0.0000
Off-Road	-1.1857	-15.5564	11.3986	0.0200		-0.8391	-0.8391		-0.7713	-0.7713	0.0000	1,994.5253	1,994.5253	0.4817		2,006.5671
Total	-1.1857	-15.5564	11.3986	0.0200	0.3647	-0.8391	-0.4744	0.0552	-0.7713	-0.7161	0.0000	1,994.5253	1,994.5253	0.4817		2,006.5671

Butte College FMP - Butte County AQMD Air District, Summer

3.4 Demolition - 2017

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	0.0505	1.4984	0.2121	3.6400e-003	0.0753	0.0114	0.0867	0.0207	0.0109	0.0315		381.7781	381.7781	0.0286		382.4924
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	0.1499	0.1095	1.3452	1.6900e-003	0.1431	1.4100e-003	0.1445	0.0379	1.3100e-003	0.0393		166.9808	166.9808	0.0117		167.2734
Total	0.2004	1.6079	1.5573	5.3300e-003	0.2184	0.0128	0.2311	0.0586	0.0122	0.0708		548.7589	548.7589	0.0403		549.7659

3.5 Grading - 2017

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	2.4369	27.7991	12.3165	0.0235		1.3196	1.3196		1.2140	1.2140		2,401.3808	2,401.3808	0.7358		2,419.7753
Total	2.4369	27.7991	12.3165	0.0235	6.5523	1.3196	7.8719	3.3675	1.2140	4.5815		2,401.3808	2,401.3808	0.7358		2,419.7753

Butte College FMP - Butte County AQMD Air District, Summer

3.5 Grading - 2017

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	0.1499	0.1095	1.3452	1.6900e-003	0.1431	1.4100e-003	0.1445	0.0379	1.3100e-003	0.0393		166.9808	166.9808	0.0117		167.2734
Total	0.1499	0.1095	1.3452	1.6900e-003	0.1431	1.4100e-003	0.1445	0.0379	1.3100e-003	0.0393		166.9808	166.9808	0.0117		167.2734

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					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	-1.3606	-17.7012	12.8139	0.0235		-1.0273	-1.0273		-0.9444	-0.9444	0.0000	2,401.3808	2,401.3808	0.7358		2,419.7753
Total	-1.3606	-17.7012	12.8139	0.0235	2.5554	-1.0273	1.5281	1.3133	-0.9444	0.3690	0.0000	2,401.3808	2,401.3808	0.7358		2,419.7753

Butte College FMP - Butte County AQMD Air District, Summer

3.5 Grading - 2017

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	0.1499	0.1095	1.3452	1.6900e-003	0.1431	1.4100e-003	0.1445	0.0379	1.3100e-003	0.0393		166.9808	166.9808	0.0117		167.2734
Total	0.1499	0.1095	1.3452	1.6900e-003	0.1431	1.4100e-003	0.1445	0.0379	1.3100e-003	0.0393		166.9808	166.9808	0.0117		167.2734

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	1.4239	14.5184	12.4333	0.0189		0.8370	0.8370		0.7718	0.7718		1,872.5505	1,872.5505	0.5672		1,886.7312
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4239	14.5184	12.4333	0.0189		0.8370	0.8370		0.7718	0.7718		1,872.5505	1,872.5505	0.5672		1,886.7312

Butte College FMP - Butte County AQMD Air District, Summer

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	0.1717	0.1256	1.5293	2.1900e-003	0.1907	1.7200e-003	0.1925	0.0506	1.5900e-003	0.0522		217.0410	217.0410	0.0136		217.3804
Total	0.1717	0.1256	1.5293	2.1900e-003	0.1907	1.7200e-003	0.1925	0.0506	1.5900e-003	0.0522		217.0410	217.0410	0.0136		217.3804

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	0.0301	-1.0952	13.5368	0.0189		-0.1496	-0.1496		-0.1372	-0.1372	0.0000	1,872.5505	1,872.5505	0.5672		1,886.7312
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0301	-1.0952	13.5368	0.0189		-0.1496	-0.1496		-0.1372	-0.1372	0.0000	1,872.5505	1,872.5505	0.5672		1,886.7312

Butte College FMP - Butte County AQMD Air District, Summer

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	0.1717	0.1256	1.5293	2.1900e-003	0.1907	1.7200e-003	0.1925	0.0506	1.5900e-003	0.0522		217.0410	217.0410	0.0136		217.3804
Total	0.1717	0.1256	1.5293	2.1900e-003	0.1907	1.7200e-003	0.1925	0.0506	1.5900e-003	0.0522		217.0410	217.0410	0.0136		217.3804

3.7 Site Preparation - 2017

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					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.5480	16.4105	7.0205	0.0116		0.8832	0.8832		0.8126	0.8126		1,192.2284	1,192.2284	0.3653		1,201.3608
Total	1.5480	16.4105	7.0205	0.0116	6.0221	0.8832	6.9053	3.3102	0.8126	4.1228		1,192.2284	1,192.2284	0.3653		1,201.3608

Butte College FMP - Butte County AQMD Air District, Summer

3.7 Site Preparation - 2017

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	0.1799	0.1315	1.6143	2.0300e-003	0.1717	1.6900e-003	0.1734	0.0455	1.5700e-003	0.0471		200.3770	200.3770	0.0141		200.7281
Total	0.1799	0.1315	1.6143	2.0300e-003	0.1717	1.6900e-003	0.1734	0.0455	1.5700e-003	0.0471		200.3770	200.3770	0.0141		200.7281

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					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000			0.0000
Off-Road	-1.2155	-14.6858	5.3396	0.0116		-0.8387	-0.8387		-0.7712	-0.7712	0.0000	1,192.2284	1,192.2284	0.3653		1,201.3608
Total	-1.2155	-14.6858	5.3396	0.0116	2.3486	-0.8387	1.5099	1.2910	-0.7712	0.5198	0.0000	1,192.2284	1,192.2284	0.3653		1,201.3608

Butte College FMP - Butte County AQMD Air District, Summer

3.7 Site Preparation - 2017

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	0.1799	0.1315	1.6143	2.0300e-003	0.1717	1.6900e-003	0.1734	0.0455	1.5700e-003	0.0471		200.3770	200.3770	0.0141		200.7281
Total	0.1799	0.1315	1.6143	2.0300e-003	0.1717	1.6900e-003	0.1734	0.0455	1.5700e-003	0.0471		200.3770	200.3770	0.0141		200.7281

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

- Increase Transit Accessibility
- Improve Pedestrian Network
- Limit Parking Supply
- Provide BRT System
- Implement Trip Reduction Program
- Encourage Telecommuting and Alternative Work Schedules
- Provide Ride Sharing Program
- Implement School Bus Program

Butte College FMP - Butte County AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0089	10.1960	16.0964	0.0388	2.1349	0.0566	2.1915	0.5732	0.0536	0.6269		3,937.493 2	3,937.493 2	0.4334		3,948.327 1
Unmitigated	2.5455	14.8119	28.7153	0.0717	4.3811	0.1066	4.4877	1.1763	0.1010	1.2773		7,269.605 9	7,269.605 9	0.5812		7,284.136 8

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	568.26	194.04	18.48	1,566,310	763,265
Total	568.26	194.04	18.48	1,566,310	763,265

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
Junior College (2Yr)	10.52	10.52	10.52	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.488379	0.037237	0.184894	0.132358	0.042014	0.007577	0.018418	0.076572	0.001721	0.001591	0.006262	0.001327	0.001651

5.0 Energy Detail

Historical Energy Use: N

Butte College FMP - Butte County AQMD Air District, Summer

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable 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	0.0845	0.7684	0.6454	4.6100e-003		0.0584	0.0584		0.0584	0.0584		922.0467	922.0467	0.0177	0.0169	927.5260
NaturalGas Unmitigated	0.0984	0.8944	0.7513	5.3700e-003		0.0680	0.0680		0.0680	0.0680		1,073.3280	1,073.3280	0.0206	0.0197	1,079.7062

Butte College FMP - Butte County AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	9123.29	0.0984	0.8944	0.7513	5.3700e-003		0.0680	0.0680		0.0680	0.0680		1,073.3280	1,073.3280	0.0206	0.0197	1,079.7062
Total		0.0984	0.8944	0.7513	5.3700e-003		0.0680	0.0680		0.0680	0.0680		1,073.3280	1,073.3280	0.0206	0.0197	1,079.7062

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					
Junior College (2Yr)	7.8374	0.0845	0.7684	0.6454	4.6100e-003		0.0584	0.0584		0.0584	0.0584		922.0467	922.0467	0.0177	0.0169	927.5260
Total		0.0845	0.7684	0.6454	4.6100e-003		0.0584	0.0584		0.0584	0.0584		922.0467	922.0467	0.0177	0.0169	927.5260

6.0 Area Detail

6.1 Mitigation Measures Area

Butte College FMP - Butte County AQMD Air District, Summer

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.5460	4.4000e-004	0.0476	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1011	0.1011	2.7000e-004		0.1080
Unmitigated	3.7860	4.4000e-004	0.0476	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1011	0.1011	2.7000e-004		0.1080

Butte College FMP - Butte County AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2100					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.5100e-003	4.4000e-004	0.0476	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1011	0.1011	2.7000e-004		0.1080
Total	3.7860	4.4000e-004	0.0476	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1011	0.1011	2.7000e-004		0.1080

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	0.5714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9700					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.5100e-003	4.4000e-004	0.0476	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1011	0.1011	2.7000e-004		0.1080
Total	3.5460	4.4000e-004	0.0476	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1011	0.1011	2.7000e-004		0.1080

7.0 Water Detail

Butte College FMP - Butte County AQMD Air District, Summer

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation