

A P P E N D I X 4.6-1

GHG Modeling

River Crossing Marketplace - Shasta County, Annual

**River Crossing Marketplace  
Shasta County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	118.80	1000sqft	3.57	118,800.00	0
Parking Lot	463.40	1000sqft	13.92	463,400.00	0
Fast Food Restaurant with Drive Thru	6.80	1000sqft	0.21	6,800.00	0
Discount Club	152.20	1000sqft	4.57	152,200.00	0
Gasoline/Service Station	30.00	Pump	0.25	4,235.25	0
Strip Mall	63.30	1000sqft	1.90	63,300.00	0
Other Asphalt Surfaces	28.00	1000sqft	0.84	28,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	220	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics - 2020 PGE CO2 Intensity Factor [Project is just outside Redding Electric Utility service area]

Land Use - Land uses account for Costco store, retail commercial building space, fast food restaurant, gas station, parking, internal circulation, and landscaping

Construction Phase - Construction phase duration provided by Project Applicant. Vegetation removal is achieved during the site preparation phase while off-site debris hauling spans both site preparation and grading

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment and equipment hours provided by Project Applicant.

Off-road Equipment - Equipment and equipment hours per Project Applicant

Off-road Equipment - Equipment and equipment hours provided by Project Applicant.

Trips and VMT - Vendor and haul trips derived from PlaceWorks. Tree hauling from vegetation removal = 1,000 haul trips.

Grading -

Architectural Coating - No parking lot for off site.

Vehicle Trips - Trip rates adjusted per TIA.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Land Use Change -

Construction Off-road Equipment Mitigation - Per Redding General Plan Policy 29. Tier 3 & 4 engines are a Project design feature proposed by the Applicant

Mobile Commute Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
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 3
tblConstructionPhase	NumDays	35.00	152.00
tblConstructionPhase	NumDays	440.00	152.00
tblConstructionPhase	NumDays	45.00	77.00
tblConstructionPhase	NumDays	35.00	152.00
tblConstructionPhase	NumDays	20.00	10.00
tblLandUse	LotAcreage	2.73	3.57

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tblLandUse	LotAcreage	10.64	13.92
tblLandUse	LotAcreage	0.16	0.21
tblLandUse	LotAcreage	3.49	4.57
tblLandUse	LotAcreage	0.10	0.25
tblLandUse	LotAcreage	1.45	1.90
tblLandUse	LotAcreage	0.64	0.84
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	8.00	2.30
tblOffRoadEquipment	UsageHours	8.00	4.70
tblOffRoadEquipment	UsageHours	8.00	0.90
tblOffRoadEquipment	UsageHours	8.00	0.20
tblOffRoadEquipment	UsageHours	8.00	0.40
tblOffRoadEquipment	UsageHours	8.00	2.20
tblOffRoadEquipment	UsageHours	8.00	8.60
tblOffRoadEquipment	UsageHours	8.00	4.80
tblProjectCharacteristics	CO2IntensityFactor	641.35	220
tblTripsAndVMT	HaulingTripLength	20.00	12.50
tblTripsAndVMT	HaulingTripLength	20.00	15.40

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tblTripsAndVMT	HaulingTripNumber	0.00	115.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,435.00
tblTripsAndVMT	HaulingTripNumber	0.00	420.00
tblTripsAndVMT	HaulingTripNumber	0.00	350.00
tblTripsAndVMT	VendorTripNumber	133.00	198.00
tblTripsAndVMT	WorkerTripNumber	318.00	485.00
tblTripsAndVMT	WorkerTripNumber	64.00	97.00
tblVehicleTrips	ST_TR	53.75	34.49
tblVehicleTrips	ST_TR	722.03	253.08
tblVehicleTrips	ST_TR	168.56	0.00
tblVehicleTrips	ST_TR	42.04	34.63
tblVehicleTrips	SU_TR	33.67	34.49
tblVehicleTrips	SU_TR	542.72	253.08
tblVehicleTrips	SU_TR	168.56	0.00
tblVehicleTrips	SU_TR	20.43	34.63
tblVehicleTrips	WD_TR	41.80	34.49
tblVehicleTrips	WD_TR	496.12	253.08
tblVehicleTrips	WD_TR	168.56	0.00
tblVehicleTrips	WD_TR	44.32	34.63

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
5	4-1-2019	6-30-2019	0.3793	0.1185
6	7-1-2019	9-30-2019	1.8180	0.4817
7	10-1-2019	12-31-2019	3.2382	2.7318
8	1-1-2020	3-31-2020	3.0296	2.6097
9	4-1-2020	6-30-2020	0.9932	0.8548
		Highest	3.2382	2.7318

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2077	7.0000e-005	7.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Energy	0.0206	0.1875	0.1575	1.1300e-003		0.0143	0.0143		0.0143	0.0143	0.0000	418.9569	418.9569	0.0322	9.6000e-003	422.6239
Mobile	3.5699	27.8243	29.6461	0.0927	4.8633	0.1166	4.9799	1.3101	0.1103	1.4204	0.0000	8,570.3584	8,570.3584	0.8409	0.0000	8,591.3807
Waste						0.0000	0.0000		0.0000	0.0000	165.5473	0.0000	165.5473	9.7836	0.0000	410.1363
Water						0.0000	0.0000		0.0000	0.0000	5.8454	13.4973	19.3427	0.6022	0.0145	38.7310
<b>Total</b>	<b>4.7982</b>	<b>28.0119</b>	<b>29.8116</b>	<b>0.0938</b>	<b>4.8633</b>	<b>0.1308</b>	<b>4.9942</b>	<b>1.3101</b>	<b>0.1246</b>	<b>1.4347</b>	<b>171.3927</b>	<b>9,002.8279</b>	<b>9,174.2206</b>	<b>11.2589</b>	<b>0.0241</b>	<b>9,462.8883</b>



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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	1.2077	7.0000e-005	7.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Energy	0.0206	0.1875	0.1575	1.1300e-003		0.0143	0.0143		0.0143	0.0143	0.0000	418.9569	418.9569	0.0322	9.6000e-003	422.6239
Mobile	3.5699	27.8243	29.6461	0.0927	4.8633	0.1166	4.9799	1.3101	0.1103	1.4204	0.0000	8,570.3584	8,570.3584	0.8409	0.0000	8,591.3807
Waste						0.0000	0.0000		0.0000	0.0000	165.5473	0.0000	165.5473	9.7836	0.0000	410.1363
Water						0.0000	0.0000		0.0000	0.0000	4.6764	11.5075	16.1839	0.4818	0.0117	31.7026
<b>Total</b>	<b>4.7982</b>	<b>28.0119</b>	<b>29.8116</b>	<b>0.0938</b>	<b>4.8633</b>	<b>0.1308</b>	<b>4.9942</b>	<b>1.3101</b>	<b>0.1246</b>	<b>1.4347</b>	<b>170.2236</b>	<b>9,000.8381</b>	<b>9,171.0617</b>	<b>11.1385</b>	<b>0.0213</b>	<b>9,455.8599</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.68</b>	<b>0.02</b>	<b>0.03</b>	<b>1.07</b>	<b>11.97</b>	<b>0.07</b>

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**2.3 Vegetation**

Vegetation

	CO2e
Category	MT
Vegetation Land Change	- 2,775.000 0
<b>Total</b>	- <b>2,775.000</b> 0

**3.0 Construction Detail**

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/14/2019	5	10	
2	Grading	Grading	6/15/2019	10/1/2019	5	77	
3	Building Construction	Building Construction	10/2/2019	4/30/2020	5	152	
4	Paving	Paving	10/2/2019	4/30/2020	5	152	
5	Architectural Coating	Architectural Coating	10/2/2019	4/30/2020	5	152	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 131.38**

**Acres of Paving: 18.33**

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**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 339,803; Non-Residential Outdoor: 113,268; Striped Parking Area: 34,932 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Excavators	2	8.80	158	0.38
Site Preparation	Rollers	1	0.80	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	4.80	97	0.37
Grading	Excavators	3	2.30	158	0.38
Grading	Graders	3	4.70	187	0.41
Grading	Rollers	4	7.30	80	0.38
Grading	Rubber Tired Dozers	1	0.40	247	0.40
Grading	Scrapers	3	2.20	367	0.48
Grading	Tractors/Loaders/Backhoes	5	8.60	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	1	0.90	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	2	0.20	80	0.38
Paving	Tractors/Loaders/Backhoes	1	2.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	5	13.00	0.00	115.00	10.80	7.30	12.50	LD_Mix	HDT_Mix	HHDT
Grading	19	48.00	0.00	1,435.00	10.80	7.30	15.40	LD_Mix	HDT_Mix	HHDT
Building Construction	9	485.00	198.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	420.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	97.00	0.00	350.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3800e-003	0.0447	0.0507	8.0000e-005		2.4300e-003	2.4300e-003		2.2400e-003	2.2400e-003	0.0000	6.8923	6.8923	2.1800e-003	0.0000	6.9468
<b>Total</b>	<b>4.3800e-003</b>	<b>0.0447</b>	<b>0.0507</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>2.4300e-003</b>	<b>2.4300e-003</b>	<b>0.0000</b>	<b>2.2400e-003</b>	<b>2.2400e-003</b>	<b>0.0000</b>	<b>6.8923</b>	<b>6.8923</b>	<b>2.1800e-003</b>	<b>0.0000</b>	<b>6.9468</b>

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**3.2 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	3.8000e-004	0.0134	1.8200e-003	3.0000e-005	6.0000e-004	6.0000e-005	6.6000e-004	1.7000e-004	5.0000e-005	2.2000e-004	0.0000	3.0751	3.0751	2.6000e-004	0.0000	3.0816
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	3.0000e-004	2.5000e-004	2.3500e-003	1.0000e-005	5.1000e-004	0.0000	5.1000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4857	0.4857	2.0000e-005	0.0000	0.4862
<b>Total</b>	<b>6.8000e-004</b>	<b>0.0136</b>	<b>4.1700e-003</b>	<b>4.0000e-005</b>	<b>1.1100e-003</b>	<b>6.0000e-005</b>	<b>1.1700e-003</b>	<b>3.1000e-004</b>	<b>5.0000e-005</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.5608</b>	<b>3.5608</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>3.5678</b>

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1500e-003	0.0185	0.0552	8.0000e-005		9.2000e-004	9.2000e-004		8.5000e-004	8.5000e-004	0.0000	6.8923	6.8923	2.1800e-003	0.0000	6.9468
<b>Total</b>	<b>2.1500e-003</b>	<b>0.0185</b>	<b>0.0552</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>9.2000e-004</b>	<b>9.2000e-004</b>	<b>0.0000</b>	<b>8.5000e-004</b>	<b>8.5000e-004</b>	<b>0.0000</b>	<b>6.8923</b>	<b>6.8923</b>	<b>2.1800e-003</b>	<b>0.0000</b>	<b>6.9468</b>

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**3.2 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	3.8000e-004	0.0134	1.8200e-003	3.0000e-005	4.2000e-004	6.0000e-005	4.8000e-004	1.2000e-004	5.0000e-005	1.8000e-004	0.0000	3.0751	3.0751	2.6000e-004	0.0000	3.0816
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	3.0000e-004	2.5000e-004	2.3500e-003	1.0000e-005	3.3000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.4857	0.4857	2.0000e-005	0.0000	0.4862
<b>Total</b>	<b>6.8000e-004</b>	<b>0.0136</b>	<b>4.1700e-003</b>	<b>4.0000e-005</b>	<b>7.5000e-004</b>	<b>6.0000e-005</b>	<b>8.2000e-004</b>	<b>2.1000e-004</b>	<b>5.0000e-005</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>3.5608</b>	<b>3.5608</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>3.5678</b>

**3.3 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					0.0813	0.0000	0.0813	0.0139	0.0000	0.0139	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1577	1.7675	1.2419	2.1300e-003		0.0888	0.0888		0.0817	0.0817	0.0000	191.4123	191.4123	0.0606	0.0000	192.9264
<b>Total</b>	<b>0.1577</b>	<b>1.7675</b>	<b>1.2419</b>	<b>2.1300e-003</b>	<b>0.0813</b>	<b>0.0888</b>	<b>0.1701</b>	<b>0.0139</b>	<b>0.0817</b>	<b>0.0956</b>	<b>0.0000</b>	<b>191.4123</b>	<b>191.4123</b>	<b>0.0606</b>	<b>0.0000</b>	<b>192.9264</b>

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**3.3 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	5.4000e-003	0.1870	0.0260	4.7000e-004	9.2700e-003	8.4000e-004	0.0101	2.5500e-003	8.0000e-004	3.3600e-003	0.0000	45.0594	45.0594	3.2500e-003	0.0000	45.1407
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	8.5900e-003	7.0700e-003	0.0670	1.5000e-004	0.0144	1.1000e-004	0.0146	3.8400e-003	1.0000e-004	3.9500e-003	0.0000	13.8093	13.8093	5.4000e-004	0.0000	13.8229
<b>Total</b>	<b>0.0140</b>	<b>0.1940</b>	<b>0.0929</b>	<b>6.2000e-004</b>	<b>0.0237</b>	<b>9.5000e-004</b>	<b>0.0247</b>	<b>6.3900e-003</b>	<b>9.0000e-004</b>	<b>7.3100e-003</b>	<b>0.0000</b>	<b>58.8687</b>	<b>58.8687</b>	<b>3.7900e-003</b>	<b>0.0000</b>	<b>58.9637</b>

**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					0.0311	0.0000	0.0311	5.3100e-003	0.0000	5.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0441	0.3153	1.3073	2.1300e-003		0.0169	0.0169		0.0157	0.0157	0.0000	191.4121	191.4121	0.0606	0.0000	192.9261
<b>Total</b>	<b>0.0441</b>	<b>0.3153</b>	<b>1.3073</b>	<b>2.1300e-003</b>	<b>0.0311</b>	<b>0.0169</b>	<b>0.0479</b>	<b>5.3100e-003</b>	<b>0.0157</b>	<b>0.0211</b>	<b>0.0000</b>	<b>191.4121</b>	<b>191.4121</b>	<b>0.0606</b>	<b>0.0000</b>	<b>192.9261</b>

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**3.3 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	5.4000e-003	0.1870	0.0260	4.7000e-004	6.5100e-003	8.4000e-004	7.3500e-003	1.8800e-003	8.0000e-004	2.6800e-003	0.0000	45.0594	45.0594	3.2500e-003	0.0000	45.1407
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	8.5900e-003	7.0700e-003	0.0670	1.5000e-004	9.4600e-003	1.1000e-004	9.5700e-003	2.6200e-003	1.0000e-004	2.7300e-003	0.0000	13.8093	13.8093	5.4000e-004	0.0000	13.8229
<b>Total</b>	<b>0.0140</b>	<b>0.1940</b>	<b>0.0929</b>	<b>6.2000e-004</b>	<b>0.0160</b>	<b>9.5000e-004</b>	<b>0.0169</b>	<b>4.5000e-003</b>	<b>9.0000e-004</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>58.8687</b>	<b>58.8687</b>	<b>3.7900e-003</b>	<b>0.0000</b>	<b>58.9637</b>

**3.4 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	0.0767	0.6851	0.5578	8.7000e-004		0.0419	0.0419		0.0394	0.0394	0.0000	76.4089	76.4089	0.0186	0.0000	76.8742
<b>Total</b>	<b>0.0767</b>	<b>0.6851</b>	<b>0.5578</b>	<b>8.7000e-004</b>		<b>0.0419</b>	<b>0.0419</b>		<b>0.0394</b>	<b>0.0394</b>	<b>0.0000</b>	<b>76.4089</b>	<b>76.4089</b>	<b>0.0186</b>	<b>0.0000</b>	<b>76.8742</b>



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**3.4 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0347	0.8675	0.2020	1.8800e-003	0.0419	6.8100e-003	0.0487	0.0121	6.5200e-003	0.0187	0.0000	178.0743	178.0743	0.0157	0.0000	178.4667
Worker	0.0732	0.0603	0.5711	1.3100e-003	0.1232	9.6000e-004	0.1241	0.0328	8.8000e-004	0.0337	0.0000	117.7866	117.7866	4.6400e-003	0.0000	117.9026
<b>Total</b>	<b>0.1079</b>	<b>0.9278</b>	<b>0.7731</b>	<b>3.1900e-003</b>	<b>0.1650</b>	<b>7.7700e-003</b>	<b>0.1728</b>	<b>0.0449</b>	<b>7.4000e-003</b>	<b>0.0523</b>	<b>0.0000</b>	<b>295.8609</b>	<b>295.8609</b>	<b>0.0203</b>	<b>0.0000</b>	<b>296.3694</b>

**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	0.0212	0.2920	0.5800	8.7000e-004		0.0165	0.0165		0.0162	0.0162	0.0000	76.4088	76.4088	0.0186	0.0000	76.8741
<b>Total</b>	<b>0.0212</b>	<b>0.2920</b>	<b>0.5800</b>	<b>8.7000e-004</b>		<b>0.0165</b>	<b>0.0165</b>		<b>0.0162</b>	<b>0.0162</b>	<b>0.0000</b>	<b>76.4088</b>	<b>76.4088</b>	<b>0.0186</b>	<b>0.0000</b>	<b>76.8741</b>

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**3.4 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0347	0.8675	0.2020	1.8800e-003	0.0301	6.8100e-003	0.0370	9.2500e-003	6.5200e-003	0.0158	0.0000	178.0743	178.0743	0.0157	0.0000	178.4667
Worker	0.0732	0.0603	0.5711	1.3100e-003	0.0807	9.6000e-004	0.0816	0.0224	8.8000e-004	0.0233	0.0000	117.7866	117.7866	4.6400e-003	0.0000	117.9026
<b>Total</b>	<b>0.1079</b>	<b>0.9278</b>	<b>0.7731</b>	<b>3.1900e-003</b>	<b>0.1108</b>	<b>7.7700e-003</b>	<b>0.1186</b>	<b>0.0316</b>	<b>7.4000e-003</b>	<b>0.0390</b>	<b>0.0000</b>	<b>295.8609</b>	<b>295.8609</b>	<b>0.0203</b>	<b>0.0000</b>	<b>296.3694</b>

**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0922	0.8346	0.7329	1.1700e-003		0.0486	0.0486		0.0457	0.0457	0.0000	100.7503	100.7503	0.0246	0.0000	101.3648
<b>Total</b>	<b>0.0922</b>	<b>0.8346</b>	<b>0.7329</b>	<b>1.1700e-003</b>		<b>0.0486</b>	<b>0.0486</b>		<b>0.0457</b>	<b>0.0457</b>	<b>0.0000</b>	<b>100.7503</b>	<b>100.7503</b>	<b>0.0246</b>	<b>0.0000</b>	<b>101.3648</b>

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**3.4 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0375	1.0571	0.2348	2.5000e-003	0.0560	5.8400e-003	0.0619	0.0162	5.5900e-003	0.0218	0.0000	236.7174	236.7174	0.0192	0.0000	237.1972
Worker	0.0878	0.0704	0.6691	1.6900e-003	0.1649	1.2300e-003	0.1661	0.0439	1.1400e-003	0.0450	0.0000	152.6711	152.6711	5.2800e-003	0.0000	152.8031
<b>Total</b>	<b>0.1253</b>	<b>1.1275</b>	<b>0.9039</b>	<b>4.1900e-003</b>	<b>0.2209</b>	<b>7.0700e-003</b>	<b>0.2280</b>	<b>0.0601</b>	<b>6.7300e-003</b>	<b>0.0669</b>	<b>0.0000</b>	<b>389.3885</b>	<b>389.3885</b>	<b>0.0245</b>	<b>0.0000</b>	<b>390.0004</b>

**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	0.0276	0.3834	0.7755	1.1700e-003		0.0213	0.0213		0.0210	0.0210	0.0000	100.7502	100.7502	0.0246	0.0000	101.3647
<b>Total</b>	<b>0.0276</b>	<b>0.3834</b>	<b>0.7755</b>	<b>1.1700e-003</b>		<b>0.0213</b>	<b>0.0213</b>		<b>0.0210</b>	<b>0.0210</b>	<b>0.0000</b>	<b>100.7502</b>	<b>100.7502</b>	<b>0.0246</b>	<b>0.0000</b>	<b>101.3647</b>

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**3.4 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0375	1.0571	0.2348	2.5000e-003	0.0404	5.8400e-003	0.0462	0.0124	5.5900e-003	0.0180	0.0000	236.7174	236.7174	0.0192	0.0000	237.1972
Worker	0.0878	0.0704	0.6691	1.6900e-003	0.1080	1.2300e-003	0.1092	0.0299	1.1400e-003	0.0311	0.0000	152.6711	152.6711	5.2800e-003	0.0000	152.8031
<b>Total</b>	<b>0.1253</b>	<b>1.1275</b>	<b>0.9039</b>	<b>4.1900e-003</b>	<b>0.1483</b>	<b>7.0700e-003</b>	<b>0.1554</b>	<b>0.0423</b>	<b>6.7300e-003</b>	<b>0.0490</b>	<b>0.0000</b>	<b>389.3885</b>	<b>389.3885</b>	<b>0.0245</b>	<b>0.0000</b>	<b>390.0004</b>

**3.5 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	3.3100e-003	0.0341	0.0324	5.0000e-005		2.0700e-003	2.0700e-003		1.9000e-003	1.9000e-003	0.0000	4.1937	4.1937	1.3300e-003	0.0000	4.2269
Paving	8.2700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0116</b>	<b>0.0341</b>	<b>0.0324</b>	<b>5.0000e-005</b>		<b>2.0700e-003</b>	<b>2.0700e-003</b>		<b>1.9000e-003</b>	<b>1.9000e-003</b>	<b>0.0000</b>	<b>4.1937</b>	<b>4.1937</b>	<b>1.3300e-003</b>	<b>0.0000</b>	<b>4.2269</b>

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**3.5 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	8.1000e-004	0.0274	3.9000e-003	7.0000e-005	3.0100e-003	1.3000e-004	3.1400e-003	7.8000e-004	1.3000e-004	9.1000e-004	0.0000	6.9673	6.9673	4.1000e-004	0.0000	6.9777
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	1.5100e-003	1.2400e-003	0.0118	3.0000e-005	2.5400e-003	2.0000e-005	2.5600e-003	6.8000e-004	2.0000e-005	6.9000e-004	0.0000	2.4286	2.4286	1.0000e-004	0.0000	2.4310
<b>Total</b>	<b>2.3200e-003</b>	<b>0.0287</b>	<b>0.0157</b>	<b>1.0000e-004</b>	<b>5.5500e-003</b>	<b>1.5000e-004</b>	<b>5.7000e-003</b>	<b>1.4600e-003</b>	<b>1.5000e-004</b>	<b>1.6000e-003</b>	<b>0.0000</b>	<b>9.3959</b>	<b>9.3959</b>	<b>5.1000e-004</b>	<b>0.0000</b>	<b>9.4086</b>

**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	1.2700e-003	0.0152	0.0352	5.0000e-005		8.2000e-004	8.2000e-004		7.9000e-004	7.9000e-004	0.0000	4.1937	4.1937	1.3300e-003	0.0000	4.2269
Paving	8.2700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>9.5400e-003</b>	<b>0.0152</b>	<b>0.0352</b>	<b>5.0000e-005</b>		<b>8.2000e-004</b>	<b>8.2000e-004</b>		<b>7.9000e-004</b>	<b>7.9000e-004</b>	<b>0.0000</b>	<b>4.1937</b>	<b>4.1937</b>	<b>1.3300e-003</b>	<b>0.0000</b>	<b>4.2269</b>

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**3.5 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	8.1000e-004	0.0274	3.9000e-003	7.0000e-005	1.9600e-003	1.3000e-004	2.0900e-003	5.3000e-004	1.3000e-004	6.5000e-004	0.0000	6.9673	6.9673	4.1000e-004	0.0000	6.9777
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	1.5100e-003	1.2400e-003	0.0118	3.0000e-005	1.6600e-003	2.0000e-005	1.6800e-003	4.6000e-004	2.0000e-005	4.8000e-004	0.0000	2.4286	2.4286	1.0000e-004	0.0000	2.4310
<b>Total</b>	<b>2.3200e-003</b>	<b>0.0287</b>	<b>0.0157</b>	<b>1.0000e-004</b>	<b>3.6200e-003</b>	<b>1.5000e-004</b>	<b>3.7700e-003</b>	<b>9.9000e-004</b>	<b>1.5000e-004</b>	<b>1.1300e-003</b>	<b>0.0000</b>	<b>9.3959</b>	<b>9.3959</b>	<b>5.1000e-004</b>	<b>0.0000</b>	<b>9.4086</b>

**3.5 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0200e-003	0.0412	0.0431	6.0000e-005		2.4000e-003	2.4000e-003		2.2100e-003	2.2100e-003	0.0000	5.4898	5.4898	1.7800e-003	0.0000	5.5342
Paving	0.0111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0151</b>	<b>0.0412</b>	<b>0.0431</b>	<b>6.0000e-005</b>		<b>2.4000e-003</b>	<b>2.4000e-003</b>		<b>2.2100e-003</b>	<b>2.2100e-003</b>	<b>0.0000</b>	<b>5.4898</b>	<b>5.4898</b>	<b>1.7800e-003</b>	<b>0.0000</b>	<b>5.5342</b>

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**3.5 Paving - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.6000e-004	0.0339	4.7900e-003	1.0000e-004	3.1400e-003	1.3000e-004	3.2700e-003	8.3000e-004	1.2000e-004	9.6000e-004	0.0000	9.2251	9.2251	5.1000e-004	0.0000	9.2379
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	1.8100e-003	1.4500e-003	0.0138	3.0000e-005	3.4000e-003	3.0000e-005	3.4200e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	3.1479	3.1479	1.1000e-004	0.0000	3.1506
<b>Total</b>	<b>2.7700e-003</b>	<b>0.0353</b>	<b>0.0186</b>	<b>1.3000e-004</b>	<b>6.5400e-003</b>	<b>1.6000e-004</b>	<b>6.6900e-003</b>	<b>1.7400e-003</b>	<b>1.4000e-004</b>	<b>1.8900e-003</b>	<b>0.0000</b>	<b>12.3730</b>	<b>12.3730</b>	<b>6.2000e-004</b>	<b>0.0000</b>	<b>12.3885</b>

**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	1.6300e-003	0.0196	0.0470	6.0000e-005		1.0200e-003	1.0200e-003		9.9000e-004	9.9000e-004	0.0000	5.4898	5.4898	1.7800e-003	0.0000	5.5342
Paving	0.0111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0127</b>	<b>0.0196</b>	<b>0.0470</b>	<b>6.0000e-005</b>		<b>1.0200e-003</b>	<b>1.0200e-003</b>		<b>9.9000e-004</b>	<b>9.9000e-004</b>	<b>0.0000</b>	<b>5.4898</b>	<b>5.4898</b>	<b>1.7800e-003</b>	<b>0.0000</b>	<b>5.5342</b>

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**3.5 Paving - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.6000e-004	0.0339	4.7900e-003	1.0000e-004	2.0900e-003	1.3000e-004	2.2200e-003	5.7000e-004	1.2000e-004	7.0000e-004	0.0000	9.2251	9.2251	5.1000e-004	0.0000	9.2379
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	1.8100e-003	1.4500e-003	0.0138	3.0000e-005	2.2300e-003	3.0000e-005	2.2500e-003	6.2000e-004	2.0000e-005	6.4000e-004	0.0000	3.1479	3.1479	1.1000e-004	0.0000	3.1506
<b>Total</b>	<b>2.7700e-003</b>	<b>0.0353</b>	<b>0.0186</b>	<b>1.3000e-004</b>	<b>4.3200e-003</b>	<b>1.6000e-004</b>	<b>4.4700e-003</b>	<b>1.1900e-003</b>	<b>1.4000e-004</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>12.3730</b>	<b>12.3730</b>	<b>6.2000e-004</b>	<b>0.0000</b>	<b>12.3885</b>

**3.6 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	1.2091					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6600e-003	0.0597	0.0598	1.0000e-004		4.1800e-003	4.1800e-003		4.1800e-003	4.1800e-003	0.0000	8.2981	8.2981	7.0000e-004	0.0000	8.3156
<b>Total</b>	<b>1.2177</b>	<b>0.0597</b>	<b>0.0598</b>	<b>1.0000e-004</b>		<b>4.1800e-003</b>	<b>4.1800e-003</b>		<b>4.1800e-003</b>	<b>4.1800e-003</b>	<b>0.0000</b>	<b>8.2981</b>	<b>8.2981</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>8.3156</b>



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**3.6 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	6.7000e-004	0.0229	3.2500e-003	6.0000e-005	2.5100e-003	1.1000e-004	2.6200e-003	6.5000e-004	1.1000e-004	7.6000e-004	0.0000	5.8061	5.8061	3.4000e-004	0.0000	5.8147
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0147	0.0121	0.1142	2.6000e-004	0.0246	1.9000e-004	0.0248	6.5600e-003	1.8000e-004	6.7400e-003	0.0000	23.5573	23.5573	9.3000e-004	0.0000	23.5805
<b>Total</b>	<b>0.0153</b>	<b>0.0349</b>	<b>0.1175</b>	<b>3.2000e-004</b>	<b>0.0271</b>	<b>3.0000e-004</b>	<b>0.0274</b>	<b>7.2100e-003</b>	<b>2.9000e-004</b>	<b>7.5000e-003</b>	<b>0.0000</b>	<b>29.3634</b>	<b>29.3634</b>	<b>1.2700e-003</b>	<b>0.0000</b>	<b>29.3952</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2091					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9300e-003	0.0441	0.0596	1.0000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003	0.0000	8.2981	8.2981	7.0000e-004	0.0000	8.3156
<b>Total</b>	<b>1.2110</b>	<b>0.0441</b>	<b>0.0596</b>	<b>1.0000e-004</b>		<b>3.0900e-003</b>	<b>3.0900e-003</b>		<b>3.0900e-003</b>	<b>3.0900e-003</b>	<b>0.0000</b>	<b>8.2981</b>	<b>8.2981</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>8.3156</b>

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**3.6 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	6.7000e-004	0.0229	3.2500e-003	6.0000e-005	1.6300e-003	1.1000e-004	1.7400e-003	4.4000e-004	1.1000e-004	5.4000e-004	0.0000	5.8061	5.8061	3.4000e-004	0.0000	5.8147
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0147	0.0121	0.1142	2.6000e-004	0.0161	1.9000e-004	0.0163	4.4700e-003	1.8000e-004	4.6500e-003	0.0000	23.5573	23.5573	9.3000e-004	0.0000	23.5805
<b>Total</b>	<b>0.0153</b>	<b>0.0349</b>	<b>0.1175</b>	<b>3.2000e-004</b>	<b>0.0178</b>	<b>3.0000e-004</b>	<b>0.0181</b>	<b>4.9100e-003</b>	<b>2.9000e-004</b>	<b>5.1900e-003</b>	<b>0.0000</b>	<b>29.3634</b>	<b>29.3634</b>	<b>1.2700e-003</b>	<b>0.0000</b>	<b>29.3952</b>

**3.6 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6183					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0105	0.0733	0.0797	1.3000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003	0.0000	11.1067	11.1067	8.6000e-004	0.0000	11.1282
<b>Total</b>	<b>1.6288</b>	<b>0.0733</b>	<b>0.0797</b>	<b>1.3000e-004</b>		<b>4.8300e-003</b>	<b>4.8300e-003</b>		<b>4.8300e-003</b>	<b>4.8300e-003</b>	<b>0.0000</b>	<b>11.1067</b>	<b>11.1067</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>11.1282</b>

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**3.6 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-004	0.0282	3.9900e-003	8.0000e-005	2.6100e-003	1.1000e-004	2.7200e-003	6.9000e-004	1.0000e-004	8.0000e-004	0.0000	7.6876	7.6876	4.3000e-004	0.0000	7.6982
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0176	0.0141	0.1338	3.4000e-004	0.0330	2.5000e-004	0.0332	8.7800e-003	2.3000e-004	9.0100e-003	0.0000	30.5342	30.5342	1.0600e-003	0.0000	30.5606
<b>Total</b>	<b>0.0184</b>	<b>0.0423</b>	<b>0.1378</b>	<b>4.2000e-004</b>	<b>0.0356</b>	<b>3.6000e-004</b>	<b>0.0359</b>	<b>9.4700e-003</b>	<b>3.3000e-004</b>	<b>9.8100e-003</b>	<b>0.0000</b>	<b>38.2218</b>	<b>38.2218</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>38.2589</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6183					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5900e-003	0.0590	0.0797	1.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	11.1066	11.1066	8.6000e-004	0.0000	11.1281
<b>Total</b>	<b>1.6209</b>	<b>0.0590</b>	<b>0.0797</b>	<b>1.3000e-004</b>		<b>4.1400e-003</b>	<b>4.1400e-003</b>		<b>4.1400e-003</b>	<b>4.1400e-003</b>	<b>0.0000</b>	<b>11.1066</b>	<b>11.1066</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>11.1281</b>

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**3.6 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-004	0.0282	3.9900e-003	8.0000e-005	1.7400e-003	1.1000e-004	1.8500e-003	4.8000e-004	1.0000e-004	5.8000e-004	0.0000	7.6876	7.6876	4.3000e-004	0.0000	7.6982
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0176	0.0141	0.1338	3.4000e-004	0.0216	2.5000e-004	0.0218	5.9900e-003	2.3000e-004	6.2100e-003	0.0000	30.5342	30.5342	1.0600e-003	0.0000	30.5606
<b>Total</b>	<b>0.0184</b>	<b>0.0423</b>	<b>0.1378</b>	<b>4.2000e-004</b>	<b>0.0233</b>	<b>3.6000e-004</b>	<b>0.0237</b>	<b>6.4700e-003</b>	<b>3.3000e-004</b>	<b>6.7900e-003</b>	<b>0.0000</b>	<b>38.2218</b>	<b>38.2218</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>38.2589</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

Employee Vanpool/Shuttle

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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	3.5699	27.8243	29.6461	0.0927	4.8633	0.1166	4.9799	1.3101	0.1103	1.4204	0.0000	8,570.3584	8,570.3584	0.8409	0.0000	8,591.3807
Unmitigated	3.5699	27.8243	29.6461	0.0927	4.8633	0.1166	4.9799	1.3101	0.1103	1.4204	0.0000	8,570.3584	8,570.3584	0.8409	0.0000	8,591.3807

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Discount Club	5,249.38	5,249.38	5,249.38	8,086,528	8,086,528
Fast Food Restaurant with Drive Thru	1,720.94	1,720.94	1,720.94	1,607,921	1,607,921
Gasoline/Service Station	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	2,192.08	2,192.08	2,192.08	3,375,874	3,375,874
<b>Total</b>	<b>9,162.40</b>	<b>9,162.40</b>	<b>9,162.40</b>	<b>13,070,323</b>	<b>13,070,323</b>

4.3 Trip Type Information

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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
Discount Club	9.50	7.30	7.30	16.70	64.30	19.00	45	40	15
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Discount Club	0.504118	0.034156	0.184227	0.115679	0.038681	0.007500	0.013254	0.090536	0.001365	0.001353	0.006129	0.001330	0.001672
Fast Food Restaurant with Drive Thru	0.504118	0.034156	0.184227	0.115679	0.038681	0.007500	0.013254	0.090536	0.001365	0.001353	0.006129	0.001330	0.001672
Gasoline/Service Station	0.504118	0.034156	0.184227	0.115679	0.038681	0.007500	0.013254	0.090536	0.001365	0.001353	0.006129	0.001330	0.001672
Other Non-Asphalt Surfaces	0.504118	0.034156	0.184227	0.115679	0.038681	0.007500	0.013254	0.090536	0.001365	0.001353	0.006129	0.001330	0.001672
Other Non-Asphalt Surfaces	0.504118	0.034156	0.184227	0.115679	0.038681	0.007500	0.013254	0.090536	0.001365	0.001353	0.006129	0.001330	0.001672
Parking Lot	0.504118	0.034156	0.184227	0.115679	0.038681	0.007500	0.013254	0.090536	0.001365	0.001353	0.006129	0.001330	0.001672
Strip Mall	0.504118	0.034156	0.184227	0.115679	0.038681	0.007500	0.013254	0.090536	0.001365	0.001353	0.006129	0.001330	0.001672

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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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					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	214.8352	214.8352	0.0283	5.8600e-003	217.2892
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	214.8352	214.8352	0.0283	5.8600e-003	217.2892
NaturalGas Mitigated	0.0206	0.1875	0.1575	1.1300e-003			0.0143	0.0143		0.0143	0.0000	204.1217	204.1217	3.9100e-003	3.7400e-003	205.3347
NaturalGas Unmitigated	0.0206	0.1875	0.1575	1.1300e-003			0.0143	0.0143		0.0143	0.0000	204.1217	204.1217	3.9100e-003	3.7400e-003	205.3347

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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					
Discount Club	1.62854e+006	8.7800e-003	0.0798	0.0671	4.8000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.0000	86.9051	86.9051	1.6700e-003	1.5900e-003	87.4215
Fast Food Restaurant with Drive Thru	1.43086e+006	7.7200e-003	0.0701	0.0589	4.2000e-004		5.3300e-003	5.3300e-003		5.3300e-003	5.3300e-003	0.0000	76.3559	76.3559	1.4600e-003	1.4000e-003	76.8097
Gasoline/Service Station	88389.7	4.8000e-004	4.3300e-003	3.6400e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	4.7168	4.7168	9.0000e-005	9.0000e-005	4.7448
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Strip Mall	677310	3.6500e-003	0.0332	0.0279	2.0000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	36.1438	36.1438	6.9000e-004	6.6000e-004	36.3586
<b>Total</b>		<b>0.0206</b>	<b>0.1875</b>	<b>0.1575</b>	<b>1.1300e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>204.1217</b>	<b>204.1217</b>	<b>3.9100e-003</b>	<b>3.7400e-003</b>	<b>205.3347</b>



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**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Discount Club	1.62854e+006	8.7800e-003	0.0798	0.0671	4.8000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.0000	86.9051	86.9051	1.6700e-003	1.5900e-003	87.4215
Fast Food Restaurant with Drive Thru	1.43086e+006	7.7200e-003	0.0701	0.0589	4.2000e-004		5.3300e-003	5.3300e-003		5.3300e-003	5.3300e-003	0.0000	76.3559	76.3559	1.4600e-003	1.4000e-003	76.8097
Gasoline/Service Station	88389.7	4.8000e-004	4.3300e-003	3.6400e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	4.7168	4.7168	9.0000e-005	9.0000e-005	4.7448
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Strip Mall	677310	3.6500e-003	0.0332	0.0279	2.0000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	36.1438	36.1438	6.9000e-004	6.6000e-004	36.3586
<b>Total</b>		<b>0.0206</b>	<b>0.1875</b>	<b>0.1575</b>	<b>1.1300e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>204.1217</b>	<b>204.1217</b>	<b>3.9100e-003</b>	<b>3.7400e-003</b>	<b>205.3347</b>

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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			
Discount Club	1.24043e+006	123.7829	0.0163	3.3800e-003	125.1969
Fast Food Restaurant with Drive Thru	196996	19.6583	2.5900e-003	5.4000e-004	19.8829
Gasoline/Service Station	37354.9	3.7277	4.9000e-004	1.0000e-004	3.7702
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	162190	16.1850	2.1300e-003	4.4000e-004	16.3699
Strip Mall	515895	51.4813	6.7900e-003	1.4000e-003	52.0694
<b>Total</b>		<b>214.8352</b>	<b>0.0283</b>	<b>5.8600e-003</b>	<b>217.2892</b>

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**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Discount Club	1.24043e+006	123.7829	0.0163	3.3800e-003	125.1969
Fast Food Restaurant with Drive Thru	196996	19.6583	2.5900e-003	5.4000e-004	19.8829
Gasoline/Service Station	37354.9	3.7277	4.9000e-004	1.0000e-004	3.7702
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	162190	16.1850	2.1300e-003	4.4000e-004	16.3699
Strip Mall	515895	51.4813	6.7900e-003	1.4000e-003	52.0694
<b>Total</b>		<b>214.8352</b>	<b>0.0283</b>	<b>5.8600e-003</b>	<b>217.2892</b>

**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	1.2077	7.0000e-005	7.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Unmitigated	1.2077	7.0000e-005	7.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164

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	0.2827					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.5000e-004	7.0000e-005	7.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
<b>Total</b>	<b>1.2077</b>	<b>7.0000e-005</b>	<b>7.9800e-003</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0154</b>	<b>0.0154</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0164</b>

River Crossing Marketplace - Shasta County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2827					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.5000e-004	7.0000e-005	7.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
<b>Total</b>	<b>1.2077</b>	<b>7.0000e-005</b>	<b>7.9800e-003</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0154</b>	<b>0.0154</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0164</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

River Crossing Marketplace - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.1839	0.4818	0.0117	31.7026
Unmitigated	19.3427	0.6022	0.0145	38.7310

River Crossing Marketplace - Shasta County, Annual

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Discount Club	11.2738 / 6.90977	12.0775	0.3685	8.9100e-003	23.9435
Fast Food Restaurant with Drive Thru	2.06403 / 0.131747	1.8153	0.0674	1.6200e-003	3.9833
Gasoline/Service Station	0.398457 / 0.244215	0.4269	0.0130	3.1000e-004	0.8462
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.68879 / 2.87377	5.0230	0.1533	3.7000e-003	9.9581
<b>Total</b>		<b>19.3427</b>	<b>0.6022</b>	<b>0.0145</b>	<b>38.7310</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Discount Club	9.01907 / 6.90977	10.1447	0.2949	7.1400e-003	19.6429
Fast Food Restaurant with Drive Thru	1.65122 / 0.131747	1.4615	0.0539	1.3000e-003	3.1959
Gasoline/Service Station	0.318765 / 0.244215	0.3586	0.0104	2.5000e-004	0.6943
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3.75103 / 2.87377	4.2192	0.1226	2.9700e-003	8.1695
<b>Total</b>		<b>16.1839</b>	<b>0.4818</b>	<b>0.0117</b>	<b>31.7026</b>

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**



River Crossing Marketplace - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	165.5473	9.7836	0.0000	410.1363
Unmitigated	165.5473	9.7836	0.0000	410.1363

River Crossing Marketplace - Shasta County, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Discount Club	654.57	132.8718	7.8525	0.0000	329.1843
Fast Food Restaurant with Drive Thru	78.33	15.9003	0.9397	0.0000	39.3923
Gasoline/Service Station	16.17	3.2824	0.1940	0.0000	8.1319
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	66.47	13.4928	0.7974	0.0000	33.4279
<b>Total</b>		<b>165.5472</b>	<b>9.7836</b>	<b>0.0000</b>	<b>410.1363</b>

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**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Discount Club	654.57	132.8718	7.8525	0.0000	329.1843
Fast Food Restaurant with Drive Thru	78.33	15.9003	0.9397	0.0000	39.3923
Gasoline/Service Station	16.17	3.2824	0.1940	0.0000	8.1319
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	66.47	13.4928	0.7974	0.0000	33.4279
<b>Total</b>		<b>165.5472</b>	<b>9.7836</b>	<b>0.0000</b>	<b>410.1363</b>

**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**

River Crossing Marketplace - Shasta County, Annual

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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River Crossing Marketplace - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	- 2,775.000 0	0.0000	0.0000	- 2,775.000 0

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Trees	25 / 0	- 2,775.000 0	0.0000	0.0000	- 2,775.000 0
<b>Total</b>		- <b>2,775.000</b> 0	<b>0.0000</b>	<b>0.0000</b>	- <b>2,775.000</b> 0

River Crossing Marketplace - Off-Site Improvements - Shasta County, Annual

**River Crossing Marketplace - Off-Site Improvements  
Shasta County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	355.80	1000sqft	8.17	355,800.00	0
Other Non-Asphalt Surfaces	15.50	1000sqft	0.36	15,500.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

River Crossing Marketplace - Off-Site Improvements - Shasta County, Annual

Project Characteristics -

Land Use -

Construction Phase - Off-site construction duration per Project Applicant

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Equipment per Project Applicant

Off-road Equipment - Equipment per Project Applicant

Grading -

Trips and VMT - Haul Trips per Project Applicant

Construction Off-road Equipment Mitigation - Per Redding General Plan Policy 29

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	230.00	25.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	230.00	25.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	230.00	25.00

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tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	PhaseEndDate	5/27/2020	8/9/2019
tblConstructionPhase	PhaseEndDate	5/15/2019	7/5/2019
tblConstructionPhase	PhaseEndDate	4/29/2020	9/13/2019
tblConstructionPhase	PhaseStartDate	4/30/2020	7/6/2019
tblConstructionPhase	PhaseStartDate	4/18/2019	6/1/2019
tblConstructionPhase	PhaseStartDate	4/2/2020	8/10/2019
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers



River Crossing Marketplace - Off-Site Improvements - Shasta County, Annual

tbloffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tbloffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tbloffRoadEquipment	OffRoadEquipmentType		Excavators
tbloffRoadEquipment	OffRoadEquipmentType		Graders
tbloffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
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tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
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tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00

River Crossing Marketplace - Off-Site Improvements - Shasta County, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	740.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,800.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	740.00
tblTripsAndVMT	HaulingTripNumber	0.00	740.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,800.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,800.00
tblTripsAndVMT	VendorTripNumber	61.00	0.00
tblTripsAndVMT	VendorTripNumber	61.00	0.00
tblTripsAndVMT	VendorTripNumber	61.00	0.00

River Crossing Marketplace - Off-Site Improvements - Shasta County, Annual

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3030	3.9533	1.9783	7.3000e-003	0.2424	0.1128	0.3552	0.0462	0.1041	0.1502	0.0000	674.3294	674.3294	0.1133	0.0000	677.1622
2020	0.0671	0.8421	0.4188	2.0100e-003	0.0427	0.0198	0.0625	0.0116	0.0183	0.0299	0.0000	185.9687	185.9687	0.0233	0.0000	186.5503
<b>Maximum</b>	<b>0.3030</b>	<b>3.9533</b>	<b>1.9783</b>	<b>7.3000e-003</b>	<b>0.2424</b>	<b>0.1128</b>	<b>0.3552</b>	<b>0.0462</b>	<b>0.1041</b>	<b>0.1502</b>	<b>0.0000</b>	<b>674.3294</b>	<b>674.3294</b>	<b>0.1133</b>	<b>0.0000</b>	<b>677.1622</b>

**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	0.3030	3.9533	1.9783	7.3000e-003	0.1374	0.1128	0.2502	0.0294	0.1041	0.1335	0.0000	674.3290	674.3290	0.1133	0.0000	677.1618
2020	0.0671	0.8421	0.4188	2.0100e-003	0.0292	0.0198	0.0490	8.2900e-003	0.0183	0.0266	0.0000	185.9687	185.9687	0.0233	0.0000	186.5502
<b>Maximum</b>	<b>0.3030</b>	<b>3.9533</b>	<b>1.9783</b>	<b>7.3000e-003</b>	<b>0.1374</b>	<b>0.1128</b>	<b>0.2502</b>	<b>0.0294</b>	<b>0.1041</b>	<b>0.1335</b>	<b>0.0000</b>	<b>674.3290</b>	<b>674.3290</b>	<b>0.1133</b>	<b>0.0000</b>	<b>677.1618</b>

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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	41.57	0.00	28.37	34.72	0.00	11.13	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	3-7-2019	6-6-2019	0.1222	0.1222
2	6-7-2019	9-6-2019	2.0911	2.0911
3	9-7-2019	12-6-2019	1.5501	1.5501
4	12-7-2019	3-6-2020	1.3912	1.3912
		Highest	2.0911	2.0911

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	0.0372	3.0000e-005	3.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.6300e-003	6.6300e-003	2.0000e-005	0.0000	7.0800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0372</b>	<b>3.0000e-005</b>	<b>3.4300e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>6.6300e-003</b>	<b>6.6300e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>7.0800e-003</b>

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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	0.0372	3.0000e-005	3.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.6300e-003	6.6300e-003	2.0000e-005	0.0000	7.0800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0372</b>	<b>3.0000e-005</b>	<b>3.4300e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>6.6300e-003</b>	<b>6.6300e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>7.0800e-003</b>

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

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Earthwork 1	Grading	6/1/2019	7/5/2019	5	25	
2	Utilities and Concrete 1	Building Construction	7/6/2019	8/9/2019	5	25	
3	Paving-Electrical-Striping 1	Paving	8/10/2019	9/13/2019	5	25	
4	Earthwork 2	Grading	8/10/2019	9/13/2019	5	25	
5	Utilities and Concrete 2	Building Construction	9/14/2019	10/18/2019	5	25	
6	Paving-Electrical-Striping 2	Paving	10/19/2019	11/22/2019	5	25	
7	Earthwork 3	Grading	11/23/2019	12/27/2019	5	25	
8	Utilities and Concrete 3	Building Construction	12/28/2019	1/31/2020	5	25	
9	Paving-Electrical-Striping 3	Paving	2/1/2020	3/6/2020	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 8.53

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving-Electrical-Striping 2	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Earthwork 3	Paving Equipment	1	8.00	132	0.36
Earthwork 3	Plate Compactors	1	8.00	8	0.43
Earthwork 3	Scrapers	2	8.00	367	0.48
Utilities and Concrete 3	Excavators	2	8.00	158	0.38
Utilities and Concrete 3	Graders	1	8.00	187	0.41
Utilities and Concrete 3	Plate Compactors	1	8.00	8	0.43

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Utilities and Concrete 3	Rubber Tired Loaders	2	8.00	203	0.36
Paving-Electrical-Striping 3	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Utilities and Concrete 1	Air Compressors	0	6.00	78	0.48
Utilities and Concrete 1	Cranes	0	7.00	231	0.29
Utilities and Concrete 2	Cranes	0	7.00	231	0.29
Earthwork 1	Excavators	1	8.00	158	0.38
Utilities and Concrete 3	Cranes	0	7.00	231	0.29
Earthwork 2	Excavators	1	8.00	158	0.38
Earthwork 3	Excavators	1	8.00	158	0.38
Paving-Electrical-Striping 1	Pavers	0	8.00	130	0.42
Paving-Electrical-Striping 1	Rollers	3	8.00	80	0.38
Utilities and Concrete 1	Forklifts	0	8.00	89	0.20
Earthwork 1	Rubber Tired Dozers	0	8.00	247	0.40
Utilities and Concrete 2	Forklifts	0	8.00	89	0.20
Earthwork 1	Graders	2	8.00	187	0.41
Earthwork 1	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving-Electrical-Striping 1	Paving Equipment	1	8.00	132	0.36
Utilities and Concrete 3	Forklifts	0	8.00	89	0.20
Utilities and Concrete 1	Generator Sets	0	8.00	84	0.74
Utilities and Concrete 2	Generator Sets	0	8.00	84	0.74
Utilities and Concrete 3	Generator Sets	0	8.00	84	0.74
Earthwork 2	Graders	2	8.00	187	0.41
Earthwork 3	Graders	2	8.00	187	0.41
Paving-Electrical-Striping 2	Pavers	0	8.00	130	0.42
Paving-Electrical-Striping 3	Pavers	0	8.00	130	0.42
Paving-Electrical-Striping 2	Paving Equipment	1	8.00	132	0.36
Paving-Electrical-Striping 3	Paving Equipment	1	8.00	132	0.36

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Paving-Electrical-Striping 2	Rollers	3	8.00	80	0.38
Paving-Electrical-Striping 3	Rollers	3	8.00	80	0.38
Earthwork 2	Rubber Tired Dozers	0	8.00	247	0.40
Earthwork 3	Rubber Tired Dozers	0	8.00	247	0.40
Utilities and Concrete 1	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Utilities and Concrete 2	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Utilities and Concrete 3	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Earthwork 2	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Earthwork 3	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Utilities and Concrete 1	Welders	0	8.00	46	0.45
Utilities and Concrete 2	Welders	0	8.00	46	0.45
Utilities and Concrete 3	Welders	0	8.00	46	0.45
Earthwork 1	Paving Equipment	1	8.00	132	0.36
Earthwork 1	Plate Compactors	1	8.00	8	0.43
Earthwork 1	Scrapers	2	8.00	367	0.48
Utilities and Concrete 1	Rubber Tired Loaders	2	8.00	203	0.36
Utilities and Concrete 1	Plate Compactors	1	8.00	8	0.43
Utilities and Concrete 1	Excavators	2	8.00	158	0.38
Utilities and Concrete 1	Graders	1	8.00	187	0.41
Paving-Electrical-Striping 1	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Earthwork 2	Paving Equipment	1	8.00	132	0.36
Earthwork 2	Plate Compactors	1	8.00	8	0.43
Earthwork 2	Scrapers	2	8.00	367	0.48
Utilities and Concrete 2	Excavators	2	8.00	158	0.38
Utilities and Concrete 2	Graders	1	8.00	187	0.41
Utilities and Concrete 2	Plate Compactors	1	8.00	8	0.43
Utilities and Concrete 2	Rubber Tired Loaders	2	8.00	203	0.36



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**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
Utilities and Concrete 1	7	156.00	0.00	1,500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities and Concrete 2	7	156.00	0.00	1,500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities and Concrete 3	7	156.00	0.00	1,500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Earthwork 1	7	18.00	0.00	740.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving-Electrical-Striping 1	5	13.00	0.00	1,800.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Earthwork 2	7	18.00	0.00	740.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Earthwork 3	7	18.00	0.00	740.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving-Electrical-Striping 2	5	13.00	0.00	1,800.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving-Electrical-Striping 3	5	13.00	0.00	1,800.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

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**3.2 Earthwork 1 - 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					0.0398	0.0000	0.0398	4.2900e-003	0.0000	4.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0452	0.5522	0.3225	6.7000e-004		0.0211	0.0211		0.0194	0.0194	0.0000	59.6906	59.6906	0.0188	0.0000	60.1606
<b>Total</b>	<b>0.0452</b>	<b>0.5522</b>	<b>0.3225</b>	<b>6.7000e-004</b>	<b>0.0398</b>	<b>0.0211</b>	<b>0.0608</b>	<b>4.2900e-003</b>	<b>0.0194</b>	<b>0.0237</b>	<b>0.0000</b>	<b>59.6906</b>	<b>59.6906</b>	<b>0.0188</b>	<b>0.0000</b>	<b>60.1606</b>

**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	3.3300e-003	0.1130	0.0161	3.0000e-004	6.2100e-003	5.5000e-004	6.7500e-003	1.7100e-003	5.2000e-004	2.2300e-003	0.0000	28.7064	28.7064	1.7000e-003	0.0000	28.7490
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.6000e-004	8.1500e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.6813	1.6813	7.0000e-005	0.0000	1.6830
<b>Total</b>	<b>4.3800e-003</b>	<b>0.1139</b>	<b>0.0242</b>	<b>3.2000e-004</b>	<b>7.9700e-003</b>	<b>5.6000e-004</b>	<b>8.5200e-003</b>	<b>2.1800e-003</b>	<b>5.3000e-004</b>	<b>2.7100e-003</b>	<b>0.0000</b>	<b>30.3877</b>	<b>30.3877</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>30.4320</b>

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**3.2 Earthwork 1 - 2019**

**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					0.0179	0.0000	0.0179	1.9300e-003	0.0000	1.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0452	0.5522	0.3225	6.7000e-004		0.0211	0.0211		0.0194	0.0194	0.0000	59.6905	59.6905	0.0188	0.0000	60.1606
<b>Total</b>	<b>0.0452</b>	<b>0.5522</b>	<b>0.3225</b>	<b>6.7000e-004</b>	<b>0.0179</b>	<b>0.0211</b>	<b>0.0390</b>	<b>1.9300e-003</b>	<b>0.0194</b>	<b>0.0213</b>	<b>0.0000</b>	<b>59.6905</b>	<b>59.6905</b>	<b>0.0188</b>	<b>0.0000</b>	<b>60.1606</b>

**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	3.3300e-003	0.1130	0.0161	3.0000e-004	4.3600e-003	5.5000e-004	4.9100e-003	1.2600e-003	5.2000e-004	1.7800e-003	0.0000	28.7064	28.7064	1.7000e-003	0.0000	28.7490
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.6000e-004	8.1500e-003	2.0000e-005	1.1500e-003	1.0000e-005	1.1700e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.6813	1.6813	7.0000e-005	0.0000	1.6830
<b>Total</b>	<b>4.3800e-003</b>	<b>0.1139</b>	<b>0.0242</b>	<b>3.2000e-004</b>	<b>5.5100e-003</b>	<b>5.6000e-004</b>	<b>6.0800e-003</b>	<b>1.5800e-003</b>	<b>5.3000e-004</b>	<b>2.1100e-003</b>	<b>0.0000</b>	<b>30.3877</b>	<b>30.3877</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>30.4320</b>

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**3.3 Utilities and Concrete 1 - 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	0.0260	0.3023	0.1779	4.1000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	36.9622	36.9622	0.0116	0.0000	37.2525
<b>Total</b>	<b>0.0260</b>	<b>0.3023</b>	<b>0.1779</b>	<b>4.1000e-004</b>		<b>0.0120</b>	<b>0.0120</b>		<b>0.0110</b>	<b>0.0110</b>	<b>0.0000</b>	<b>36.9622</b>	<b>36.9622</b>	<b>0.0116</b>	<b>0.0000</b>	<b>37.2525</b>

**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	6.7600e-003	0.2291	0.0325	6.1000e-004	0.0126	1.1100e-003	0.0137	3.4700e-003	1.0600e-003	4.5300e-003	0.0000	58.1886	58.1886	3.4500e-003	0.0000	58.2749
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	9.0600e-003	7.4700e-003	0.0707	1.6000e-004	0.0152	1.2000e-004	0.0154	4.0600e-003	1.1000e-004	4.1700e-003	0.0000	14.5715	14.5715	5.7000e-004	0.0000	14.5859
<b>Total</b>	<b>0.0158</b>	<b>0.2366</b>	<b>0.1032</b>	<b>7.7000e-004</b>	<b>0.0278</b>	<b>1.2300e-003</b>	<b>0.0291</b>	<b>7.5300e-003</b>	<b>1.1700e-003</b>	<b>8.7000e-003</b>	<b>0.0000</b>	<b>72.7602</b>	<b>72.7602</b>	<b>4.0200e-003</b>	<b>0.0000</b>	<b>72.8608</b>

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**3.3 Utilities and Concrete 1 - 2019**

**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	0.0260	0.3023	0.1779	4.1000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	36.9622	36.9622	0.0116	0.0000	37.2525
<b>Total</b>	<b>0.0260</b>	<b>0.3023</b>	<b>0.1779</b>	<b>4.1000e-004</b>		<b>0.0120</b>	<b>0.0120</b>		<b>0.0110</b>	<b>0.0110</b>	<b>0.0000</b>	<b>36.9622</b>	<b>36.9622</b>	<b>0.0116</b>	<b>0.0000</b>	<b>37.2525</b>

**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	6.7600e-003	0.2291	0.0325	6.1000e-004	8.8400e-003	1.1100e-003	9.9400e-003	2.5500e-003	1.0600e-003	3.6100e-003	0.0000	58.1886	58.1886	3.4500e-003	0.0000	58.2749
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	9.0600e-003	7.4700e-003	0.0707	1.6000e-004	9.9800e-003	1.2000e-004	0.0101	2.7700e-003	1.1000e-004	2.8800e-003	0.0000	14.5715	14.5715	5.7000e-004	0.0000	14.5859
<b>Total</b>	<b>0.0158</b>	<b>0.2366</b>	<b>0.1032</b>	<b>7.7000e-004</b>	<b>0.0188</b>	<b>1.2300e-003</b>	<b>0.0200</b>	<b>5.3200e-003</b>	<b>1.1700e-003</b>	<b>6.4900e-003</b>	<b>0.0000</b>	<b>72.7602</b>	<b>72.7602</b>	<b>4.0200e-003</b>	<b>0.0000</b>	<b>72.8608</b>

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**3.4 Paving-Electrical-Striping 1 - 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	0.0141	0.1415	0.1319	1.9000e-004		8.8700e-003	8.8700e-003		8.1600e-003	8.1600e-003	0.0000	16.8953	16.8953	5.3500e-003	0.0000	17.0290
Paving	0.0107					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0248</b>	<b>0.1415</b>	<b>0.1319</b>	<b>1.9000e-004</b>		<b>8.8700e-003</b>	<b>8.8700e-003</b>		<b>8.1600e-003</b>	<b>8.1600e-003</b>	<b>0.0000</b>	<b>16.8953</b>	<b>16.8953</b>	<b>5.3500e-003</b>	<b>0.0000</b>	<b>17.0290</b>

**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	8.1100e-003	0.2750	0.0391	7.3000e-004	0.0151	1.3300e-003	0.0164	4.1600e-003	1.2700e-003	5.4300e-003	0.0000	69.8264	69.8264	4.1400e-003	0.0000	69.9299
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.2000e-004	5.8900e-003	1.0000e-005	1.2700e-003	1.0000e-005	1.2800e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.2143	1.2143	5.0000e-005	0.0000	1.2155
<b>Total</b>	<b>8.8700e-003</b>	<b>0.2756</b>	<b>0.0449</b>	<b>7.4000e-004</b>	<b>0.0164</b>	<b>1.3400e-003</b>	<b>0.0177</b>	<b>4.5000e-003</b>	<b>1.2800e-003</b>	<b>5.7800e-003</b>	<b>0.0000</b>	<b>71.0406</b>	<b>71.0406</b>	<b>4.1900e-003</b>	<b>0.0000</b>	<b>71.1454</b>

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**3.4 Paving-Electrical-Striping 1 - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0141	0.1415	0.1319	1.9000e-004		8.8700e-003	8.8700e-003		8.1600e-003	8.1600e-003	0.0000	16.8953	16.8953	5.3500e-003	0.0000	17.0289
Paving	0.0107					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0248</b>	<b>0.1415</b>	<b>0.1319</b>	<b>1.9000e-004</b>		<b>8.8700e-003</b>	<b>8.8700e-003</b>		<b>8.1600e-003</b>	<b>8.1600e-003</b>	<b>0.0000</b>	<b>16.8953</b>	<b>16.8953</b>	<b>5.3500e-003</b>	<b>0.0000</b>	<b>17.0289</b>

**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	8.1100e-003	0.2750	0.0391	7.3000e-004	0.0106	1.3300e-003	0.0119	3.0600e-003	1.2700e-003	4.3300e-003	0.0000	69.8264	69.8264	4.1400e-003	0.0000	69.9299
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.2000e-004	5.8900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2143	1.2143	5.0000e-005	0.0000	1.2155
<b>Total</b>	<b>8.8700e-003</b>	<b>0.2756</b>	<b>0.0449</b>	<b>7.4000e-004</b>	<b>0.0114</b>	<b>1.3400e-003</b>	<b>0.0128</b>	<b>3.2900e-003</b>	<b>1.2800e-003</b>	<b>4.5700e-003</b>	<b>0.0000</b>	<b>71.0406</b>	<b>71.0406</b>	<b>4.1900e-003</b>	<b>0.0000</b>	<b>71.1454</b>

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**3.5 Earthwork 2 - 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					0.0398	0.0000	0.0398	4.2900e-003	0.0000	4.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0452	0.5522	0.3225	6.7000e-004		0.0211	0.0211		0.0194	0.0194	0.0000	59.6906	59.6906	0.0188	0.0000	60.1606
<b>Total</b>	<b>0.0452</b>	<b>0.5522</b>	<b>0.3225</b>	<b>6.7000e-004</b>	<b>0.0398</b>	<b>0.0211</b>	<b>0.0608</b>	<b>4.2900e-003</b>	<b>0.0194</b>	<b>0.0237</b>	<b>0.0000</b>	<b>59.6906</b>	<b>59.6906</b>	<b>0.0188</b>	<b>0.0000</b>	<b>60.1606</b>

**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	3.3300e-003	0.1130	0.0161	3.0000e-004	6.2100e-003	5.5000e-004	6.7500e-003	1.7100e-003	5.2000e-004	2.2300e-003	0.0000	28.7064	28.7064	1.7000e-003	0.0000	28.7490
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.6000e-004	8.1500e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.6813	1.6813	7.0000e-005	0.0000	1.6830
<b>Total</b>	<b>4.3800e-003</b>	<b>0.1139</b>	<b>0.0242</b>	<b>3.2000e-004</b>	<b>7.9700e-003</b>	<b>5.6000e-004</b>	<b>8.5200e-003</b>	<b>2.1800e-003</b>	<b>5.3000e-004</b>	<b>2.7100e-003</b>	<b>0.0000</b>	<b>30.3877</b>	<b>30.3877</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>30.4320</b>



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**3.5 Earthwork 2 - 2019**

**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					0.0179	0.0000	0.0179	1.9300e-003	0.0000	1.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0452	0.5522	0.3225	6.7000e-004		0.0211	0.0211		0.0194	0.0194	0.0000	59.6905	59.6905	0.0188	0.0000	60.1606
<b>Total</b>	<b>0.0452</b>	<b>0.5522</b>	<b>0.3225</b>	<b>6.7000e-004</b>	<b>0.0179</b>	<b>0.0211</b>	<b>0.0390</b>	<b>1.9300e-003</b>	<b>0.0194</b>	<b>0.0213</b>	<b>0.0000</b>	<b>59.6905</b>	<b>59.6905</b>	<b>0.0188</b>	<b>0.0000</b>	<b>60.1606</b>

**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	3.3300e-003	0.1130	0.0161	3.0000e-004	4.3600e-003	5.5000e-004	4.9100e-003	1.2600e-003	5.2000e-004	1.7800e-003	0.0000	28.7064	28.7064	1.7000e-003	0.0000	28.7490
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.6000e-004	8.1500e-003	2.0000e-005	1.1500e-003	1.0000e-005	1.1700e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.6813	1.6813	7.0000e-005	0.0000	1.6830
<b>Total</b>	<b>4.3800e-003</b>	<b>0.1139</b>	<b>0.0242</b>	<b>3.2000e-004</b>	<b>5.5100e-003</b>	<b>5.6000e-004</b>	<b>6.0800e-003</b>	<b>1.5800e-003</b>	<b>5.3000e-004</b>	<b>2.1100e-003</b>	<b>0.0000</b>	<b>30.3877</b>	<b>30.3877</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>30.4320</b>

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**3.6 Utilities and Concrete 2 - 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	0.0260	0.3023	0.1779	4.1000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	36.9622	36.9622	0.0116	0.0000	37.2525
<b>Total</b>	<b>0.0260</b>	<b>0.3023</b>	<b>0.1779</b>	<b>4.1000e-004</b>		<b>0.0120</b>	<b>0.0120</b>		<b>0.0110</b>	<b>0.0110</b>	<b>0.0000</b>	<b>36.9622</b>	<b>36.9622</b>	<b>0.0116</b>	<b>0.0000</b>	<b>37.2525</b>

**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	6.7600e-003	0.2291	0.0325	6.1000e-004	0.0126	1.1100e-003	0.0137	3.4700e-003	1.0600e-003	4.5300e-003	0.0000	58.1886	58.1886	3.4500e-003	0.0000	58.2749
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	9.0600e-003	7.4700e-003	0.0707	1.6000e-004	0.0152	1.2000e-004	0.0154	4.0600e-003	1.1000e-004	4.1700e-003	0.0000	14.5715	14.5715	5.7000e-004	0.0000	14.5859
<b>Total</b>	<b>0.0158</b>	<b>0.2366</b>	<b>0.1032</b>	<b>7.7000e-004</b>	<b>0.0278</b>	<b>1.2300e-003</b>	<b>0.0291</b>	<b>7.5300e-003</b>	<b>1.1700e-003</b>	<b>8.7000e-003</b>	<b>0.0000</b>	<b>72.7602</b>	<b>72.7602</b>	<b>4.0200e-003</b>	<b>0.0000</b>	<b>72.8608</b>

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**3.6 Utilities and Concrete 2 - 2019**

**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	0.0260	0.3023	0.1779	4.1000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	36.9622	36.9622	0.0116	0.0000	37.2525
<b>Total</b>	<b>0.0260</b>	<b>0.3023</b>	<b>0.1779</b>	<b>4.1000e-004</b>		<b>0.0120</b>	<b>0.0120</b>		<b>0.0110</b>	<b>0.0110</b>	<b>0.0000</b>	<b>36.9622</b>	<b>36.9622</b>	<b>0.0116</b>	<b>0.0000</b>	<b>37.2525</b>

**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	6.7600e-003	0.2291	0.0325	6.1000e-004	8.8400e-003	1.1100e-003	9.9400e-003	2.5500e-003	1.0600e-003	3.6100e-003	0.0000	58.1886	58.1886	3.4500e-003	0.0000	58.2749
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	9.0600e-003	7.4700e-003	0.0707	1.6000e-004	9.9800e-003	1.2000e-004	0.0101	2.7700e-003	1.1000e-004	2.8800e-003	0.0000	14.5715	14.5715	5.7000e-004	0.0000	14.5859
<b>Total</b>	<b>0.0158</b>	<b>0.2366</b>	<b>0.1032</b>	<b>7.7000e-004</b>	<b>0.0188</b>	<b>1.2300e-003</b>	<b>0.0200</b>	<b>5.3200e-003</b>	<b>1.1700e-003</b>	<b>6.4900e-003</b>	<b>0.0000</b>	<b>72.7602</b>	<b>72.7602</b>	<b>4.0200e-003</b>	<b>0.0000</b>	<b>72.8608</b>

River Crossing Marketplace - Off-Site Improvements - Shasta County, Annual

**3.7 Paving-Electrical-Striping 2 - 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	0.0141	0.1415	0.1319	1.9000e-004		8.8700e-003	8.8700e-003		8.1600e-003	8.1600e-003	0.0000	16.8953	16.8953	5.3500e-003	0.0000	17.0290
Paving	0.0107					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0248</b>	<b>0.1415</b>	<b>0.1319</b>	<b>1.9000e-004</b>		<b>8.8700e-003</b>	<b>8.8700e-003</b>		<b>8.1600e-003</b>	<b>8.1600e-003</b>	<b>0.0000</b>	<b>16.8953</b>	<b>16.8953</b>	<b>5.3500e-003</b>	<b>0.0000</b>	<b>17.0290</b>

**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	8.1100e-003	0.2750	0.0391	7.3000e-004	0.0151	1.3300e-003	0.0164	4.1600e-003	1.2700e-003	5.4300e-003	0.0000	69.8264	69.8264	4.1400e-003	0.0000	69.9299
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.2000e-004	5.8900e-003	1.0000e-005	1.2700e-003	1.0000e-005	1.2800e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.2143	1.2143	5.0000e-005	0.0000	1.2155
<b>Total</b>	<b>8.8700e-003</b>	<b>0.2756</b>	<b>0.0449</b>	<b>7.4000e-004</b>	<b>0.0164</b>	<b>1.3400e-003</b>	<b>0.0177</b>	<b>4.5000e-003</b>	<b>1.2800e-003</b>	<b>5.7800e-003</b>	<b>0.0000</b>	<b>71.0406</b>	<b>71.0406</b>	<b>4.1900e-003</b>	<b>0.0000</b>	<b>71.1454</b>

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**3.7 Paving-Electrical-Striping 2 - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0141	0.1415	0.1319	1.9000e-004		8.8700e-003	8.8700e-003		8.1600e-003	8.1600e-003	0.0000	16.8953	16.8953	5.3500e-003	0.0000	17.0289
Paving	0.0107					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0248</b>	<b>0.1415</b>	<b>0.1319</b>	<b>1.9000e-004</b>		<b>8.8700e-003</b>	<b>8.8700e-003</b>		<b>8.1600e-003</b>	<b>8.1600e-003</b>	<b>0.0000</b>	<b>16.8953</b>	<b>16.8953</b>	<b>5.3500e-003</b>	<b>0.0000</b>	<b>17.0289</b>

**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	8.1100e-003	0.2750	0.0391	7.3000e-004	0.0106	1.3300e-003	0.0119	3.0600e-003	1.2700e-003	4.3300e-003	0.0000	69.8264	69.8264	4.1400e-003	0.0000	69.9299
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.2000e-004	5.8900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2143	1.2143	5.0000e-005	0.0000	1.2155
<b>Total</b>	<b>8.8700e-003</b>	<b>0.2756</b>	<b>0.0449</b>	<b>7.4000e-004</b>	<b>0.0114</b>	<b>1.3400e-003</b>	<b>0.0128</b>	<b>3.2900e-003</b>	<b>1.2800e-003</b>	<b>4.5700e-003</b>	<b>0.0000</b>	<b>71.0406</b>	<b>71.0406</b>	<b>4.1900e-003</b>	<b>0.0000</b>	<b>71.1454</b>

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**3.8 Earthwork 3 - 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					0.0398	0.0000	0.0398	4.2900e-003	0.0000	4.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0452	0.5522	0.3225	6.7000e-004		0.0211	0.0211		0.0194	0.0194	0.0000	59.6906	59.6906	0.0188	0.0000	60.1606
<b>Total</b>	<b>0.0452</b>	<b>0.5522</b>	<b>0.3225</b>	<b>6.7000e-004</b>	<b>0.0398</b>	<b>0.0211</b>	<b>0.0608</b>	<b>4.2900e-003</b>	<b>0.0194</b>	<b>0.0237</b>	<b>0.0000</b>	<b>59.6906</b>	<b>59.6906</b>	<b>0.0188</b>	<b>0.0000</b>	<b>60.1606</b>

**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	3.3300e-003	0.1130	0.0161	3.0000e-004	6.2100e-003	5.5000e-004	6.7500e-003	1.7100e-003	5.2000e-004	2.2300e-003	0.0000	28.7064	28.7064	1.7000e-003	0.0000	28.7490
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.6000e-004	8.1500e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.6813	1.6813	7.0000e-005	0.0000	1.6830
<b>Total</b>	<b>4.3800e-003</b>	<b>0.1139</b>	<b>0.0242</b>	<b>3.2000e-004</b>	<b>7.9700e-003</b>	<b>5.6000e-004</b>	<b>8.5200e-003</b>	<b>2.1800e-003</b>	<b>5.3000e-004</b>	<b>2.7100e-003</b>	<b>0.0000</b>	<b>30.3877</b>	<b>30.3877</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>30.4320</b>

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**3.8 Earthwork 3 - 2019**

**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					0.0179	0.0000	0.0179	1.9300e-003	0.0000	1.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0452	0.5522	0.3225	6.7000e-004		0.0211	0.0211		0.0194	0.0194	0.0000	59.6905	59.6905	0.0188	0.0000	60.1606
<b>Total</b>	<b>0.0452</b>	<b>0.5522</b>	<b>0.3225</b>	<b>6.7000e-004</b>	<b>0.0179</b>	<b>0.0211</b>	<b>0.0390</b>	<b>1.9300e-003</b>	<b>0.0194</b>	<b>0.0213</b>	<b>0.0000</b>	<b>59.6905</b>	<b>59.6905</b>	<b>0.0188</b>	<b>0.0000</b>	<b>60.1606</b>

**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	3.3300e-003	0.1130	0.0161	3.0000e-004	4.3600e-003	5.5000e-004	4.9100e-003	1.2600e-003	5.2000e-004	1.7800e-003	0.0000	28.7064	28.7064	1.7000e-003	0.0000	28.7490
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.6000e-004	8.1500e-003	2.0000e-005	1.1500e-003	1.0000e-005	1.1700e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.6813	1.6813	7.0000e-005	0.0000	1.6830
<b>Total</b>	<b>4.3800e-003</b>	<b>0.1139</b>	<b>0.0242</b>	<b>3.2000e-004</b>	<b>5.5100e-003</b>	<b>5.6000e-004</b>	<b>6.0800e-003</b>	<b>1.5800e-003</b>	<b>5.3000e-004</b>	<b>2.1100e-003</b>	<b>0.0000</b>	<b>30.3877</b>	<b>30.3877</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>30.4320</b>

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**3.9 Utilities and Concrete 3 - 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	2.0800e-003	0.0242	0.0142	3.0000e-005		9.6000e-004	9.6000e-004		8.8000e-004	8.8000e-004	0.0000	2.9570	2.9570	9.3000e-004	0.0000	2.9802
<b>Total</b>	<b>2.0800e-003</b>	<b>0.0242</b>	<b>0.0142</b>	<b>3.0000e-005</b>		<b>9.6000e-004</b>	<b>9.6000e-004</b>		<b>8.8000e-004</b>	<b>8.8000e-004</b>	<b>0.0000</b>	<b>2.9570</b>	<b>2.9570</b>	<b>9.3000e-004</b>	<b>0.0000</b>	<b>2.9802</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0183	2.6000e-003	5.0000e-005	9.6200e-003	9.0000e-005	9.7100e-003	2.3900e-003	8.0000e-005	2.4800e-003	0.0000	4.6551	4.6551	2.8000e-004	0.0000	4.6620
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	6.0000e-004	5.6500e-003	1.0000e-005	1.2200e-003	1.0000e-005	1.2300e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1657	1.1657	5.0000e-005	0.0000	1.1669
<b>Total</b>	<b>1.2600e-003</b>	<b>0.0189</b>	<b>8.2500e-003</b>	<b>6.0000e-005</b>	<b>0.0108</b>	<b>1.0000e-004</b>	<b>0.0109</b>	<b>2.7100e-003</b>	<b>9.0000e-005</b>	<b>2.8100e-003</b>	<b>0.0000</b>	<b>5.8208</b>	<b>5.8208</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>5.8289</b>



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**3.9 Utilities and Concrete 3 - 2019**

**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	2.0800e-003	0.0242	0.0142	3.0000e-005		9.6000e-004	9.6000e-004		8.8000e-004	8.8000e-004	0.0000	2.9570	2.9570	9.3000e-004	0.0000	2.9802
<b>Total</b>	<b>2.0800e-003</b>	<b>0.0242</b>	<b>0.0142</b>	<b>3.0000e-005</b>		<b>9.6000e-004</b>	<b>9.6000e-004</b>		<b>8.8000e-004</b>	<b>8.8000e-004</b>	<b>0.0000</b>	<b>2.9570</b>	<b>2.9570</b>	<b>9.3000e-004</b>	<b>0.0000</b>	<b>2.9802</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0183	2.6000e-003	5.0000e-005	5.8700e-003	9.0000e-005	5.9600e-003	1.4700e-003	8.0000e-005	1.5600e-003	0.0000	4.6551	4.6551	2.8000e-004	0.0000	4.6620
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	6.0000e-004	5.6500e-003	1.0000e-005	8.0000e-004	1.0000e-005	8.1000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	1.1657	1.1657	5.0000e-005	0.0000	1.1669
<b>Total</b>	<b>1.2600e-003</b>	<b>0.0189</b>	<b>8.2500e-003</b>	<b>6.0000e-005</b>	<b>6.6700e-003</b>	<b>1.0000e-004</b>	<b>6.7700e-003</b>	<b>1.6900e-003</b>	<b>9.0000e-005</b>	<b>1.7900e-003</b>	<b>0.0000</b>	<b>5.8208</b>	<b>5.8208</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>5.8289</b>

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**3.9 Utilities and Concrete 3 - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0226	0.2568	0.1623	3.8000e-004		0.0100	0.0100		9.2300e-003	9.2300e-003	0.0000	33.2647	33.2647	0.0107	0.0000	33.5317
<b>Total</b>	<b>0.0226</b>	<b>0.2568</b>	<b>0.1623</b>	<b>3.8000e-004</b>		<b>0.0100</b>	<b>0.0100</b>		<b>9.2300e-003</b>	<b>9.2300e-003</b>	<b>0.0000</b>	<b>33.2647</b>	<b>33.2647</b>	<b>0.0107</b>	<b>0.0000</b>	<b>33.5317</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.5000e-003	0.1944	0.0275	5.6000e-004	0.0123	7.5000e-004	0.0131	3.3700e-003	7.2000e-004	4.0900e-003	0.0000	52.9573	52.9573	2.9300e-003	0.0000	53.0306
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4600e-003	5.9900e-003	0.0569	1.4000e-004	0.0140	1.0000e-004	0.0141	3.7300e-003	1.0000e-004	3.8300e-003	0.0000	12.9822	12.9822	4.5000e-004	0.0000	12.9934
<b>Total</b>	<b>0.0130</b>	<b>0.2003</b>	<b>0.0844</b>	<b>7.0000e-004</b>	<b>0.0263</b>	<b>8.5000e-004</b>	<b>0.0272</b>	<b>7.1000e-003</b>	<b>8.2000e-004</b>	<b>7.9200e-003</b>	<b>0.0000</b>	<b>65.9395</b>	<b>65.9395</b>	<b>3.3800e-003</b>	<b>0.0000</b>	<b>66.0240</b>

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**3.9 Utilities and Concrete 3 - 2020**

**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	0.0226	0.2568	0.1623	3.8000e-004		0.0100	0.0100		9.2300e-003	9.2300e-003	0.0000	33.2646	33.2646	0.0107	0.0000	33.5316
<b>Total</b>	<b>0.0226</b>	<b>0.2568</b>	<b>0.1623</b>	<b>3.8000e-004</b>		<b>0.0100</b>	<b>0.0100</b>		<b>9.2300e-003</b>	<b>9.2300e-003</b>	<b>0.0000</b>	<b>33.2646</b>	<b>33.2646</b>	<b>0.0107</b>	<b>0.0000</b>	<b>33.5316</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.5000e-003	0.1944	0.0275	5.6000e-004	8.5800e-003	7.5000e-004	9.3300e-003	2.4500e-003	7.2000e-004	3.1700e-003	0.0000	52.9573	52.9573	2.9300e-003	0.0000	53.0306
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4600e-003	5.9900e-003	0.0569	1.4000e-004	9.1800e-003	1.0000e-004	9.2900e-003	2.5500e-003	1.0000e-004	2.6400e-003	0.0000	12.9822	12.9822	4.5000e-004	0.0000	12.9934
<b>Total</b>	<b>0.0130</b>	<b>0.2003</b>	<b>0.0844</b>	<b>7.0000e-004</b>	<b>0.0178</b>	<b>8.5000e-004</b>	<b>0.0186</b>	<b>5.0000e-003</b>	<b>8.2000e-004</b>	<b>5.8100e-003</b>	<b>0.0000</b>	<b>65.9395</b>	<b>65.9395</b>	<b>3.3800e-003</b>	<b>0.0000</b>	<b>66.0240</b>

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**3.10 Paving-Electrical-Striping 3 - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0130	0.1310	0.1311	1.9000e-004		7.9700e-003	7.9700e-003		7.3300e-003	7.3300e-003	0.0000	16.5139	16.5139	5.3400e-003	0.0000	16.6474
Paving	0.0107					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0237</b>	<b>0.1310</b>	<b>0.1311</b>	<b>1.9000e-004</b>		<b>7.9700e-003</b>	<b>7.9700e-003</b>		<b>7.3300e-003</b>	<b>7.3300e-003</b>	<b>0.0000</b>	<b>16.5139</b>	<b>16.5139</b>	<b>5.3400e-003</b>	<b>0.0000</b>	<b>16.6474</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.1800e-003	0.2535	0.0359	7.3000e-004	0.0151	9.8000e-004	0.0161	4.1600e-003	9.3000e-004	5.0900e-003	0.0000	69.0747	69.0747	3.8200e-003	0.0000	69.1703
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	6.8000e-004	5.4000e-004	5.1500e-003	1.0000e-005	1.2700e-003	1.0000e-005	1.2800e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1759	1.1759	4.0000e-005	0.0000	1.1769
<b>Total</b>	<b>7.8600e-003</b>	<b>0.2540</b>	<b>0.0410</b>	<b>7.4000e-004</b>	<b>0.0164</b>	<b>9.9000e-004</b>	<b>0.0174</b>	<b>4.5000e-003</b>	<b>9.4000e-004</b>	<b>5.4400e-003</b>	<b>0.0000</b>	<b>70.2507</b>	<b>70.2507</b>	<b>3.8600e-003</b>	<b>0.0000</b>	<b>70.3472</b>

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**3.10 Paving-Electrical-Striping 3 - 2020**

**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	0.0130	0.1310	0.1311	1.9000e-004		7.9700e-003	7.9700e-003		7.3300e-003	7.3300e-003	0.0000	16.5139	16.5139	5.3400e-003	0.0000	16.6474
Paving	0.0107					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0237</b>	<b>0.1310</b>	<b>0.1311</b>	<b>1.9000e-004</b>		<b>7.9700e-003</b>	<b>7.9700e-003</b>		<b>7.3300e-003</b>	<b>7.3300e-003</b>	<b>0.0000</b>	<b>16.5139</b>	<b>16.5139</b>	<b>5.3400e-003</b>	<b>0.0000</b>	<b>16.6474</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.1800e-003	0.2535	0.0359	7.3000e-004	0.0106	9.8000e-004	0.0116	3.0600e-003	9.3000e-004	3.9900e-003	0.0000	69.0747	69.0747	3.8200e-003	0.0000	69.1703
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	6.8000e-004	5.4000e-004	5.1500e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.1759	1.1759	4.0000e-005	0.0000	1.1769
<b>Total</b>	<b>7.8600e-003</b>	<b>0.2540</b>	<b>0.0410</b>	<b>7.4000e-004</b>	<b>0.0114</b>	<b>9.9000e-004</b>	<b>0.0124</b>	<b>3.2900e-003</b>	<b>9.4000e-004</b>	<b>4.2300e-003</b>	<b>0.0000</b>	<b>70.2507</b>	<b>70.2507</b>	<b>3.8600e-003</b>	<b>0.0000</b>	<b>70.3472</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**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
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**







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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			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**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	0.0372	3.0000e-005	3.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.6300e-003	6.6300e-003	2.0000e-005	0.0000	7.0800e-003
Unmitigated	0.0372	3.0000e-005	3.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.6300e-003	6.6300e-003	2.0000e-005	0.0000	7.0800e-003

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	0.0129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e-004	3.0000e-005	3.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.6300e-003	6.6300e-003	2.0000e-005	0.0000	7.0800e-003
<b>Total</b>	<b>0.0372</b>	<b>3.0000e-005</b>	<b>3.4300e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>6.6300e-003</b>	<b>6.6300e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>7.0800e-003</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e-004	3.0000e-005	3.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.6300e-003	6.6300e-003	2.0000e-005	0.0000	7.0800e-003
<b>Total</b>	<b>0.0372</b>	<b>3.0000e-005</b>	<b>3.4300e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>6.6300e-003</b>	<b>6.6300e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>7.0800e-003</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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

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**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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