**APPENDIX C**

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**CalEEMod Output Data**

Phase I Construction - South Coast Air Basin, Annual

# Phase I Construction

**South Coast Air Basin, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 5.00 | Acre | 5.00 | 217,800.00 | 0 |
| Single Family Housing | 144.00 | Dwelling Unit | 20.00 | 433,711.00 | 412 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2025 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -
Land Use - Based on Phasing Summary
Construction Phase - According to Phasing Plan
Demolition - Vacant Site
Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.
Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 20.00 | 44.00 |
| tblLandUse | LandUseSquareFeet | 259,200.00 | 433,711.00 |
| tblLandUse | LotAcreage | 46.75 | 20.00 |

## 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 | | | | | |
| 2023 | 0.3070 | 2.6611 | 2.9265 | 7.1100e-003 | 0.3683 | 0.1054 | 0.4737 | 0.1213 | 0.0986 | 0.2199 | 0.0000 | 636.0015 | 636.0015 | 0.1040 | 0.0000 | 638.6012 |
| 2024 | 1.5300 | 1.1789 | 1.4988 | 3.5800e-003 | 0.1240 | 0.0444 | 0.1684 | 0.0334 | 0.0418 | 0.0751 | 0.0000 | 321.0394 | 321.0394 | 0.0461 | 0.0000 | 322.1929 |
| **Maximum** | **1.5300** | **2.6611** | **2.9265** | **7.1100e-003** | **0.3683** | **0.1054** | **0.4737** | **0.1213** | **0.0986** | **0.2199** | **0.0000** | **636.0015** | **636.0015** | **0.1040** | **0.0000** | **638.6012** |

### 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 | | | | | |
| 2023 | 0.1744 | 2.1388 | 3.2615 | 7.1100e-003 | 0.2757 | 0.0204 | 0.2961 | 0.0829 | 0.0203 | 0.1032 | 0.0000 | 636.0011 | 636.0011 | 0.1040 | 0.0000 | 638.6008 |
| 2024 | 1.4744 | 1.0452 | 1.6301 | 3.5800e-003 | 0.1240 | 0.0105 | 0.1344 | 0.0334 | 0.0104 | 0.0438 | 0.0000 | 321.0392 | 321.0392 | 0.0461 | 0.0000 | 322.1927 |
| **Maximum** | **1.4744** | **2.1388** | **3.2615** | **7.1100e-003** | **0.2757** | **0.0204** | **0.2961** | **0.0829** | **0.0203** | **0.1032** | **0.0000** | **636.0011** | **636.0011** | **0.1040** | **0.0000** | **638.6008** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **10.24** | **17.08** | **-10.54** | **0.00** | **18.81** | **79.38** | **32.94** | **24.83** | **78.14** | **50.19** | **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 | 1-2-2023 | 4-1-2023 | 0.9518 | 0.6848 |
| 2 | 4-2-2023 | 7-1-2023 | 0.6631 | 0.5362 |

| | | | | |
|---|---|---|---|---|
| **3** | **7-2-2023** | **10-1-2023** | 0.6704 | 0.5421 |
| **4** | **10-2-2023** | **1-1-2024** | 0.6724 | 0.5445 |
| **5** | **1-2-2024** | **4-1-2024** | 0.6293 | 0.5363 |
| **6** | **4-2-2024** | **7-1-2024** | 2.0741 | 1.9796 |
| | | **Highest** | 2.0741 | 1.9796 |

## 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 | 2.2362 | 0.0544 | 2.3991 | 2.4100e-003 | | 0.1457 | 0.1457 | | 0.1457 | 0.1457 | 15.2956 | 31.8187 | 47.1142 | 0.0479 | 1.0400e-003 | 48.6220 |
| Energy | 0.0238 | 0.2030 | 0.0864 | 1.3000e-003 | | 0.0164 | 0.0164 | | 0.0164 | 0.0164 | 0.0000 | 635.0378 | 635.0378 | 0.0210 | 7.7300e-003 | 637.8657 |
| Mobile | 0.3271 | 1.6126 | 4.4852 | 0.0190 | 1.7652 | 0.0138 | 1.7790 | 0.4729 | 0.0128 | 0.4857 | 0.0000 | 1,756.1483 | 1,756.1483 | 0.0759 | 0.0000 | 1,758.0466 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 34.2892 | 0.0000 | 34.2892 | 2.0264 | 0.0000 | 84.9501 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 2.9765 | 59.8624 | 62.8389 | 0.3082 | 7.7300e-003 | 72.8472 |
| **Total** | **2.5871** | **1.8701** | **6.9706** | **0.0227** | **1.7652** | **0.1759** | **1.9412** | **0.4729** | **0.1750** | **0.6478** | **52.5613** | **2,482.8671** | **2,535.4284** | **2.4795** | **0.0165** | **2,602.3316** |

### 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 | 2.2362 | 0.0544 | 2.3991 | 2.4100e-003 | | 0.1457 | 0.1457 | | 0.1457 | 0.1457 | 15.2956 | 31.8187 | 47.1142 | 0.0479 | 1.0400e-003 | 48.6220 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.0238 | 0.2030 | 0.0864 | 1.3000e-003 | | 0.0164 | 0.0164 | | 0.0164 | 0.0164 | 0.0000 | 635.0378 | 635.0378 | 0.0210 | 7.7300e-003 | 637.8657 |
| Mobile | 0.3271 | 1.6126 | 4.4852 | 0.0190 | 1.7652 | 0.0138 | 1.7790 | 0.4729 | 0.0128 | 0.4857 | 0.0000 | 1,756.1483 | 1,756.1483 | 0.0759 | 0.0000 | 1,758.0466 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 34.2892 | 0.0000 | 34.2892 | 2.0264 | 0.0000 | 84.9501 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 2.3812 | 50.8003 | 53.1815 | 0.2467 | 6.2100e-003 | 61.1986 |
| **Total** | **2.5871** | **1.8701** | **6.9706** | **0.0227** | **1.7652** | **0.1759** | **1.9412** | **0.4729** | **0.1750** | **0.6478** | **51.9660** | **2,473.8050** | **2,525.7710** | **2.4180** | **0.0150** | **2,590.6830** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **1.13** | **0.36** | **0.38** | **2.48** | **9.21** | **0.45** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/2/2023 | 2/17/2023 | 5 | 35 | |
| 2 | Building Construction | Building Construction | 2/18/2023 | 6/18/2024 | 5 | 370 | |
| 3 | Architectural Coating | Architectural Coating | 4/18/2024 | 6/18/2024 | 5 | 44 | |
| 4 | Paving | Paving | 5/22/2024 | 6/18/2024 | 5 | 20 | |

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

**Acres of Grading (Grading Phase): 87.5**

**Acres of Paving: 5**

**Residential Indoor: 878,265; Residential Outdoor: 292,755; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |

| | | | | | |
|---|---|---|---|---|---|
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 143.00 | 51.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 29.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2023

**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 | | | | | 0.1518 | 0.0000 | 0.1518 | 0.0629 | 0.0000 | 0.0629 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0581 | 0.6040 | 0.4909 | 1.0900e-003 | | 0.0249 | 0.0249 | | 0.0229 | 0.0229 | 0.0000 | 95.4366 | 95.4366 | 0.0309 | 0.0000 | 96.2083 |
| **Total** | **0.0581** | **0.6040** | **0.4909** | **1.0900e-003** | **0.1518** | **0.0249** | **0.1767** | **0.0629** | **0.0229** | **0.0859** | **0.0000** | **95.4366** | **95.4366** | **0.0309** | **0.0000** | **96.2083** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2900e-003 | 8.8000e-004 | 0.0104 | 3.0000e-005 | 3.8400e-003 | 3.0000e-005 | 3.8700e-003 | 1.0200e-003 | 3.0000e-005 | 1.0500e-003 | 0.0000 | 3.1081 | 3.1081 | 7.0000e-005 | 0.0000 | 3.1099 |
| **Total** | **1.2900e-003** | **8.8000e-004** | **0.0104** | **3.0000e-005** | **3.8400e-003** | **3.0000e-005** | **3.8700e-003** | **1.0200e-003** | **3.0000e-005** | **1.0500e-003** | **0.0000** | **3.1081** | **3.1081** | **7.0000e-005** | **0.0000** | **3.1099** |

## 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 | | | | | 0.0592 | 0.0000 | 0.0592 | 0.0246 | 0.0000 | 0.0246 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0267 | 0.4197 | 0.6426 | 1.0900e-003 | | 3.4100e-003 | 3.4100e-003 | | 3.4100e-003 | 3.4100e-003 | 0.0000 | 95.4365 | 95.4365 | 0.0309 | 0.0000 | 96.2082 |
| **Total** | **0.0267** | **0.4197** | **0.6426** | **1.0900e-003** | **0.0592** | **3.4100e-003** | **0.0626** | **0.0246** | **3.4100e-003** | **0.0280** | **0.0000** | **95.4365** | **95.4365** | **0.0309** | **0.0000** | **96.2082** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2900e-003 | 8.8000e-004 | 0.0104 | 3.0000e-005 | 3.8400e-003 | 3.0000e-005 | 3.8700e-003 | 1.0200e-003 | 3.0000e-005 | 1.0500e-003 | 0.0000 | 3.1081 | 3.1081 | 7.0000e-005 | 0.0000 | 3.1099 |
| **Total** | **1.2900e-003** | **8.8000e-004** | **0.0104** | **3.0000e-005** | **3.8400e-003** | **3.0000e-005** | **3.8700e-003** | **1.0200e-003** | **3.0000e-005** | **1.0500e-003** | **0.0000** | **3.1081** | **3.1081** | **7.0000e-005** | **0.0000** | **3.1099** |

## 3.3 Building Construction - 2023

**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 | 0.1769 | 1.6183 | 1.8275 | 3.0300e-003 | | 0.0787 | 0.0787 | | 0.0741 | 0.0741 | 0.0000 | 260.7803 | 260.7803 | 0.0620 | 0.0000 | 262.3312 |
| **Total** | **0.1769** | **1.6183** | **1.8275** | **3.0300e-003** | | **0.0787** | **0.0787** | | **0.0741** | **0.0741** | **0.0000** | **260.7803** | **260.7803** | **0.0620** | **0.0000** | **262.3312** |

## 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 | 0.0115 | 0.3973 | 0.1197 | 1.3800e-003 | 0.0362 | 4.6000e-004 | 0.0366 | 0.0104 | 4.4000e-004 | 0.0109 | 0.0000 | 133.8167 | 133.8167 | 7.6400e-003 | 0.0000 | 134.0077 |
| Worker | 0.0591 | 0.0406 | 0.4780 | 1.5800e-003 | 0.1765 | 1.2600e-003 | 0.1778 | 0.0469 | 1.1600e-003 | 0.0480 | 0.0000 | 142.8599 | 142.8599 | 3.3700e-003 | 0.0000 | 142.9441 |
| **Total** | **0.0706** | **0.4378** | **0.5977** | **2.9600e-003** | **0.2127** | **1.7200e-003** | **0.2144** | **0.0573** | **1.6000e-003** | **0.0589** | **0.0000** | **276.6765** | **276.6765** | **0.0110** | **0.0000** | **276.9518** |

## 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 | 0.0758 | 1.2803 | 2.0108 | 3.0300e-003 | | 0.0153 | 0.0153 | | 0.0153 | 0.0153 | 0.0000 | 260.7800 | 260.7800 | 0.0620 | 0.0000 | 262.3309 |
| **Total** | **0.0758** | **1.2803** | **2.0108** | **3.0300e-003** | | **0.0153** | **0.0153** | | **0.0153** | **0.0153** | **0.0000** | **260.7800** | **260.7800** | **0.0620** | **0.0000** | **262.3309** |

## 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 | 0.0115 | 0.3973 | 0.1197 | 1.3800e-003 | 0.0362 | 4.6000e-004 | 0.0366 | 0.0104 | 4.4000e-004 | 0.0109 | 0.0000 | 133.8167 | 133.8167 | 7.6400e-003 | 0.0000 | 134.0077 |
| Worker | 0.0591 | 0.0406 | 0.4780 | 1.5800e-003 | 0.1765 | 1.2600e-003 | 0.1778 | 0.0469 | 1.1600e-003 | 0.0480 | 0.0000 | 142.8599 | 142.8599 | 3.3700e-003 | 0.0000 | 142.9441 |
| **Total** | **0.0706** | **0.4378** | **0.5977** | **2.9600e-003** | **0.2127** | **1.7200e-003** | **0.2144** | **0.0573** | **1.6000e-003** | **0.0589** | **0.0000** | **276.6765** | **276.6765** | **0.0110** | **0.0000** | **276.9518** |

## 3.3 Building Construction - 2024

### 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 | 0.0898 | 0.8201 | 0.9862 | 1.6400e-003 | | 0.0374 | 0.0374 | | 0.0352 | 0.0352 | 0.0000 | 141.4280 | 141.4280 | 0.0334 | 0.0000 | 142.2641 |
| **Total** | **0.0898** | **0.8201** | **0.9862** | **1.6400e-003** | | **0.0374** | **0.0374** | | **0.0352** | **0.0352** | **0.0000** | **141.4280** | **141.4280** | **0.0334** | **0.0000** | **142.2641** |

### 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 | 6.0900e-003 | 0.2149 | 0.0630 | 7.4000e-004 | 0.0196 | 2.5000e-004 | 0.0199 | 5.6600e-003 | 2.4000e-004 | 5.8900e-003 | 0.0000 | 72.2982 | 72.2982 | 4.0800e-003 | 0.0000 | 72.4002 |
| Worker | 0.0304 | 0.0200 | 0.2417 | 8.3000e-004 | 0.0957 | 6.7000e-004 | 0.0964 | 0.0254 | 6.2000e-004 | 0.0260 | 0.0000 | 74.9031 | 74.9031 | 1.6700e-003 | 0.0000 | 74.9449 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0365** | **0.2349** | **0.3047** | **1.5700e-003** | **0.1153** | **9.2000e-004** | **0.1162** | **0.0311** | **8.6000e-004** | **0.0319** | **0.0000** | **147.2013** | **147.2013** | **5.7500e-003** | **0.0000** | **147.3451** |

**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 | 0.0411 | 0.6942 | 1.0903 | 1.6400e-003 | | 8.2700e-003 | 8.2700e-003 | | 8.2700e-003 | 8.2700e-003 | 0.0000 | 141.4278 | 141.4278 | 0.0334 | 0.0000 | 142.2639 |
| **Total** | **0.0411** | **0.6942** | **1.0903** | **1.6400e-003** | | **8.2700e-003** | **8.2700e-003** | | **8.2700e-003** | **8.2700e-003** | **0.0000** | **141.4278** | **141.4278** | **0.0334** | **0.0000** | **142.2639** |

**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 | 6.0900e-003 | 0.2149 | 0.0630 | 7.4000e-004 | 0.0196 | 2.5000e-004 | 0.0199 | 5.6600e-003 | 2.4000e-004 | 5.8900e-003 | 0.0000 | 72.2982 | 72.2982 | 4.0800e-003 | 0.0000 | 72.4002 |
| Worker | 0.0304 | 0.0200 | 0.2417 | 8.3000e-004 | 0.0957 | 6.7000e-004 | 0.0964 | 0.0254 | 6.2000e-004 | 0.0260 | 0.0000 | 74.9031 | 74.9031 | 1.6700e-003 | 0.0000 | 74.9449 |
| **Total** | **0.0365** | **0.2349** | **0.3047** | **1.5700e-003** | **0.1153** | **9.2000e-004** | **0.1162** | **0.0311** | **8.6000e-004** | **0.0319** | **0.0000** | **147.2013** | **147.2013** | **5.7500e-003** | **0.0000** | **147.3451** |

## 3.4 Architectural Coating - 2024

**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 | 1.3872 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.9800e-003 | 0.0268 | 0.0398 | 7.0000e-005 | | 1.3400e-003 | 1.3400e-003 | | 1.3400e-003 | 1.3400e-003 | 0.0000 | 5.6172 | 5.6172 | 3.2000e-004 | 0.0000 | 5.6251 |
| **Total** | **1.3912** | **0.0268** | **0.0398** | **7.0000e-005** | | **1.3400e-003** | **1.3400e-003** | | **1.3400e-003** | **1.3400e-003** | **0.0000** | **5.6172** | **5.6172** | **3.2000e-004** | **0.0000** | **5.6251** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.2200e-003 | 1.4700e-003 | 0.0177 | 6.0000e-005 | 7.0000e-003 | 5.0000e-005 | 7.0500e-003 | 1.8600e-003 | 5.0000e-005 | 1.9000e-003 | 0.0000 | 5.4784 | 5.4784 | 1.2000e-004 | 0.0000 | 5.4815 |
| **Total** | **2.2200e-003** | **1.4700e-003** | **0.0177** | **6.0000e-005** | **7.0000e-003** | **5.0000e-005** | **7.0500e-003** | **1.8600e-003** | **5.0000e-005** | **1.9000e-003** | **0.0000** | **5.4784** | **5.4784** | **1.2000e-004** | **0.0000** | **5.4815** |

## 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 | 1.3872 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.3100e-003 | 0.0239 | 0.0403 | 7.0000e-005 | | 3.1000e-004 | 3.1000e-004 | | 3.1000e-004 | 3.1000e-004 | 0.0000 | 5.6172 | 5.6172 | 3.2000e-004 | 0.0000 | 5.6251 |
| **Total** | **1.3885** | **0.0239** | **0.0403** | **7.0000e-005** | | **3.1000e-004** | **3.1000e-004** | | **3.1000e-004** | **3.1000e-004** | **0.0000** | **5.6172** | **5.6172** | **3.2000e-004** | **0.0000** | **5.6251** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.2200e-003 | 1.4700e-003 | 0.0177 | 6.0000e-005 | 7.0000e-003 | 5.0000e-005 | 7.0500e-003 | 1.8600e-003 | 5.0000e-005 | 1.9000e-003 | 0.0000 | 5.4784 | 5.4784 | 1.2000e-004 | 0.0000 | 5.4815 |
| **Total** | **2.2200e-003** | **1.4700e-003** | **0.0177** | **6.0000e-005** | **7.0000e-003** | **5.0000e-005** | **7.0500e-003** | **1.8600e-003** | **5.0000e-005** | **1.9000e-003** | **0.0000** | **5.4784** | **5.4784** | **1.2000e-004** | **0.0000** | **5.4815** |

## 3.5 Paving - 2024

**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 | 9.8800e-003 | 0.0953 | 0.1463 | 2.3000e-004 | | 4.6900e-003 | 4.6900e-003 | | 4.3100e-003 | 4.3100e-003 | 0.0000 | 20.0265 | 20.0265 | 6.4800e-003 | 0.0000 | 20.1885 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **9.8800e-003** | **0.0953** | **0.1463** | **2.3000e-004** | | **4.6900e-003** | **4.6900e-003** | | **4.3100e-003** | **4.3100e-003** | **0.0000** | **20.0265** | **20.0265** | **6.4800e-003** | **0.0000** | **20.1885** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.2000e-004 | 3.4000e-004 | 4.1600e-003 | 1.0000e-005 | 1.6500e-003 | 1.0000e-005 | 1.6600e-003 | 4.4000e-004 | 1.0000e-005 | 4.5000e-004 | 0.0000 | 1.2880 | 1.2880 | 3.0000e-005 | 0.0000 | 1.2888 |
| **Total** | **5.2000e-004** | **3.4000e-004** | **4.1600e-003** | **1.0000e-005** | **1.6500e-003** | **1.0000e-005** | **1.6600e-003** | **4.4000e-004** | **1.0000e-005** | **4.5000e-004** | **0.0000** | **1.2880** | **1.2880** | **3.0000e-005** | **0.0000** | **1.2888** |

## 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 | 5.6100e-003 | 0.0904 | 0.1730 | 2.3000e-004 | | 9.1000e-004 | 9.1000e-004 | | 9.1000e-004 | 9.1000e-004 | 0.0000 | 20.0265 | 20.0265 | 6.4800e-003 | 0.0000 | 20.1884 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **5.6100e-003** | **0.0904** | **0.1730** | **2.3000e-004** | | **9.1000e-004** | **9.1000e-004** | | **9.1000e-004** | **9.1000e-004** | **0.0000** | **20.0265** | **20.0265** | **6.4800e-003** | **0.0000** | **20.1884** |

## Mitigated Construction Off-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.2000e-004 | 3.4000e-004 | 4.1600e-003 | 1.0000e-005 | 1.6500e-003 | 1.0000e-005 | 1.6600e-003 | 4.4000e-004 | 1.0000e-005 | 4.5000e-004 | 0.0000 | 1.2880 | 1.2880 | 3.0000e-005 | 0.0000 | 1.2888 |
| **Total** | **5.2000e-004** | **3.4000e-004** | **4.1600e-003** | **1.0000e-005** | **1.6500e-003** | **1.0000e-005** | **1.6600e-003** | **4.4000e-004** | **1.0000e-005** | **4.5000e-004** | **0.0000** | **1.2880** | **1.2880** | **3.0000e-005** | **0.0000** | **1.2888** |

## 4.0 Operational Detail - Mobile

### 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 | 0.3271 | 1.6126 | 4.4852 | 0.0190 | 1.7652 | 0.0138 | 1.7790 | 0.4729 | 0.0128 | 0.4857 | 0.0000 | 1,756.1483 | 1,756.1483 | 0.0759 | 0.0000 | 1,758.0466 |
| Unmitigated | 0.3271 | 1.6126 | 4.4852 | 0.0190 | 1.7652 | 0.0138 | 1.7790 | 0.4729 | 0.0128 | 0.4857 | 0.0000 | 1,756.1483 | 1,756.1483 | 0.0759 | 0.0000 | 1,758.0466 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 1,370.88 | 1,427.04 | 1241.28 | 4,648,654 | 4,648,654 |
| Total | 1,370.88 | 1,427.04 | 1,241.28 | 4,648,654 | 4,648,654 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-... | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.553907 | 0.042339 | 0.204535 | 0.114490 | 0.014186 | 0.005810 | 0.021866 | 0.032691 | 0.002129 | 0.001663 | 0.004844 | 0.000713 | 0.000827 |
| Single Family Housing | 0.553907 | 0.042339 | 0.204535 | 0.114490 | 0.014186 | 0.005810 | 0.021866 | 0.032691 | 0.002129 | 0.001663 | 0.004844 | 0.000713 | 0.000827 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 399.9251 | 399.9251 | 0.0165 | 3.4200e-003 | 401.3558 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 399.9251 | 399.9251 | 0.0165 | 3.4200e-003 | 401.3558 |
| NaturalGas Mitigated | 0.0238 | 0.2030 | 0.0864 | 1.3000e-003 | | 0.0164 | 0.0164 | | 0.0164 | 0.0164 | 0.0000 | 235.1127 | 235.1127 | 4.5100e-003 | 4.3100e-003 | 236.5099 |
| NaturalGas Unmitigated | 0.0238 | 0.2030 | 0.0864 | 1.3000e-003 | | 0.0164 | 0.0164 | | 0.0164 | 0.0164 | 0.0000 | 235.1127 | 235.1127 | 4.5100e-003 | 4.3100e-003 | 236.5099 |

### 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 | | | | | |
| 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 |
| Single Family Housing | 4.40585e+006 | 0.0238 | 0.2030 | 0.0864 | 1.3000e-003 | | 0.0164 | 0.0164 | | 0.0164 | 0.0164 | 0.0000 | 235.1127 | 235.1127 | 4.5100e-003 | 4.3100e-003 | 236.5099 |
| **Total** | | **0.0238** | **0.2030** | **0.0864** | **1.3000e-003** | | **0.0164** | **0.0164** | | **0.0164** | **0.0164** | **0.0000** | **235.1127** | **235.1127** | **4.5100e-003** | **4.3100e-003** | **236.5099** |

**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 | | | | | |
| 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 |
| Single Family Housing | 4.40585e+006 | 0.0238 | 0.2030 | 0.0864 | 1.3000e-003 | | 0.0164 | 0.0164 | | 0.0164 | 0.0164 | 0.0000 | 235.1127 | 235.1127 | 4.5100e-003 | 4.3100e-003 | 236.5099 |
| **Total** | | **0.0238** | **0.2030** | **0.0864** | **1.3000e-003** | | **0.0164** | **0.0164** | | **0.0164** | **0.0164** | **0.0000** | **235.1127** | **235.1127** | **4.5100e-003** | **4.3100e-003** | **236.5099** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.25517e+006 | 399.9251 | 0.0165 | 3.4200e-003 | 401.3558 |

| | | | | | |
|---|---|---|---|---|---|
| **Total** | | **399.9251** | **0.0165** | **3.4200e-003** | **401.3558** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.25517e+006 | 399.9251 | 0.0165 | 3.4200e-003 | 401.3558 |
| **Total** | | **399.9251** | **0.0165** | **3.4200e-003** | **401.3558** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mitigated | 2.2362 | 0.0544 | 2.3991 | 2.4100e-003 | | 0.1457 | 0.1457 | | 0.1457 | 0.1457 | 15.2956 | 31.8187 | 47.1142 | 0.0479 | 1.0400e-003 | 48.6220 |
| Unmitigated | 2.2362 | 0.0544 | 2.3991 | 2.4100e-003 | | 0.1457 | 0.1457 | | 0.1457 | 0.1457 | 15.2956 | 31.8187 | 47.1142 | 0.0479 | 1.0400e-003 | 48.6220 |

## 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 | 0.1387 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 1.5813 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.4717 | 0.0374 | 0.9154 | 2.3400e-003 | | 0.1375 | 0.1375 | | 0.1375 | 0.1375 | 15.2956 | 29.3928 | 44.6883 | 0.0456 | 1.0400e-003 | 46.1381 |
| Landscaping | 0.0446 | 0.0171 | 1.4837 | 8.0000e-005 | | 8.2300e-003 | 8.2300e-003 | | 8.2300e-003 | 8.2300e-003 | 0.0000 | 2.4259 | 2.4259 | 2.3200e-003 | 0.0000 | 2.4840 |
| **Total** | **2.2362** | **0.0544** | **2.3991** | **2.4200e-003** | | **0.1457** | **0.1457** | | **0.1457** | **0.1457** | **15.2956** | **31.8187** | **47.1142** | **0.0479** | **1.0400e-003** | **48.6220** |

### 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 | 0.1387 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 1.5813 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.4717 | 0.0374 | 0.9154 | 2.3400e-003 | | 0.1375 | 0.1375 | | 0.1375 | 0.1375 | 15.2956 | 29.3928 | 44.6883 | 0.0456 | 1.0400e-003 | 46.1381 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landscaping | 0.0446 | 0.0171 | 1.4837 | 8.0000e-005 | | 8.2300e-003 | 8.2300e-003 | | 8.2300e-003 | 8.2300e-003 | 0.0000 | 2.4259 | 2.4259 | 2.3200e-003 | 0.0000 | 2.4840 |
| **Total** | **2.2362** | **0.0544** | **2.3991** | **2.4200e-003** | | **0.1457** | **0.1457** | | **0.1457** | **0.1457** | **15.2956** | **31.8187** | **47.1142** | **0.0479** | **1.0400e-003** | **48.6220** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 53.1815 | 0.2467 | 6.2100e-003 | 61.1986 |
| Unmitigated | 62.8389 | 0.3082 | 7.7300e-003 | 72.8472 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |

| | | | | | |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 9.38218 / 5.91485 | 62.8389 | 0.3082 | 7.7300e-003 | 72.8472 |
| **Total** | | **62.8389** | **0.3082** | **7.7300e-003** | **72.8472** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 7.50574 / 5.55405 | 53.1815 | 0.2467 | 6.2100e-003 | 61.1986 |
| **Total** | | **53.1815** | **0.2467** | **6.2100e-003** | **61.1986** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 34.2892 | 2.0264 | 0.0000 | 84.9501 |
| Unmitigated | 34.2892 | 2.0264 | 0.0000 | 84.9501 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 168.92 | 34.2892 | 2.0264 | 0.0000 | 84.9501 |
| **Total** | | **34.2892** | **2.0264** | **0.0000** | **84.9501** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 168.92 | 34.2892 | 2.0264 | 0.0000 | 84.9501 |
| **Total** | | **34.2892** | **2.0264** | **0.0000** | **84.9501** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

Phase I Construction - South Coast Air Basin, Summer

# Phase I Construction

**South Coast Air Basin, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 5.00 | Acre | 5.00 | 217,800.00 | 0 |
| Single Family Housing | 144.00 | Dwelling Unit | 20.00 | 433,711.00 | 412 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2025 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary

Other Non-Asphalt Surfaces include Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF

SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 20.00 | 44.00 |
| tblLandUse | LandUseSquareFeet | 259,200.00 | 433,711.00 |
| tblLandUse | LotAcreage | 46.75 | 20.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 3.3956 | 34.5602 | 28.6925 | 0.0642 | 8.8969 | 1.4261 | 10.3230 | 3.6558 | 1.3120 | 4.9678 | 0.0000 | 6,216.9797 | 6,216.9797 | 1.9491 | 0.0000 | 6,265.7072 |
| 2024 | 66.4463 | 28.0555 | 39.1860 | 0.0837 | 2.4166 | 1.1611 | 3.5777 | 0.6483 | 1.0859 | 1.7342 | 0.0000 | 8,224.1528 | 8,224.1528 | 1.4477 | 0.0000 | 8,260.3449 |
| **Maximum** | **66.4463** | **34.5602** | **39.1860** | **0.0837** | **8.8969** | **1.4261** | **10.3230** | **3.6558** | **1.3120** | **4.9678** | **0.0000** | **8,224.1528** | **8,224.1528** | **1.9491** | **0.0000** | **8,260.3449** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 1.5969 | 24.0272 | 37.3639 | 0.0642 | 3.6062 | 0.1965 | 3.8026 | 1.4619 | 0.1964 | 1.6583 | 0.0000 | 6,216.9797 | 6,216.9797 | 1.9491 | 0.0000 | 6,265.7072 |
| 2024 | 65.1001 | 25.3710 | 43.5852 | 0.0837 | 2.4166 | 0.2596 | 2.6761 | 0.6483 | 0.2583 | 0.9066 | 0.0000 | 8,224.1528 | 8,224.1528 | 1.4477 | 0.0000 | 8,260.3449 |
| **Maximum** | **65.1001** | **25.3710** | **43.5852** | **0.0837** | **3.6062** | **0.2596** | **3.8026** | **1.4619** | **0.2583** | **1.6583** | **0.0000** | **8,224.1528** | **8,224.1528** | **1.9491** | **0.0000** | **8,260.3449** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **4.50** | **21.11** | **-19.26** | **0.00** | **46.77** | **82.37** | **53.39** | **50.97** | **81.04** | **61.73** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 47.5143 | 3.1245 | 85.1009 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.3926 | 3,962.2289 | 4.0430 | 0.0916 | 4,090.5851 |
| Energy | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| Mobile | 2.0192 | 8.9641 | 27.1824 | 0.1136 | 10.3622 | 0.0795 | 10.4418 | 2.7717 | 0.0739 | 2.8455 | | 11,590.7608 | 11,590.7608 | 0.4858 | | 11,602.9055 |
| **Total** | **49.6637** | **13.2010** | **112.7566** | **0.3082** | **10.3622** | **11.2352** | **21.5975** | **2.7717** | **11.2296** | **14.0012** | **1,348.8363** | **15,624.2487** | **16,973.0850** | **4.5560** | **0.1176** | **17,122.0247** |

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 47.5143 | 3.1245 | 85.1009 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.3926 | 3,962.2289 | 4.0430 | 0.0916 | 4,090.5851 |
| Energy | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| Mobile | 2.0192 | 8.9641 | 27.1824 | 0.1136 | 10.3622 | 0.0795 | 10.4418 | 2.7717 | 0.0739 | 2.8455 | | 11,590.7608 | 11,590.7608 | 0.4858 | | 11,602.9055 |
| **Total** | **49.6637** | **13.2010** | **112.7566** | **0.3082** | **10.3622** | **11.2352** | **21.5975** | **2.7717** | **11.2296** | **14.0012** | **1,348.8363** | **15,624.2487** | **16,973.0850** | **4.5560** | **0.1176** | **17,122.0247** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/2/2023 | 2/17/2023 | 5 | 35 | |
| 2 | Building Construction | Building Construction | 2/18/2023 | 6/18/2024 | 5 | 370 | |
| 3 | Architectural Coating | Architectural Coating | 4/18/2024 | 6/18/2024 | 5 | 44 | |
| 4 | Paving | Paving | 5/22/2024 | 6/18/2024 | 5 | 20 | |

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

**Acres of Grading (Grading Phase): 87.5**

**Acres of Paving: 5**

**Residential Indoor: 878,265; Residential Outdoor: 292,755; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 143.00 | 51.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 29.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **8.6733** | **1.4245** | **10.0978** | **3.5965** | **1.3105** | **4.9070** | | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0738 | 0.0446 | 0.6413 | 2.0600e-003 | 0.2236 | 1.5700e-003 | 0.2251 | 0.0593 | 1.4400e-003 | 0.0607 | | 205.5020 | 205.5020 | 4.8700e-003 | | 205.6236 |
| **Total** | **0.0738** | **0.0446** | **0.6413** | **2.0600e-003** | **0.2236** | **1.5700e-003** | **0.2251** | **0.0593** | **1.4400e-003** | **0.0607** | | **205.5020** | **205.5020** | **4.8700e-003** | | **205.6236** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0738 | 0.0446 | 0.6413 | 2.0600e-003 | 0.2236 | 1.5700e-003 | 0.2251 | 0.0593 | 1.4400e-003 | 0.0607 | | 205.5020 | 205.5020 | 4.8700e-003 | | 205.6236 |
| **Total** | **0.0738** | **0.0446** | **0.6413** | **2.0600e-003** | **0.2236** | **1.5700e-003** | **0.2251** | **0.0593** | **1.4400e-003** | **0.0607** | | **205.5020** | **205.5020** | **4.8700e-003** | | **205.6236** |

## 3.3 Building Construction - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0999 | 3.4973 | 1.0136 | 0.0124 | 0.3263 | 4.0100e-003 | 0.3303 | 0.0939 | 3.8300e-003 | 0.0978 | | 1,326.1860 | 1,326.1860 | 0.0729 | | 1,328.0082 |
| Worker | 0.5279 | 0.3191 | 4.5852 | 0.0147 | 1.5984 | 0.0112 | 1.6096 | 0.4239 | 0.0103 | 0.4342 | | 1,469.3392 | 1,469.3392 | 0.0348 | | 1,470.2090 |
| **Total** | **0.6278** | **3.8164** | **5.5988** | **0.0271** | **1.9247** | **0.0152** | **1.9399** | **0.5178** | **0.0141** | **0.5320** | | **2,795.5252** | **2,795.5252** | **0.1077** | | **2,798.2171** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0269 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0269** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0999 | 3.4973 | 1.0136 | 0.0124 | 0.3263 | 4.0100e-003 | 0.3303 | 0.0939 | 3.8300e-003 | 0.0978 | | 1,326.1860 | 1,326.1860 | 0.0729 | | 1,328.0082 |
| Worker | 0.5279 | 0.3191 | 4.5852 | 0.0147 | 1.5984 | 0.0112 | 1.6096 | 0.4239 | 0.0103 | 0.4342 | | 1,469.3392 | 1,469.3392 | 0.0348 | | 1,470.2090 |
| **Total** | **0.6278** | **3.8164** | **5.5988** | **0.0271** | **1.9247** | **0.0152** | **1.9399** | **0.5178** | **0.0141** | **0.5320** | | **2,795.5252** | **2,795.5252** | **0.1077** | | **2,798.2171** |

## 3.3 Building Construction - 2024

**Unmitigated Construction On-Site**

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0977 | 3.4881 | 0.9848 | 0.0123 | 0.3263 | 3.9600e-003 | 0.3303 | 0.0939 | 3.7900e-003 | 0.0977 | | 1,321.3236 | 1,321.3236 | 0.0718 | | 1,323.1192 |
| Worker | 0.4997 | 0.2908 | 4.2812 | 0.0143 | 1.5984 | 0.0110 | 1.6094 | 0.4239 | 0.0102 | 0.4341 | | 1,420.9268 | 1,420.9268 | 0.0319 | | 1,421.7240 |
| **Total** | **0.5974** | **3.7789** | **5.2660** | **0.0266** | **1.9247** | **0.0150** | **1.9397** | **0.5178** | **0.0140** | **0.5318** | | **2,742.2504** | **2,742.2504** | **0.1037** | | **2,744.8432** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0977 | 3.4881 | 0.9848 | 0.0123 | 0.3263 | 3.9600e-003 | 0.3303 | 0.0939 | 3.7900e-003 | 0.0977 | | 1,321.3236 | 1,321.3236 | 0.0718 | | 1,323.1192 |
| Worker | 0.4997 | 0.2908 | 4.2812 | 0.0143 | 1.5984 | 0.0110 | 1.6094 | 0.4239 | 0.0102 | 0.4341 | | 1,420.9268 | 1,420.9268 | 0.0319 | | 1,421.7240 |
| **Total** | **0.5974** | **3.7789** | **5.2660** | **0.0266** | **1.9247** | **0.0150** | **1.9397** | **0.5178** | **0.0140** | **0.5318** | | **2,742.2504** | **2,742.2504** | **0.1037** | | **2,744.8432** |

## 3.4 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 63.0548 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **63.2355** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1013 | 0.0590 | 0.8682 | 2.8900e-003 | 0.3242 | 2.2400e-003 | 0.3264 | 0.0860 | 2.0600e-003 | 0.0880 | | 288.1600 | 288.1600 | 6.4700e-003 | | 288.3216 |
| **Total** | **0.1013** | **0.0590** | **0.8682** | **2.8900e-003** | **0.3242** | **2.2400e-003** | **0.3264** | **0.0860** | **2.0600e-003** | **0.0880** | | **288.1600** | **288.1600** | **6.4700e-003** | | **288.3216** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 63.0548 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **63.1142** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1013 | 0.0590 | 0.8682 | 2.8900e-003 | 0.3242 | 2.2400e-003 | 0.3264 | 0.0860 | 2.0600e-003 | 0.0880 | | 288.1600 | 288.1600 | 6.4700e-003 | | 288.3216 |
| **Total** | **0.1013** | **0.0590** | **0.8682** | **2.8900e-003** | **0.3242** | **2.2400e-003** | **0.3264** | **0.0860** | **2.0600e-003** | **0.0880** | | **288.1600** | **288.1600** | **6.4700e-003** | | **288.3216** |

## 3.5 Paving - 2024

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0524 | 0.0305 | 0.4491 | 1.4900e-003 | 0.1677 | 1.1600e-003 | 0.1688 | 0.0445 | 1.0700e-003 | 0.0455 | | 149.0483 | 149.0483 | 3.3400e-003 | | 149.1319 |
| **Total** | **0.0524** | **0.0305** | **0.4491** | **1.4900e-003** | **0.1677** | **1.1600e-003** | **0.1688** | **0.0445** | **1.0700e-003** | **0.0455** | | **149.0483** | **149.0483** | **3.3400e-003** | | **149.1319** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0524 | 0.0305 | 0.4491 | 1.4900e-003 | 0.1677 | 1.1600e-003 | 0.1688 | 0.0445 | 1.0700e-003 | 0.0455 | | 149.0483 | 149.0483 | 3.3400e-003 | | 149.1319 |
| **Total** | **0.0524** | **0.0305** | **0.4491** | **1.4900e-003** | **0.1677** | **1.1600e-003** | **0.1688** | **0.0445** | **1.0700e-003** | **0.0455** | | **149.0483** | **149.0483** | **3.3400e-003** | | **149.1319** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 2.0192 | 8.9641 | 27.1824 | 0.1136 | 10.3622 | 0.0795 | 10.4418 | 2.7717 | 0.0739 | 2.8455 | | 11,590.7608 | 11,590.7608 | 0.4858 | | 11,602.9055 |
| Unmitigated | 2.0192 | 8.9641 | 27.1824 | 0.1136 | 10.3622 | 0.0795 | 10.4418 | 2.7717 | 0.0739 | 2.8455 | | 11,590.7608 | 11,590.7608 | 0.4858 | | 11,602.9055 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 1,370.88 | 1,427.04 | 1241.28 | 4,648,654 | 4,648,654 |
| Total | 1,370.88 | 1,427.04 | 1,241.28 | 4,648,654 | 4,648,654 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.553907 | 0.042339 | 0.204535 | 0.114490 | 0.014186 | 0.005810 | 0.021866 | 0.032691 | 0.002129 | 0.001663 | 0.004844 | 0.000713 | 0.000827 |
| Single Family Housing | 0.553907 | 0.042339 | 0.204535 | 0.114490 | 0.014186 | 0.005810 | 0.021866 | 0.032691 | 0.002129 | 0.001663 | 0.004844 | 0.000713 | 0.000827 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| NaturalGas Unmitigated | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 12070.8 | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| **Total** | | **0.1302** | **1.1124** | **0.4734** | **7.1000e-003** | | **0.0899** | **0.0899** | | **0.0899** | **0.0899** | | **1,420.0953** | **1,420.0953** | **0.0272** | **0.0260** | **1,428.5342** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 12.0708 | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| **Total** | | **0.1302** | **1.1124** | **0.4734** | **7.1000e-003** | | **0.0899** | **0.0899** | | **0.0899** | **0.0899** | | **1,420.0953** | **1,420.0953** | **0.0272** | **0.0260** | **1,428.5342** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 47.5143 | 3.1245 | 85.1009 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.3926 | 3,962.2289 | 4.0430 | 0.0916 | 4,090.5851 |
| Unmitigated | 47.5143 | 3.1245 | 85.1009 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.3926 | 3,962.2289 | 4.0430 | 0.0916 | 4,090.5851 |

### 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.7601 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 8.6646 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37.7332 | 2.9878 | 73.2315 | 0.1868 | | 10.9999 | 10.9999 | | 10.9999 | 10.9999 | 1,348.8363 | 2,592.0000 | 3,940.8363 | 4.0225 | 0.0916 | 4,068.6802 |
| Landscaping | 0.3564 | 0.1367 | 11.8694 | 6.3000e-004 | | 0.0659 | 0.0659 | | 0.0659 | 0.0659 | | 21.3926 | 21.3926 | 0.0205 | | 21.9048 |
| **Total** | **47.5143** | **3.1245** | **85.1009** | **0.1875** | | **11.0658** | **11.0658** | | **11.0658** | **11.0658** | **1,348.8363** | **2,613.3926** | **3,962.2289** | **4.0430** | **0.0916** | **4,090.5851** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.7601 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 8.6646 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37.7332 | 2.9878 | 73.2315 | 0.1868 | | 10.9999 | 10.9999 | | 10.9999 | 10.9999 | 1,348.8363 | 2,592.0000 | 3,940.8363 | 4.0225 | 0.0916 | 4,068.6802 |
| Landscaping | 0.3564 | 0.1367 | 11.8694 | 6.3000e-004 | | 0.0659 | 0.0659 | | 0.0659 | 0.0659 | | 21.3926 | 21.3926 | 0.0205 | | 21.9048 |
| **Total** | **47.5143** | **3.1245** | **85.1009** | **0.1875** | | **11.0658** | **11.0658** | | **11.0658** | **11.0658** | **1,348.8363** | **2,613.3926** | **3,962.2289** | **4.0430** | **0.0916** | **4,090.5851** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase IV Construction - South Coast Air Basin, Annual

# Phase IV Construction

**South Coast Air Basin, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 28.00 | Acre | 28.00 | 1,219,680.00 | 0 |
| Single Family Housing | 555.00 | Dwelling Unit | 83.00 | 1,399,700.00 | 1587 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2029 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 220.00 | 154.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | NumDays | 3,100.00 | 263.00 |
| tblConstructionPhase | NumDays | 220.00 | 45.00 |
| tblConstructionPhase | PhaseEndDate | 1/22/2042 | 9/21/2028 |
| tblConstructionPhase | PhaseEndDate | 5/16/2040 | 9/21/2028 |
| tblConstructionPhase | PhaseEndDate | 3/20/2041 | 9/21/2028 |
| tblConstructionPhase | PhaseStartDate | 3/21/2041 | 2/21/2028 |
| tblConstructionPhase | PhaseStartDate | 6/29/2028 | 9/21/2027 |
| tblConstructionPhase | PhaseStartDate | 5/17/2040 | 7/21/2028 |
| tblLandUse | LandUseSquareFeet | 999,000.00 | 1,399,700.00 |
| tblLandUse | LotAcreage | 180.19 | 83.00 |

## 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 | | | | | |
| 2027 | 0.4172 | 3.6981 | 3.8085 | 0.0113 | 1.3283 | 0.1251 | 1.4534 | 0.4451 | 0.1155 | 0.5606 | 0.0000 | 1,017.8947 | 1,017.8947 | 0.1967 | 0.0000 | 1,022.8129 |
| 2028 | 5.1705 | 5.0107 | 5.8269 | 0.0196 | 1.8265 | 0.1425 | 1.9690 | 0.5334 | 0.1326 | 0.6659 | 0.0000 | 1,786.8678 | 1,786.8678 | 0.2210 | 0.0000 | 1,792.3928 |
| **Maximum** | **5.1705** | **5.0107** | **5.8269** | **0.0196** | **1.8265** | **0.1425** | **1.9690** | **0.5334** | **0.1326** | **0.6659** | **0.0000** | **1,786.8678** | **1,786.8678** | **0.2210** | **0.0000** | **1,792.3928** |

**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 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2027 | 0.2661 | 3.2974 | 4.8204 | 0.0113 | 0.7434 | 0.0254 | 0.7688 | 0.2343 | 0.0252 | 0.2595 | 0.0000 | 1,017.8940 | 1,017.8940 | 0.1967 | 0.0000 | 1,022.8122 |
| 2028 | 5.0002 | 4.6600 | 6.7240 | 0.0196 | 1.3407 | 0.0354 | 1.3761 | 0.3771 | 0.0349 | 0.4119 | 0.0000 | 1,786.8670 | 1,786.8670 | 0.2210 | 0.0000 | 1,792.3920 |
| **Maximum** | **5.0002** | **4.6600** | **6.7240** | **0.0196** | **1.3407** | **0.0354** | **1.3761** | **0.3771** | **0.0349** | **0.4119** | **0.0000** | **1,786.8670** | **1,786.8670** | **0.2210** | **0.0000** | **1,792.3920** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **5.75** | **8.63** | **-19.81** | **0.00** | **33.94** | **77.29** | **37.33** | **37.52** | **75.77** | **45.26** | **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 | 4-22-2027 | 7-21-2027 | 1.0054 | 0.8319 |
| 2 | 7-22-2027 | 10-21-2027 | 1.4042 | 1.2091 |
| 3 | 10-22-2027 | 1-21-2028 | 2.1679 | 1.9339 |
| 4 | 1-22-2028 | 4-21-2028 | 3.4632 | 3.2280 |
| 5 | 4-22-2028 | 7-21-2028 | 3.8577 | 3.6646 |
| 6 | 7-22-2028 | 9-30-2028 | 2.3259 | 2.2849 |
| | | Highest | 3.8577 | 3.6646 |

## 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 | 7.5811 | 0.2098 | 9.2465 | 9.3000e-003 | | 0.5617 | 0.5617 | | 0.5617 | 0.5617 | 58.9516 | 122.6347 | 181.5863 | 0.1848 | 4.0000e-003 | 187.3976 |
| Energy | 0.0916 | 0.7825 | 0.3330 | 4.9900e-003 | | 0.0633 | 0.0633 | | 0.0633 | 0.0633 | 0.0000 | 2,447.5413 | 2,447.5413 | 0.0810 | 0.0298 | 2,458.4405 |
| Mobile | 1.0571 | 5.6559 | 14.2361 | 0.0666 | 6.8025 | 0.0426 | 6.8450 | 1.8220 | 0.0395 | 1.8615 | 0.0000 | 6,190.2350 | 6,190.2350 | 0.2501 | 0.0000 | 6,196.4878 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 132.0801 | 0.0000 | 132.0801 | 7.8057 | 0.0000 | 327.2229 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 11.4721 | 230.7196 | 242.1917 | 1.1878 | 0.0298 | 280.7653 |
| **Total** | **8.7298** | **6.6482** | **23.8156** | **0.0809** | **6.8025** | **0.6675** | **7.4700** | **1.8220** | **0.6644** | **2.4864** | **202.5038** | **8,991.1306** | **9,193.6344** | **9.5094** | **0.0636** | **9,450.3141** |

## 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 | 7.5811 | 0.2098 | 9.2465 | 9.3000e-003 | | 0.5617 | 0.5617 | | 0.5617 | 0.5617 | 58.9516 | 122.6347 | 181.5863 | 0.1848 | 4.0000e-003 | 187.3976 |
| Energy | 0.0916 | 0.7825 | 0.3330 | 4.9900e-003 | | 0.0633 | 0.0633 | | 0.0633 | 0.0633 | 0.0000 | 2,447.5413 | 2,447.5413 | 0.0810 | 0.0298 | 2,458.4405 |
| Mobile | 1.0571 | 5.6559 | 14.2361 | 0.0666 | 6.8025 | 0.0426 | 6.8450 | 1.8220 | 0.0395 | 1.8615 | 0.0000 | 6,190.2350 | 6,190.2350 | 0.2501 | 0.0000 | 6,196.4878 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 132.0801 | 0.0000 | 132.0801 | 7.8057 | 0.0000 | 327.2229 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 9.1776 | 195.7928 | 204.9704 | 0.9507 | 0.0239 | 235.8694 |
| **Total** | **8.7298** | **6.6482** | **23.8156** | **0.0809** | **6.8025** | **0.6675** | **7.4700** | **1.8220** | **0.6644** | **2.4864** | **200.2094** | **8,956.2037** | **9,156.4131** | **9.2723** | **0.0577** | **9,405.4182** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **1.13** | **0.39** | **0.40** | **2.49** | **9.22** | **0.48** |

# 3.0 Construction Detail

## Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 4/22/2027 | 6/28/2028 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 9/21/2027 | 9/21/2028 | 5 | 263 | |
| 3 | Architectural Coating | Architectural Coating | 2/21/2028 | 9/21/2028 | 5 | 154 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | Paving | Paving | 7/21/2028 | 9/21/2028 | 5 | 45 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 28**

**Residential Indoor: 2,834,393; Residential Outdoor: 944,798; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 712.00 | 259.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Architectural Coating | 1 | 142.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2027

**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 | | | | | 0.9590 | 0.0000 | 0.9590 | 0.3456 | 0.0000 | 0.3456 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2640 | 2.5428 | 2.3961 | 5.6500e-003 | | 0.1029 | 0.1029 | | 0.0947 | 0.0947 | 0.0000 | 496.0065 | 496.0065 | 0.1604 | 0.0000 | 500.0170 |
| **Total** | **0.2640** | **2.5428** | **2.3961** | **5.6500e-003** | **0.9590** | **0.1029** | **1.0619** | **0.3456** | **0.0947** | **0.4403** | **0.0000** | **496.0065** | **496.0065** | **0.1604** | **0.0000** | **500.0170** |

**Unmitigated Construction Off-Site**

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 5.5000e-003 | 3.2500e-003 | 0.0410 | 1.5000e-004 | 0.0200 | 1.3000e-004 | 0.0201 | 5.3000e-003 | 1.2000e-004 | 5.4200e-003 | 0.0000 | 14.0121 | 14.0121 | 2.7000e-004 | 0.0000 | 14.0188 |
| **Total** | **5.5000e-003** | **3.2500e-003** | **0.0410** | **1.5000e-004** | **0.0200** | **1.3000e-004** | **0.0201** | **5.3000e-003** | **1.2000e-004** | **5.4200e-003** | **0.0000** | **14.0121** | **14.0121** | **2.7000e-004** | **0.0000** | **14.0188** |

**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 | | | | | 0.3740 | 0.0000 | 0.3740 | 0.1348 | 0.0000 | 0.1348 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1386 | 2.1824 | 3.3418 | 5.6500e-003 | | 0.0177 | 0.0177 | | 0.0177 | 0.0177 | 0.0000 | 496.0059 | 496.0059 | 0.1604 | 0.0000 | 500.0164 |
| **Total** | **0.1386** | **2.1824** | **3.3418** | **5.6500e-003** | **0.3740** | **0.0177** | **0.3917** | **0.1348** | **0.0177** | **0.1525** | **0.0000** | **496.0059** | **496.0059** | **0.1604** | **0.0000** | **500.0164** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.5000e-003 | 3.2500e-003 | 0.0410 | 1.5000e-004 | 0.0200 | 1.3000e-004 | 0.0201 | 5.3000e-003 | 1.2000e-004 | 5.4200e-003 | 0.0000 | 14.0121 | 14.0121 | 2.7000e-004 | 0.0000 | 14.0188 |
| **Total** | **5.5000e-003** | **3.2500e-003** | **0.0410** | **1.5000e-004** | **0.0200** | **1.3000e-004** | **0.0201** | **5.3000e-003** | **1.2000e-004** | **5.4200e-003** | **0.0000** | **14.0121** | **14.0121** | **2.7000e-004** | **0.0000** | **14.0188** |

## 3.2 Grading - 2028

**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 | | | | | 0.7964 | 0.0000 | 0.7964 | 0.2562 | 0.0000 | 0.2562 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1857 | 1.7883 | 1.6852 | 3.9700e-003 | | 0.0724 | 0.0724 | | 0.0666 | 0.0666 | 0.0000 | 348.8398 | 348.8398 | 0.1128 | 0.0000 | 351.6603 |
| **Total** | **0.1857** | **1.7883** | **1.6852** | **3.9700e-003** | **0.7964** | **0.0724** | **0.8687** | **0.2562** | **0.0666** | **0.3228** | **0.0000** | **348.8398** | **348.8398** | **0.1128** | **0.0000** | **351.6603** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.6700e-003 | 2.1100e-003 | 0.0272 | 1.1000e-004 | 0.0140 | 8.0000e-005 | 0.0141 | 3.7300e-003 | 8.0000e-005 | 3.8100e-003 | 0.0000 | 9.5641 | 9.5641 | 1.7000e-004 | 0.0000 | 9.5684 |
| **Total** | **3.6700e-003** | **2.1100e-003** | **0.0272** | **1.1000e-004** | **0.0140** | **8.0000e-005** | **0.0141** | **3.7300e-003** | **8.0000e-005** | **3.8100e-003** | **0.0000** | **9.5641** | **9.5641** | **1.7000e-004** | **0.0000** | **9.5684** |

## 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 | | | | | 0.3106 | 0.0000 | 0.3106 | 0.0999 | 0.0000 | 0.0999 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0975 | 1.5349 | 2.3502 | 3.9700e-003 | | 0.0125 | 0.0125 | | 0.0125 | 0.0125 | 0.0000 | 348.8393 | 348.8393 | 0.1128 | 0.0000 | 351.6599 |
| **Total** | **0.0975** | **1.5349** | **2.3502** | **3.9700e-003** | **0.3106** | **0.0125** | **0.3231** | **0.0999** | **0.0125** | **0.1124** | **0.0000** | **348.8393** | **348.8393** | **0.1128** | **0.0000** | **351.6599** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.6700e-003 | 2.1100e-003 | 0.0272 | 1.1000e-004 | 0.0140 | 8.0000e-005 | 0.0141 | 3.7300e-003 | 8.0000e-005 | 3.8100e-003 | 0.0000 | 9.5641 | 9.5641 | 1.7000e-004 | 0.0000 | 9.5684 |
| **Total** | **3.6700e-003** | **2.1100e-003** | **0.0272** | **1.1000e-004** | **0.0140** | **8.0000e-005** | **0.0141** | **3.7300e-003** | **8.0000e-005** | **3.8100e-003** | **0.0000** | **9.5641** | **9.5641** | **1.7000e-004** | **0.0000** | **9.5684** |

## 3.3 Building Construction - 2027

**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 | 0.0506 | 0.4614 | 0.5951 | 1.0000e-003 | | 0.0195 | 0.0195 | | 0.0184 | 0.0184 | 0.0000 | 85.8102 | 85.8102 | 0.0202 | 0.0000 | 86.3145 |
| **Total** | **0.0506** | **0.4614** | **0.5951** | **1.0000e-003** | | **0.0195** | **0.0195** | | **0.0184** | **0.0184** | **0.0000** | **85.8102** | **85.8102** | **0.0202** | **0.0000** | **86.3145** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0175 | 0.6437 | 0.1822 | 2.2500e-003 | 0.0604 | 7.2000e-004 | 0.0611 | 0.0174 | 6.9000e-004 | 0.0181 | 0.0000 | 219.2441 | 219.2441 | 0.0120 | 0.0000 | 219.5441 |
| Worker | 0.0796 | 0.0470 | 0.5940 | 2.2400e-003 | 0.2890 | 1.8200e-003 | 0.2909 | 0.0768 | 1.6800e-003 | 0.0784 | 0.0000 | 202.8217 | 202.8217 | 3.8700e-003 | 0.0000 | 202.9185 |
| **Total** | **0.0971** | **0.6907** | **0.7762** | **4.4900e-003** | **0.3494** | **2.5400e-003** | **0.3520** | **0.0942** | **2.3700e-003** | **0.0966** | **0.0000** | **422.0658** | **422.0658** | **0.0159** | **0.0000** | **422.4626** |

## 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 | 0.0249 | 0.4211 | 0.6613 | 1.0000e-003 | | 5.0100e-003 | 5.0100e-003 | | 5.0100e-003 | 5.0100e-003 | 0.0000 | 85.8101 | 85.8101 | 0.0202 | 0.0000 | 86.3144 |
| **Total** | **0.0249** | **0.4211** | **0.6613** | **1.0000e-003** | | **5.0100e-003** | **5.0100e-003** | | **5.0100e-003** | **5.0100e-003** | **0.0000** | **85.8101** | **85.8101** | **0.0202** | **0.0000** | **86.3144** |

## Mitigated Construction Off-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0175 | 0.6437 | 0.1822 | 2.2500e-003 | 0.0604 | 7.2000e-004 | 0.0611 | 0.0174 | 6.9000e-004 | 0.0181 | 0.0000 | 219.2441 | 219.2441 | 0.0120 | 0.0000 | 219.5441 |
| Worker | 0.0796 | 0.0470 | 0.5940 | 2.2400e-003 | 0.2890 | 1.8200e-003 | 0.2909 | 0.0768 | 1.6800e-003 | 0.0784 | 0.0000 | 202.8217 | 202.8217 | 3.8700e-003 | 0.0000 | 202.9185 |
| **Total** | **0.0971** | **0.6907** | **0.7762** | **4.4900e-003** | **0.3494** | **2.5400e-003** | **0.3520** | **0.0942** | **2.3700e-003** | **0.0966** | **0.0000** | **422.0658** | **422.0658** | **0.0159** | **0.0000** | **422.4626** |

## 3.3 Building Construction - 2028

### 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 | 0.1292 | 1.1784 | 1.5200 | 2.5500e-003 | | 0.0499 | 0.0499 | | 0.0469 | 0.0469 | 0.0000 | 219.1639 | 219.1639 | 0.0515 | 0.0000 | 220.4519 |
| **Total** | **0.1292** | **1.1784** | **1.5200** | **2.5500e-003** | | **0.0499** | **0.0499** | | **0.0469** | **0.0469** | **0.0000** | **219.1639** | **219.1639** | **0.0515** | **0.0000** | **220.4519** |

### 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 | 0.0440 | 1.6310 | 0.4592 | 5.7100e-003 | 0.1543 | 1.8000e-003 | 0.1561 | 0.0445 | 1.7200e-003 | 0.0462 | 0.0000 | 557.6340 | 557.6340 | 0.0302 | 0.0000 | 558.3890 |
| Worker | 0.1931 | 0.1110 | 1.4287 | 5.5500e-003 | 0.7382 | 4.3200e-003 | 0.7425 | 0.1961 | 3.9700e-003 | 0.2000 | 0.0000 | 502.7426 | 502.7426 | 9.1200e-003 | 0.0000 | 502.9706 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.2371** | **1.7420** | **1.8879** | **0.0113** | **0.8924** | **6.1200e-003** | **0.8986** | **0.2406** | **5.6900e-003** | **0.2463** | **0.0000** | **1,060.3766** | **1,060.3766** | **0.0393** | **0.0000** | **1,061.3595** |

## 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 | 0.0637 | 1.0755 | 1.6891 | 2.5500e-003 | | 0.0128 | 0.0128 | | 0.0128 | 0.0128 | 0.0000 | 219.1636 | 219.1636 | 0.0515 | 0.0000 | 220.4516 |
| **Total** | **0.0637** | **1.0755** | **1.6891** | **2.5500e-003** | | **0.0128** | **0.0128** | | **0.0128** | **0.0128** | **0.0000** | **219.1636** | **219.1636** | **0.0515** | **0.0000** | **220.4516** |

## 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 | 0.0440 | 1.6310 | 0.4592 | 5.7100e-003 | 0.1543 | 1.8000e-003 | 0.1561 | 0.0445 | 1.7200e-003 | 0.0462 | 0.0000 | 557.6340 | 557.6340 | 0.0302 | 0.0000 | 558.3890 |
| Worker | 0.1931 | 0.1110 | 1.4287 | 5.5500e-003 | 0.7382 | 4.3200e-003 | 0.7425 | 0.1961 | 3.9700e-003 | 0.2000 | 0.0000 | 502.7426 | 502.7426 | 9.1200e-003 | 0.0000 | 502.9706 |
| **Total** | **0.2371** | **1.7420** | **1.8879** | **0.0113** | **0.8924** | **6.1200e-003** | **0.8986** | **0.2406** | **5.6900e-003** | **0.2463** | **0.0000** | **1,060.3766** | **1,060.3766** | **0.0393** | **0.0000** | **1,061.3595** |

# 3.4 Architectural Coating - 2028

## 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 | 4.5487 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0132 | 0.0882 | 0.1393 | 2.3000e-004 | | 3.9700e-003 | 3.9700e-003 | | 3.9700e-003 | 3.9700e-003 | 0.0000 | 19.6601 | 19.6601 | 1.0700e-003 | 0.0000 | 19.6869 |
| **Total** | **4.5619** | **0.0882** | **0.1393** | **2.3000e-004** | | **3.9700e-003** | **3.9700e-003** | | **3.9700e-003** | **3.9700e-003** | **0.0000** | **19.6601** | **19.6601** | **1.0700e-003** | **0.0000** | **19.6869** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0314 | 0.0180 | 0.2322 | 9.0000e-004 | 0.1200 | 7.0000e-004 | 0.1207 | 0.0319 | 6.5000e-004 | 0.0325 | 0.0000 | 81.6983 | 81.6983 | 1.4800e-003 | 0.0000 | 81.7353 |
| **Total** | **0.0314** | **0.0180** | **0.2322** | **9.0000e-004** | **0.1200** | **7.0000e-004** | **0.1207** | **0.0319** | **6.5000e-004** | **0.0325** | **0.0000** | **81.6983** | **81.6983** | **1.4800e-003** | **0.0000** | **81.7353** |

## 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 | 4.5487 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.5800e-003 | 0.0836 | 0.1411 | 2.3000e-004 | | 1.1000e-003 | 1.1000e-003 | | 1.1000e-003 | 1.1000e-003 | 0.0000 | 19.6600 | 19.6600 | 1.0700e-003 | 0.0000 | 19.6868 |
| **Total** | **4.5533** | **0.0836** | **0.1411** | **2.3000e-004** | | **1.1000e-003** | **1.1000e-003** | | **1.1000e-003** | **1.1000e-003** | **0.0000** | **19.6600** | **19.6600** | **1.0700e-003** | **0.0000** | **19.6868** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0314 | 0.0180 | 0.2322 | 9.0000e-004 | 0.1200 | 7.0000e-004 | 0.1207 | 0.0319 | 6.5000e-004 | 0.0325 | 0.0000 | 81.6983 | 81.6983 | 1.4800e-003 | 0.0000 | 81.7353 |
| **Total** | **0.0314** | **0.0180** | **0.2322** | **9.0000e-004** | **0.1200** | **7.0000e-004** | **0.1207** | **0.0319** | **6.5000e-004** | **0.0325** | **0.0000** | **81.6983** | **81.6983** | **1.4800e-003** | **0.0000** | **81.7353** |

## 3.5 Paving - 2028

### 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 | 0.0206 | 0.1931 | 0.3280 | 5.1000e-004 | | 9.4200e-003 | 9.4200e-003 | | 8.6600e-003 | 8.6600e-003 | 0.0000 | 45.0433 | 45.0433 | 0.0146 | 0.0000 | 45.4075 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0206** | **0.1931** | **0.3280** | **5.1000e-004** | | **9.4200e-003** | **9.4200e-003** | | **8.6600e-003** | **8.6600e-003** | **0.0000** | **45.0433** | **45.0433** | **0.0146** | **0.0000** | **45.4075** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 5.6000e-004 | 7.1700e-003 | 3.0000e-005 | 3.7000e-003 | 2.0000e-005 | 3.7200e-003 | 9.8000e-004 | 2.0000e-005 | 1.0000e-003 | 0.0000 | 2.5218 | 2.5218 | 5.0000e-005 | 0.0000 | 2.5229 |
| **Total** | **9.7000e-004** | **5.6000e-004** | **7.1700e-003** | **3.0000e-005** | **3.7000e-003** | **2.0000e-005** | **3.7200e-003** | **9.8000e-004** | **2.0000e-005** | **1.0000e-003** | **0.0000** | **2.5218** | **2.5218** | **5.0000e-005** | **0.0000** | **2.5229** |

## 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 | 0.0126 | 0.2033 | 0.3892 | 5.1000e-004 | | 2.0600e-003 | 2.0600e-003 | | 2.0600e-003 | 2.0600e-003 | 0.0000 | 45.0433 | 45.0433 | 0.0146 | 0.0000 | 45.4075 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0126** | **0.2033** | **0.3892** | **5.1000e-004** | | **2.0600e-003** | **2.0600e-003** | | **2.0600e-003** | **2.0600e-003** | **0.0000** | **45.0433** | **45.0433** | **0.0146** | **0.0000** | **45.4075** |

## Mitigated Construction Off-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 5.6000e-004 | 7.1700e-003 | 3.0000e-005 | 3.7000e-003 | 2.0000e-005 | 3.7200e-003 | 9.8000e-004 | 2.0000e-005 | 1.0000e-003 | 0.0000 | 2.5218 | 2.5218 | 5.0000e-005 | 0.0000 | 2.5229 |
| **Total** | **9.7000e-004** | **5.6000e-004** | **7.1700e-003** | **3.0000e-005** | **3.7000e-003** | **2.0000e-005** | **3.7200e-003** | **9.8000e-004** | **2.0000e-005** | **1.0000e-003** | **0.0000** | **2.5218** | **2.5218** | **5.0000e-005** | **0.0000** | **2.5229** |

# 4.0 Operational Detail - Mobile

## 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 | 1.0571 | 5.6559 | 14.2361 | 0.0666 | 6.8025 | 0.0426 | 6.8450 | 1.8220 | 0.0395 | 1.8615 | 0.0000 | 6,190.2350 | 6,190.2350 | 0.2501 | 0.0000 | 6,196.4878 |
| Unmitigated | 1.0571 | 5.6559 | 14.2361 | 0.0666 | 6.8025 | 0.0426 | 6.8450 | 1.8220 | 0.0395 | 1.8615 | 0.0000 | 6,190.2350 | 6,190.2350 | 0.2501 | 0.0000 | 6,196.4878 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 5,283.60 | 5,500.05 | 4784.10 | 17,916,689 | 17,916,689 |
| Total | 5,283.60 | 5,500.05 | 4,784.10 | 17,916,689 | 17,916,689 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |
| Single Family Housing | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1,541.3778 | 1,541.3778 | 0.0636 | 0.0132 | 1,546.8921 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1,541.3778 | 1,541.3778 | 0.0636 | 0.0132 | 1,546.8921 |
| NaturalGas Mitigated | 0.0916 | 0.7825 | 0.3330 | 4.9900e-003 | | 0.0633 | 0.0633 | | 0.0633 | 0.0633 | 0.0000 | 906.1635 | 906.1635 | 0.0174 | 0.0166 | 911.5484 |
| NaturalGas Unmitigated | 0.0916 | 0.7825 | 0.3330 | 4.9900e-003 | | 0.0633 | 0.0633 | | 0.0633 | 0.0633 | 0.0000 | 906.1635 | 906.1635 | 0.0174 | 0.0166 | 911.5484 |

## 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 | | | | | |
| 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 |
| Single Family Housing | 1.69809e+007 | 0.0916 | 0.7825 | 0.3330 | 4.9900e-003 | | 0.0633 | 0.0633 | | 0.0633 | 0.0633 | 0.0000 | 906.1635 | 906.1635 | 0.0174 | 0.0166 | 911.5484 |
| **Total** | | **0.0916** | **0.7825** | **0.3330** | **4.9900e-003** | | **0.0633** | **0.0633** | | **0.0633** | **0.0633** | **0.0000** | **906.1635** | **906.1635** | **0.0174** | **0.0166** | **911.5484** |

## 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 | | | | | |
| 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 |
| Single Family Housing | 1.69809e+007 | 0.0916 | 0.7825 | 0.3330 | 4.9900e-003 | | 0.0633 | 0.0633 | | 0.0633 | 0.0633 | 0.0000 | 906.1635 | 906.1635 | 0.0174 | 0.0166 | 911.5484 |
| **Total** | | **0.0916** | **0.7825** | **0.3330** | **4.9900e-003** | | **0.0633** | **0.0633** | | **0.0633** | **0.0633** | **0.0000** | **906.1635** | **906.1635** | **0.0174** | **0.0166** | **911.5484** |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 4.83765e+006 | 1,541.3778 | 0.0636 | 0.0132 | 1,546.8921 |

| | | | | | |
|---|---|---|---|---|---|
| **Total** | | **1,541.3778** | **0.0636** | **0.0132** | **1,546.8921** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 4.83765e+006 | 1,541.3778 | 0.0636 | 0.0132 | 1,546.8921 |
| **Total** | | **1,541.3778** | **0.0636** | **0.0132** | **1,546.8921** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mitigated | 7.5811 | 0.2098 | 9.2465 | 9.3000e-003 | | 0.5617 | 0.5617 | | 0.5617 | 0.5617 | 58.9516 | 122.6347 | 181.5863 | 0.1848 | 4.0000e-003 | 187.3976 |
| Unmitigated | 7.5811 | 0.2098 | 9.2465 | 9.3000e-003 | | 0.5617 | 0.5617 | | 0.5617 | 0.5617 | 58.9516 | 122.6347 | 181.5863 | 0.1848 | 4.0000e-003 | 187.3976 |

## 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 | 0.4549 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 5.1367 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1.8179 | 0.1439 | 3.5281 | 9.0000e-003 | | 0.5299 | 0.5299 | | 0.5299 | 0.5299 | 58.9516 | 113.2847 | 172.2363 | 0.1758 | 4.0000e-003 | 177.8238 |
| Landscaping | 0.1717 | 0.0659 | 5.7185 | 3.0000e-004 | | 0.0317 | 0.0317 | | 0.0317 | 0.0317 | 0.0000 | 9.3500 | 9.3500 | 8.9500e-003 | 0.0000 | 9.5738 |
| **Total** | **7.5811** | **0.2098** | **9.2465** | **9.3000e-003** | | **0.5617** | **0.5617** | | **0.5617** | **0.5617** | **58.9516** | **122.6347** | **181.5863** | **0.1848** | **4.0000e-003** | **187.3976** |

### 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 | 0.4549 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 5.1367 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1.8179 | 0.1439 | 3.5281 | 9.0000e-003 | | 0.5299 | 0.5299 | | 0.5299 | 0.5299 | 58.9516 | 113.2847 | 172.2363 | 0.1758 | 4.0000e-003 | 177.8238 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landscaping | 0.1717 | 0.0659 | 5.7185 | 3.0000e-004 | | 0.0317 | 0.0317 | | 0.0317 | 0.0317 | 0.0000 | 9.3500 | 9.3500 | 8.9500e-003 | 0.0000 | 9.5738 |
| **Total** | **7.5811** | **0.2098** | **9.2465** | **9.3000e-003** | | **0.5617** | **0.5617** | | **0.5617** | **0.5617** | **58.9516** | **122.6347** | **181.5863** | **0.1848** | **4.0000e-003** | **187.3976** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 204.9704 | 0.9507 | 0.0239 | 235.8694 |
| Unmitigated | 242.1917 | 1.1878 | 0.0298 | 280.7653 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |

| | | | | | |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 36.1605 / 22.7968 | 242.1917 | 1.1878 | 0.0298 | 280.7653 |
| **Total** | | **242.1917** | **1.1878** | **0.0298** | **280.7653** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 28.9284 / 21.4062 | 204.9704 | 0.9507 | 0.0239 | 235.8694 |
| **Total** | | **204.9704** | **0.9507** | **0.0239** | **235.8694** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 132.0801 | 7.8057 | 0.0000 | 327.2229 |
| Unmitigated | 132.0801 | 7.8057 | 0.0000 | 327.2229 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 650.67 | 132.0801 | 7.8057 | 0.0000 | 327.2229 |
| **Total** | | **132.0801** | **7.8057** | **0.0000** | **327.2229** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 650.67 | 132.0801 | 7.8057 | 0.0000 | 327.2229 |
| **Total** | | **132.0801** | **7.8057** | **0.0000** | **327.2229** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

Phase IV Construction - South Coast Air Basin, Summer

# Phase IV Construction

**South Coast Air Basin, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 28.00 | Acre | 28.00 | 1,219,680.00 | 0 |
| Single Family Housing | 555.00 | Dwelling Unit | 83.00 | 1,399,700.00 | 1587 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2029 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 220.00 | 154.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 263.00 |
| tblConstructionPhase | NumDays | 220.00 | 45.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 1/22/2042 | 9/21/2028 |
| tblConstructionPhase | PhaseEndDate | 5/16/2040 | 9/21/2028 |
| tblConstructionPhase | PhaseEndDate | 3/20/2041 | 9/21/2028 |
| tblConstructionPhase | PhaseStartDate | 3/21/2041 | 2/21/2028 |
| tblConstructionPhase | PhaseStartDate | 6/29/2028 | 9/21/2027 |
| tblConstructionPhase | PhaseStartDate | 5/17/2040 | 7/21/2028 |
| tblLandUse | LandUseSquareFeet | 999,000.00 | 1,399,700.00 |
| tblLandUse | LotAcreage | 180.19 | 83.00 |

# 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2027 | 6.9420 | 58.8043 | 64.9935 | 0.2158 | 18.5127 | 1.7282 | 20.2409 | 6.2435 | 1.6016 | 7.8451 | 0.0000 | 21,691.7614 | 21,691.7614 | 3.0181 | 0.0000 | 21,767.2135 |
| 2028 | 66.4749 | 59.9365 | 68.9810 | 0.2289 | 20.0999 | 1.7848 | 21.8848 | 6.6645 | 1.6578 | 8.3222 | 0.0000 | 22,981.5800 | 22,981.5800 | 3.0412 | 0.0000 | 23,057.6108 |
| **Maximum** | **66.4749** | **59.9365** | **68.9810** | **0.2289** | **20.0999** | **1.7848** | **21.8848** | **6.6645** | **1.6578** | **8.3222** | **0.0000** | **22,981.5800** | **22,981.5800** | **3.0412** | **0.0000** | **23,057.6108** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2027 | 4.8704 | 53.7551 | 77.1742 | 0.2158 | 13.2220 | 0.4002 | 13.6222 | 4.0497 | 0.3953 | 4.4450 | 0.0000 | 21,691.7614 | 21,691.7614 | 3.0181 | 0.0000 | 21,767.2135 |
| 2028 | 64.2918 | 54.8274 | 81.1849 | 0.2289 | 14.8092 | 0.4196 | 15.2288 | 4.4706 | 0.4143 | 4.8849 | 0.0000 | 22,981.5800 | 22,981.5800 | 3.0412 | 0.0000 | 23,057.6108 |
| **Maximum** | **64.2918** | **54.8274** | **81.1849** | **0.2289** | **14.8092** | **0.4196** | **15.2288** | **4.4706** | **0.4143** | **4.8849** | **0.0000** | **22,981.5800** | **22,981.5800** | **3.0412** | **0.0000** | **23,057.6108** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **5.80** | **8.55** | **-18.20** | **0.00** | **27.40** | **76.66** | **31.51** | **33.99** | **75.16** | **42.29** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 177.4422 | 12.0423 | 327.9939 | 0.7225 | | 42.6494 | 42.6494 | | 42.6494 | 42.6494 | 5,198.6397 | 10,072.4527 | 15,271.0924 | 15.5823 | 0.3529 | 15,765.7986 |
| Energy | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |
| Mobile | 6.5294 | 31.6190 | 86.2354 | 0.3988 | 39.9322 | 0.2452 | 40.1775 | 10.6791 | 0.2277 | 10.9068 | | 40,814.8711 | 40,814.8711 | 1.5953 | | 40,854.7536 |
| **Total** | **184.4733** | **47.9487** | **416.0538** | **1.1487** | **39.9322** | **43.2412** | **83.1735** | **10.6791** | **43.2237** | **53.9028** | **5,198.6397** | **56,360.6076** | **61,559.2473** | **17.2825** | **0.4532** | **62,126.3611** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 177.4422 | 12.0423 | 327.9939 | 0.7225 | | 42.6494 | 42.6494 | | 42.6494 | 42.6494 | 5,198.6397 | 10,072.4527 | 15,271.0924 | 15.5823 | 0.3529 | 15,765.7986 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |
| Mobile | 6.5294 | 31.6190 | 86.2354 | 0.3988 | 39.9322 | 0.2452 | 40.1775 | 10.6791 | 0.2277 | 10.9068 | | 40,814.8711 | 40,814.8711 | 1.5953 | | 40,854.7536 |
| **Total** | **184.4733** | **47.9487** | **416.0538** | **1.1487** | **39.9322** | **43.2412** | **83.1735** | **10.6791** | **43.2237** | **53.9028** | **5,198.6397** | **56,360.6076** | **61,559.2473** | **17.2825** | **0.4532** | **62,126.3611** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 4/22/2027 | 6/28/2028 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 9/21/2027 | 9/21/2028 | 5 | 263 | |
| 3 | Architectural Coating | Architectural Coating | 2/21/2028 | 9/21/2028 | 5 | 154 | |
| 4 | Paving | Paving | 7/21/2028 | 9/21/2028 | 5 | 45 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 28**

**Residential Indoor: 2,834,393; Residential Outdoor: 944,798; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 712.00 | 259.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 142.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2027

**Unmitigated Construction On-Site**

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0604 | 0.0316 | 0.4886 | 1.7900e-003 | 0.2236 | 1.3800e-003 | 0.2249 | 0.0593 | 1.2700e-003 | 0.0606 | | 178.2011 | 178.2011 | 3.4200e-003 | | 178.2866 |
| **Total** | **0.0604** | **0.0316** | **0.4886** | **1.7900e-003** | **0.2236** | **1.3800e-003** | **0.2249** | **0.0593** | **1.2700e-003** | **0.0606** | | **178.2011** | **178.2011** | **3.4200e-003** | | **178.2866** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0604 | 0.0316 | 0.4886 | 1.7900e-003 | 0.2236 | 1.3800e-003 | 0.2249 | 0.0593 | 1.2700e-003 | 0.0606 | | 178.2011 | 178.2011 | 3.4200e-003 | | 178.2866 |
| **Total** | **0.0604** | **0.0316** | **0.4886** | **1.7900e-003** | **0.2236** | **1.3800e-003** | **0.2249** | **0.0593** | **1.2700e-003** | **0.0606** | | **178.2011** | **178.2011** | **3.4200e-003** | | **178.2866** |

## 3.2 Grading - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0573 | 0.0292 | 0.4604 | 1.7300e-003 | 0.2236 | 1.2800e-003 | 0.2248 | 0.0593 | 1.1800e-003 | 0.0605 | | 172.9594 | 172.9594 | 3.1600e-003 | | 173.0383 |
| **Total** | **0.0573** | **0.0292** | **0.4604** | **1.7300e-003** | **0.2236** | **1.2800e-003** | **0.2248** | **0.0593** | **1.1800e-003** | **0.0605** | | **172.9594** | **172.9594** | **3.1600e-003** | | **173.0383** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0573 | 0.0292 | 0.4604 | 1.7300e-003 | 0.2236 | 1.2800e-003 | 0.2248 | 0.0593 | 1.1800e-003 | 0.0605 | | 172.9594 | 172.9594 | 3.1600e-003 | | 173.0383 |
| **Total** | **0.0573** | **0.0292** | **0.4604** | **1.7300e-003** | **0.2236** | **1.2800e-003** | **0.2248** | **0.0593** | **1.1800e-003** | **0.0605** | | **172.9594** | **172.9594** | **3.1600e-003** | | **173.0383** |

## 3.3 Building Construction - 2027

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4634 | 17.2352 | 4.6967 | 0.0614 | 1.6573 | 0.0191 | 1.6764 | 0.4771 | 0.0183 | 0.4954 | | 6,604.8461 | 6,604.8461 | 0.3488 | | 6,613.5648 |
| Worker | 2.1496 | 1.1248 | 17.3925 | 0.0636 | 7.9585 | 0.0493 | 8.0078 | 2.1106 | 0.0454 | 2.1560 | | 6,343.9584 | 6,343.9584 | 0.1218 | | 6,347.0027 |
| **Total** | **2.6130** | **18.3601** | **22.0892** | **0.1250** | **9.6158** | **0.0684** | **9.6842** | **2.5877** | **0.0636** | **2.6513** | | **12,948.8045** | **12,948.8045** | **0.4705** | | **12,960.5674** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4634 | 17.2352 | 4.6967 | 0.0614 | 1.6573 | 0.0191 | 1.6764 | 0.4771 | 0.0183 | 0.4954 | | 6,604.8461 | 6,604.8461 | 0.3488 | | 6,613.5648 |
| Worker | 2.1496 | 1.1248 | 17.3925 | 0.0636 | 7.9585 | 0.0493 | 8.0078 | 2.1106 | 0.0454 | 2.1560 | | 6,343.9584 | 6,343.9584 | 0.1218 | | 6,347.0027 |
| **Total** | **2.6130** | **18.3601** | **22.0892** | **0.1250** | **9.6158** | **0.0684** | **9.6842** | **2.5877** | **0.0636** | **2.6513** | | **12,948.8045** | **12,948.8045** | **0.4705** | | **12,960.5674** |

## 3.3 Building Construction - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4555 | 17.1017 | 4.6351 | 0.0611 | 1.6573 | 0.0188 | 1.6762 | 0.4771 | 0.0180 | 0.4951 | | 6,577.0522 | 6,577.0522 | 0.3438 | | 6,585.6469 |
| Worker | 2.0410 | 1.0401 | 16.3915 | 0.0617 | 7.9585 | 0.0457 | 8.0042 | 2.1106 | 0.0420 | 2.1526 | | 6,157.3532 | 6,157.3532 | 0.1124 | | 6,160.1625 |
| **Total** | **2.4965** | **18.1418** | **21.0266** | **0.1229** | **9.6158** | **0.0645** | **9.6803** | **2.5877** | **0.0600** | **2.6477** | | **12,734.4053** | **12,734.4053** | **0.4562** | | **12,745.8094** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4555 | 17.1017 | 4.6351 | 0.0611 | 1.6573 | 0.0188 | 1.6762 | 0.4771 | 0.0180 | 0.4951 | | 6,577.0522 | 6,577.0522 | 0.3438 | | 6,585.6469 |
| Worker | 2.0410 | 1.0401 | 16.3915 | 0.0617 | 7.9585 | 0.0457 | 8.0042 | 2.1106 | 0.0420 | 2.1526 | | 6,157.3532 | 6,157.3532 | 0.1124 | | 6,160.1625 |
| **Total** | **2.4965** | **18.1418** | **21.0266** | **0.1229** | **9.6158** | **0.0645** | **9.6803** | **2.5877** | **0.0600** | **2.6477** | | **12,734.4053** | **12,734.4053** | **0.4562** | | **12,745.8094** |

## 3.4 Architectural Coating - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.0745 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **59.2453** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4071 | 0.2074 | 3.2691 | 0.0123 | 1.5872 | 9.1100e-003 | 1.5963 | 0.4209 | 8.3800e-003 | 0.4293 | | 1,228.0114 | 1,228.0114 | 0.0224 | | 1,228.5717 |
| **Total** | **0.4071** | **0.2074** | **3.2691** | **0.0123** | **1.5872** | **9.1100e-003** | **1.5963** | **0.4209** | **8.3800e-003** | **0.4293** | | **1,228.0114** | **1,228.0114** | **0.0224** | | **1,228.5717** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.0745 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **59.1339** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4071 | 0.2074 | 3.2691 | 0.0123 | 1.5872 | 9.1100e-003 | 1.5963 | 0.4209 | 8.3800e-003 | 0.4293 | | 1,228.0114 | 1,228.0114 | 0.0224 | | 1,228.5717 |
| **Total** | **0.4071** | **0.2074** | **3.2691** | **0.0123** | **1.5872** | **9.1100e-003** | **1.5963** | **0.4209** | **8.3800e-003** | **0.4293** | | **1,228.0114** | **1,228.0114** | **0.0224** | | **1,228.5717** |

## 3.5 Paving - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0430 | 0.0219 | 0.3453 | 1.3000e-003 | 0.1677 | 9.6000e-004 | 0.1686 | 0.0445 | 8.9000e-004 | 0.0454 | | 129.7195 | 129.7195 | 2.3700e-003 | | 129.7787 |
| **Total** | **0.0430** | **0.0219** | **0.3453** | **1.3000e-003** | **0.1677** | **9.6000e-004** | **0.1686** | **0.0445** | **8.9000e-004** | **0.0454** | | **129.7195** | **129.7195** | **2.3700e-003** | | **129.7787** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0430 | 0.0219 | 0.3453 | 1.3000e-003 | 0.1677 | 9.6000e-004 | 0.1686 | 0.0445 | 8.9000e-004 | 0.0454 | | 129.7195 | 129.7195 | 2.3700e-003 | | 129.7787 |
| **Total** | **0.0430** | **0.0219** | **0.3453** | **1.3000e-003** | **0.1677** | **9.6000e-004** | **0.1686** | **0.0445** | **8.9000e-004** | **0.0454** | | **129.7195** | **129.7195** | **2.3700e-003** | | **129.7787** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 6.5294 | 31.6190 | 86.2354 | 0.3988 | 39.9322 | 0.2452 | 40.1775 | 10.6791 | 0.2277 | 10.9068 | | 40,814.8711 | 40,814.8711 | 1.5953 | | 40,854.7536 |
| Unmitigated | 6.5294 | 31.6190 | 86.2354 | 0.3988 | 39.9322 | 0.2452 | 40.1775 | 10.6791 | 0.2277 | 10.9068 | | 40,814.8711 | 40,814.8711 | 1.5953 | | 40,854.7536 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 5,283.60 | 5,500.05 | 4784.10 | 17,916,689 | 17,916,689 |
| Total | 5,283.60 | 5,500.05 | 4,784.10 | 17,916,689 | 17,916,689 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |
| Single Family Housing | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |
| NaturalGas Unmitigated | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 46522.9 | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |
| **Total** | | **0.5017** | **4.2874** | **1.8244** | **0.0274** | | **0.3466** | **0.3466** | | **0.3466** | **0.3466** | | **5,473.2839** | **5,473.2839** | **0.1049** | **0.1003** | **5,505.8089** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 46.5229 | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |
| **Total** | | **0.5017** | **4.2874** | **1.8244** | **0.0274** | | **0.3466** | **0.3466** | | **0.3466** | **0.3466** | | **5,473.2839** | **5,473.2839** | **0.1049** | **0.1003** | **5,505.8089** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 177.4422 | 12.0423 | 327.9939 | 0.7225 | | 42.6494 | 42.6494 | | 42.6494 | 42.6494 | 5,198.6397 | 10,072.4527 | 15,271.0924 | 15.5823 | 0.3529 | 15,765.7986 |
| Unmitigated | 177.4422 | 12.0423 | 327.9939 | 0.7225 | | 42.6494 | 42.6494 | | 42.6494 | 42.6494 | 5,198.6397 | 10,072.4527 | 15,271.0924 | 15.5823 | 0.3529 | 15,765.7986 |

### 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.4925 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 28.1461 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 145.4300 | 11.5153 | 282.2463 | 0.7200 | | 42.3955 | 42.3955 | | 42.3955 | 42.3955 | 5,198.6397 | 9,990.0000 | 15,188.6397 | 15.5034 | 0.3529 | 15,681.3718 |
| Landscaping | 1.3737 | 0.5270 | 45.7477 | 2.4200e-003 | | 0.2538 | 0.2538 | | 0.2538 | 0.2538 | | 82.4527 | 82.4527 | 0.0790 | | 84.4269 |
| **Total** | **177.4422** | **12.0423** | **327.9939** | **0.7225** | | **42.6494** | **42.6494** | | **42.6494** | **42.6494** | **5,198.6397** | **10,072.4527** | **15,271.0924** | **15.5823** | **0.3529** | **15,765.7986** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.4925 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 28.1461 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 145.4300 | 11.5153 | 282.2463 | 0.7200 | | 42.3955 | 42.3955 | | 42.3955 | 42.3955 | 5,198.6397 | 9,990.0000 | 15,188.6397 | 15.5034 | 0.3529 | 15,681.3718 |
| Landscaping | 1.3737 | 0.5270 | 45.7477 | 2.4200e-003 | | 0.2538 | 0.2538 | | 0.2538 | 0.2538 | | 82.4527 | 82.4527 | 0.0790 | | 84.4269 |
| **Total** | **177.4422** | **12.0423** | **327.9939** | **0.7225** | | **42.6494** | **42.6494** | | **42.6494** | **42.6494** | **5,198.6397** | **10,072.4527** | **15,271.0924** | **15.5823** | **0.3529** | **15,765.7986** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase IV Construction - South Coast Air Basin, Winter

# Phase IV Construction

**South Coast Air Basin, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 28.00 | Acre | 28.00 | 1,219,680.00 | 0 |
| Single Family Housing | 555.00 | Dwelling Unit | 83.00 | 1,399,700.00 | 1587 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2029 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 220.00 | 154.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 263.00 |
| tblConstructionPhase | NumDays | 220.00 | 45.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 1/22/2042 | 9/21/2028 |
| tblConstructionPhase | PhaseEndDate | 5/16/2040 | 9/21/2028 |
| tblConstructionPhase | PhaseEndDate | 3/20/2041 | 9/21/2028 |
| tblConstructionPhase | PhaseStartDate | 3/21/2041 | 2/21/2028 |
| tblConstructionPhase | PhaseStartDate | 6/29/2028 | 9/21/2027 |
| tblConstructionPhase | PhaseStartDate | 5/17/2040 | 7/21/2028 |
| tblLandUse | LandUseSquareFeet | 999,000.00 | 1,399,700.00 |
| tblLandUse | LotAcreage | 180.19 | 83.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2027 | 7.2331 | 58.8268 | 63.5946 | 0.2101 | 18.5127 | 1.7289 | 20.2416 | 6.2435 | 1.6022 | 7.8457 | 0.0000 | 21,111.4856 | 21,111.4856 | 3.0292 | 0.0000 | 21,187.2150 |
| 2028 | 66.8073 | 59.9710 | 67.3276 | 0.2226 | 20.0999 | 1.7854 | 21.8854 | 6.6645 | 1.6583 | 8.3228 | 0.0000 | 22,337.7258 | 22,337.7258 | 3.0508 | 0.0000 | 22,413.9948 |
| **Maximum** | **66.8073** | **59.9710** | **67.3276** | **0.2226** | **20.0999** | **1.7854** | **21.8854** | **6.6645** | **1.6583** | **8.3228** | **0.0000** | **22,337.7258** | **22,337.7258** | **3.0508** | **0.0000** | **22,413.9948** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2027 | 5.1615 | 53.7777 | 75.7752 | 0.2101 | 13.2220 | 0.4009 | 13.6228 | 4.0497 | 0.3960 | 4.4456 | 0.0000 | 21,111.4855 | 21,111.4855 | 3.0292 | 0.0000 | 21,187.2149 |
| 2028 | 64.6242 | 54.8619 | 79.5315 | 0.2226 | 14.8092 | 0.4202 | 15.2294 | 4.4706 | 0.4148 | 4.8854 | 0.0000 | 22,337.7258 | 22,337.7258 | 3.0508 | 0.0000 | 22,413.9947 |
| **Maximum** | **64.6242** | **54.8619** | **79.5315** | **0.2226** | **14.8092** | **0.4202** | **15.2294** | **4.4706** | **0.4148** | **4.8854** | **0.0000** | **22,337.7258** | **22,337.7258** | **3.0508** | **0.0000** | **22,413.9947** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **5.75** | **8.55** | **-18.63** | **0.00** | **27.40** | **76.64** | **31.51** | **33.99** | **75.13** | **42.29** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 177.4422 | 12.0423 | 327.9939 | 0.7225 | | 42.6494 | 42.6494 | | 42.6494 | 42.6494 | 5,198.6397 | 10,072.4527 | 15,271.0924 | 15.5823 | 0.3529 | 15,765.7986 |
| Energy | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |
| Mobile | 6.2462 | 32.0782 | 80.8353 | 0.3791 | 39.9322 | 0.2460 | 40.1782 | 10.6791 | 0.2284 | 10.9075 | | 38,820.6115 | 38,820.6115 | 1.6000 | | 38,860.6113 |
| **Total** | **184.1901** | **48.4079** | **410.6537** | **1.1289** | **39.9322** | **43.2420** | **83.1742** | **10.6791** | **43.2244** | **53.9035** | **5,198.6397** | **54,366.3480** | **59,564.9877** | **17.2872** | **0.4532** | **60,132.2188** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 177.4422 | 12.0423 | 327.9939 | 0.7225 | | 42.6494 | 42.6494 | | 42.6494 | 42.6494 | 5,198.6397 | 10,072.4527 | 15,271.0924 | 15.5823 | 0.3529 | 15,765.7986 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |
| Mobile | 6.2462 | 32.0782 | 80.8353 | 0.3791 | 39.9322 | 0.2460 | 40.1782 | 10.6791 | 0.2284 | 10.9075 | | 38,820.6115 | 38,820.6115 | 1.6000 | | 38,860.6113 |
| **Total** | **184.1901** | **48.4079** | **410.6537** | **1.1289** | **39.9322** | **43.2420** | **83.1742** | **10.6791** | **43.2244** | **53.9035** | **5,198.6397** | **54,366.3480** | **59,564.9877** | **17.2872** | **0.4532** | **60,132.2188** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 4/22/2027 | 6/28/2028 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 9/21/2027 | 9/21/2028 | 5 | 263 | |
| 3 | Architectural Coating | Architectural Coating | 2/21/2028 | 9/21/2028 | 5 | 154 | |
| 4 | Paving | Paving | 7/21/2028 | 9/21/2028 | 5 | 45 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 28**

**Residential Indoor: 2,834,393; Residential Outdoor: 944,798; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 712.00 | 259.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 142.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2027

**Unmitigated Construction On-Site**

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0677 | 0.0346 | 0.4385 | 1.6700e-003 | 0.2236 | 1.3800e-003 | 0.2249 | 0.0593 | 1.2700e-003 | 0.0606 | | 167.1009 | 167.1009 | 3.1800e-003 | | 167.1806 |
| **Total** | **0.0677** | **0.0346** | **0.4385** | **1.6700e-003** | **0.2236** | **1.3800e-003** | **0.2249** | **0.0593** | **1.2700e-003** | **0.0606** | | **167.1009** | **167.1009** | **3.1800e-003** | | **167.1806** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0677 | 0.0346 | 0.4385 | 1.6700e-003 | 0.2236 | 1.3800e-003 | 0.2249 | 0.0593 | 1.2700e-003 | 0.0606 | | 167.1009 | 167.1009 | 3.1800e-003 | | 167.1806 |
| **Total** | **0.0677** | **0.0346** | **0.4385** | **1.6700e-003** | **0.2236** | **1.3800e-003** | **0.2249** | **0.0593** | **1.2700e-003** | **0.0606** | | **167.1009** | **167.1009** | **3.1800e-003** | | **167.1806** |

## 3.2 Grading - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0644 | 0.0320 | 0.4128 | 1.6300e-003 | 0.2236 | 1.2800e-003 | 0.2248 | 0.0593 | 1.1800e-003 | 0.0605 | | 162.1726 | 162.1726 | 2.9400e-003 | | 162.2460 |
| **Total** | **0.0644** | **0.0320** | **0.4128** | **1.6300e-003** | **0.2236** | **1.2800e-003** | **0.2248** | **0.0593** | **1.1800e-003** | **0.0605** | | **162.1726** | **162.1726** | **2.9400e-003** | | **162.2460** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0644 | 0.0320 | 0.4128 | 1.6300e-003 | 0.2236 | 1.2800e-003 | 0.2248 | 0.0593 | 1.1800e-003 | 0.0605 | | 162.1726 | 162.1726 | 2.9400e-003 | | 162.2460 |
| **Total** | **0.0644** | **0.0320** | **0.4128** | **1.6300e-003** | **0.2236** | **1.2800e-003** | **0.2248** | **0.0593** | **1.1800e-003** | **0.0605** | | **162.1726** | **162.1726** | **2.9400e-003** | | **162.2460** |

## 3.3 Building Construction - 2027

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4867 | 17.1463 | 5.1304 | 0.0598 | 1.6573 | 0.0198 | 1.6771 | 0.4771 | 0.0189 | 0.4960 | | 6,430.8354 | 6,430.8354 | 0.3685 | | 6,440.0474 |
| Worker | 2.4101 | 1.2333 | 15.6099 | 0.0596 | 7.9585 | 0.0493 | 8.0078 | 2.1106 | 0.0454 | 2.1560 | | 5,948.7935 | 5,948.7935 | 0.1134 | | 5,951.6275 |
| **Total** | **2.8968** | **18.3796** | **20.7404** | **0.1195** | **9.6158** | **0.0690** | **9.6848** | **2.5877** | **0.0642** | **2.6520** | | **12,379.6288** | **12,379.6288** | **0.4818** | | **12,391.6749** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4867 | 17.1463 | 5.1304 | 0.0598 | 1.6573 | 0.0198 | 1.6771 | 0.4771 | 0.0189 | 0.4960 | | 6,430.8354 | 6,430.8354 | 0.3685 | | 6,440.0474 |
| Worker | 2.4101 | 1.2333 | 15.6099 | 0.0596 | 7.9585 | 0.0493 | 8.0078 | 2.1106 | 0.0454 | 2.1560 | | 5,948.7935 | 5,948.7935 | 0.1134 | | 5,951.6275 |
| **Total** | **2.8968** | **18.3796** | **20.7404** | **0.1195** | **9.6158** | **0.0690** | **9.6848** | **2.5877** | **0.0642** | **2.6520** | | **12,379.6288** | **12,379.6288** | **0.4818** | | **12,391.6749** |

## 3.3 Building Construction - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4782 | 17.0135 | 5.0625 | 0.0596 | 1.6573 | 0.0194 | 1.6767 | 0.4771 | 0.0186 | 0.4957 | | 6,404.5811 | 6,404.5811 | 0.3629 | | 6,413.6540 |
| Worker | 2.2933 | 1.1400 | 14.6964 | 0.0579 | 7.9585 | 0.0457 | 8.0042 | 2.1106 | 0.0420 | 2.1526 | | 5,773.3431 | 5,773.3431 | 0.1046 | | 5,775.9570 |
| **Total** | **2.7715** | **18.1535** | **19.7589** | **0.1174** | **9.6158** | **0.0651** | **9.6809** | **2.5877** | **0.0606** | **2.6483** | | **12,177.9242** | **12,177.9242** | **0.4675** | | **12,189.6109** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4782 | 17.0135 | 5.0625 | 0.0596 | 1.6573 | 0.0194 | 1.6767 | 0.4771 | 0.0186 | 0.4957 | | 6,404.5811 | 6,404.5811 | 0.3629 | | 6,413.6540 |
| Worker | 2.2933 | 1.1400 | 14.6964 | 0.0579 | 7.9585 | 0.0457 | 8.0042 | 2.1106 | 0.0420 | 2.1526 | | 5,773.3431 | 5,773.3431 | 0.1046 | | 5,775.9570 |
| **Total** | **2.7715** | **18.1535** | **19.7589** | **0.1174** | **9.6158** | **0.0651** | **9.6809** | **2.5877** | **0.0606** | **2.6483** | | **12,177.9242** | **12,177.9242** | **0.4675** | | **12,189.6109** |

## 3.4 Architectural Coating - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.0745 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **59.2453** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4574 | 0.2274 | 2.9310 | 0.0115 | 1.5872 | 9.1100e-003 | 1.5963 | 0.4209 | 8.3800e-003 | 0.4293 | | 1,151.4252 | 1,151.4252 | 0.0209 | | 1,151.9465 |
| **Total** | **0.4574** | **0.2274** | **2.9310** | **0.0115** | **1.5872** | **9.1100e-003** | **1.5963** | **0.4209** | **8.3800e-003** | **0.4293** | | **1,151.4252** | **1,151.4252** | **0.0209** | | **1,151.9465** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.0745 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **59.1339** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4574 | 0.2274 | 2.9310 | 0.0115 | 1.5872 | 9.1100e-003 | 1.5963 | 0.4209 | 8.3800e-003 | 0.4293 | | 1,151.4252 | 1,151.4252 | 0.0209 | | 1,151.9465 |
| **Total** | **0.4574** | **0.2274** | **2.9310** | **0.0115** | **1.5872** | **9.1100e-003** | **1.5963** | **0.4209** | **8.3800e-003** | **0.4293** | | **1,151.4252** | **1,151.4252** | **0.0209** | | **1,151.9465** |

## 3.5 Paving - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0483 | 0.0240 | 0.3096 | 1.2200e-003 | 0.1677 | 9.6000e-004 | 0.1686 | 0.0445 | 8.9000e-004 | 0.0454 | | 121.6294 | 121.6294 | 2.2000e-003 | | 121.6845 |
| **Total** | **0.0483** | **0.0240** | **0.3096** | **1.2200e-003** | **0.1677** | **9.6000e-004** | **0.1686** | **0.0445** | **8.9000e-004** | **0.0454** | | **121.6294** | **121.6294** | **2.2000e-003** | | **121.6845** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0483 | 0.0240 | 0.3096 | 1.2200e-003 | 0.1677 | 9.6000e-004 | 0.1686 | 0.0445 | 8.9000e-004 | 0.0454 | | 121.6294 | 121.6294 | 2.2000e-003 | | 121.6845 |
| **Total** | **0.0483** | **0.0240** | **0.3096** | **1.2200e-003** | **0.1677** | **9.6000e-004** | **0.1686** | **0.0445** | **8.9000e-004** | **0.0454** | | **121.6294** | **121.6294** | **2.2000e-003** | | **121.6845** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 6.2462 | 32.0782 | 80.8353 | 0.3791 | 39.9322 | 0.2460 | 40.1782 | 10.6791 | 0.2284 | 10.9075 | | 38,820.6115 | 38,820.6115 | 1.6000 | | 38,860.6113 |
| Unmitigated | 6.2462 | 32.0782 | 80.8353 | 0.3791 | 39.9322 | 0.2460 | 40.1782 | 10.6791 | 0.2284 | 10.9075 | | 38,820.6115 | 38,820.6115 | 1.6000 | | 38,860.6113 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 5,283.60 | 5,500.05 | 4784.10 | 17,916,689 | 17,916,689 |
| Total | 5,283.60 | 5,500.05 | 4,784.10 | 17,916,689 | 17,916,689 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |
| Single Family Housing | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |
| NaturalGas Unmitigated | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 46522.9 | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |
| **Total** | | **0.5017** | **4.2874** | **1.8244** | **0.0274** | | **0.3466** | **0.3466** | | **0.3466** | **0.3466** | | **5,473.2839** | **5,473.2839** | **0.1049** | **0.1003** | **5,505.8089** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 46.5229 | 0.5017 | 4.2874 | 1.8244 | 0.0274 | | 0.3466 | 0.3466 | | 0.3466 | 0.3466 | | 5,473.2839 | 5,473.2839 | 0.1049 | 0.1003 | 5,505.8089 |
| **Total** | | **0.5017** | **4.2874** | **1.8244** | **0.0274** | | **0.3466** | **0.3466** | | **0.3466** | **0.3466** | | **5,473.2839** | **5,473.2839** | **0.1049** | **0.1003** | **5,505.8089** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 177.4422 | 12.0423 | 327.9939 | 0.7225 | | 42.6494 | 42.6494 | | 42.6494 | 42.6494 | 5,198.6397 | 10,072.4527 | 15,271.0924 | 15.5823 | 0.3529 | 15,765.7986 |
| Unmitigated | 177.4422 | 12.0423 | 327.9939 | 0.7225 | | 42.6494 | 42.6494 | | 42.6494 | 42.6494 | 5,198.6397 | 10,072.4527 | 15,271.0924 | 15.5823 | 0.3529 | 15,765.7986 |

### 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.4925 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 28.1461 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 145.4300 | 11.5153 | 282.2463 | 0.7200 | | 42.3955 | 42.3955 | | 42.3955 | 42.3955 | 5,198.6397 | 9,990.0000 | 15,188.6397 | 15.5034 | 0.3529 | 15,681.3718 |
| Landscaping | 1.3737 | 0.5270 | 45.7477 | 2.4200e-003 | | 0.2538 | 0.2538 | | 0.2538 | 0.2538 | | 82.4527 | 82.4527 | 0.0790 | | 84.4269 |
| **Total** | **177.4422** | **12.0423** | **327.9939** | **0.7225** | | **42.6494** | **42.6494** | | **42.6494** | **42.6494** | **5,198.6397** | **10,072.4527** | **15,271.0924** | **15.5823** | **0.3529** | **15,765.7986** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.4925 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 28.1461 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 145.4300 | 11.5153 | 282.2463 | 0.7200 | | 42.3955 | 42.3955 | | 42.3955 | 42.3955 | 5,198.6397 | 9,990.0000 | 15,188.6397 | 15.5034 | 0.3529 | 15,681.3718 |
| Landscaping | 1.3737 | 0.5270 | 45.7477 | 2.4200e-003 | | 0.2538 | 0.2538 | | 0.2538 | 0.2538 | | 82.4527 | 82.4527 | 0.0790 | | 84.4269 |
| **Total** | **177.4422** | **12.0423** | **327.9939** | **0.7225** | | **42.6494** | **42.6494** | | **42.6494** | **42.6494** | **5,198.6397** | **10,072.4527** | **15,271.0924** | **15.5823** | **0.3529** | **15,765.7986** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

# Phase V Construction

**South Coast Air Basin, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 10.00 | Acre | 10.00 | 435,600.00 | 0 |
| Single Family Housing | 495.00 | Dwelling Unit | 83.00 | 1,253,656.00 | 1416 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2031 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Trips and VMT -

Architectural Coating -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 110.00 | 133.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | NumDays | 1,550.00 | 262.00 |
| tblConstructionPhase | NumDays | 155.00 | 310.00 |
| tblConstructionPhase | NumDays | 110.00 | 45.00 |
| tblConstructionPhase | PhaseEndDate | 6/25/2043 | 2/22/2030 |
| tblConstructionPhase | PhaseEndDate | 10/17/2041 | 2/22/2030 |
| tblConstructionPhase | PhaseEndDate | 8/21/2042 | 2/22/2030 |
| tblConstructionPhase | PhaseStartDate | 8/22/2042 | 8/22/2029 |
| tblConstructionPhase | PhaseStartDate | 11/30/2029 | 2/22/2029 |
| tblConstructionPhase | PhaseStartDate | 10/18/2041 | 12/22/2029 |
| tblLandUse | LandUseSquareFeet | 891,000.00 | 1,253,656.00 |
| tblLandUse | LotAcreage | 160.71 | 83.00 |

## 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 | | | | | |
| 2028 | 0.1050 | 0.9931 | 0.9498 | 2.2600e-003 | 0.6325 | 0.0402 | 0.6727 | 0.1640 | 0.0370 | 0.2009 | 0.0000 | 198.8021 | 198.8021 | 0.0627 | 0.0000 | 200.3691 |
| 2029 | 3.5319 | 5.8259 | 6.6728 | 0.0193 | 1.9595 | 0.2027 | 2.1622 | 0.6621 | 0.1879 | 0.8500 | 0.0000 | 1,733.3318 | 1,733.3318 | 0.2993 | 0.0000 | 1,740.8140 |
| 2030 | 1.2598 | 0.4869 | 0.9454 | 2.7800e-003 | 0.1569 | 0.0106 | 0.1675 | 0.0420 | 0.0106 | 0.0526 | 0.0000 | 249.4783 | 249.4783 | 8.8400e-003 | 0.0000 | 249.6993 |
| **Maximum** | **3.5319** | **5.8259** | **6.6728** | **0.0193** | **1.9595** | **0.2027** | **2.1622** | **0.6621** | **0.1879** | **0.8500** | **0.0000** | **1,733.3318** | **1,733.3318** | **0.2993** | **0.0000** | **1,740.8140** |

**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 | | | | | |
| 2028 | 0.0561 | 0.8526 | 1.3187 | 2.2600e-003 | 0.2514 | 6.9600e-003 | 0.2584 | 0.0652 | 6.9600e-003 | 0.0722 | 0.0000 | 198.8019 | 198.8019 | 0.0627 | 0.0000 | 200.3688 |
| 2029 | 3.2836 | 5.2298 | 8.1233 | 0.0193 | 1.2698 | 0.0444 | 1.3142 | 0.3937 | 0.0440 | 0.4377 | 0.0000 | 1,733.3307 | 1,733.3307 | 0.2993 | 0.0000 | 1,740.8128 |
| 2030 | 1.2300 | 0.5960 | 1.0078 | 2.7800e-003 | 0.1569 | 5.5900e-003 | 0.1625 | 0.0420 | 5.5300e-003 | 0.0475 | 0.0000 | 249.4782 | 249.4782 | 8.8400e-003 | 0.0000 | 249.6992 |
| **Maximum** | **3.2836** | **5.2298** | **8.1233** | **0.0193** | **1.2698** | **0.0444** | **1.3142** | **0.3937** | **0.0440** | **0.4377** | **0.0000** | **1,733.3307** | **1,733.3307** | **0.2993** | **0.0000** | **1,740.8128** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **6.68** | **8.59** | **-21.96** | **0.00** | **38.95** | **77.54** | **42.21** | **42.29** | **76.00** | **49.48** | **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** | **9-22-2028** | **12-21-2028** | 1.0055 | 0.8320 |
| **2** | **12-22-2028** | **3-21-2029** | 1.2401 | 1.0507 |
| **3** | **3-22-2029** | **6-21-2029** | 1.8171 | 1.5832 |
| **4** | **6-22-2029** | **9-21-2029** | 2.4988 | 2.2629 |
| **5** | **9-22-2029** | **12-21-2029** | 3.5652 | 3.3701 |
| **6** | **12-22-2029** | **3-21-2030** | 2.0392 | 2.1095 |
| | | **Highest** | 3.5652 | 3.3701 |

## 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 | 6.9833 | 0.2026 | 8.6195 | 9.2700e-003 | | 0.5583 | 0.5583 | | 0.5583 | 0.5583 | 58.9516 | 121.6235 | 180.5751 | 0.1838 | 4.0000e-003 | 186.3612 |
| Energy | 0.0817 | 0.6979 | 0.2970 | 4.4500e-003 | | 0.0564 | 0.0564 | | 0.0564 | 0.0564 | 0.0000 | 2,182.9423 | 2,182.9423 | 0.0723 | 0.0266 | 2,192.6632 |
| Mobile | 0.9429 | 5.0445 | 12.6971 | 0.0594 | 6.0671 | 0.0380 | 6.1050 | 1.6250 | 0.0352 | 1.6602 | 0.0000 | 5,521.0204 | 5,521.0204 | 0.2231 | 0.0000 | 5,526.5972 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 132.0801 | 0.0000 | 132.0801 | 7.8057 | 0.0000 | 327.2229 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 11.4721 | 230.7196 | 242.1917 | 1.1878 | 0.0298 | 280.7653 |
| **Total** | **8.0078** | **5.9450** | **21.6135** | **0.0732** | **6.0671** | **0.6526** | **6.7197** | **1.6250** | **0.6499** | **2.2749** | **202.5038** | **8,056.3058** | **8,258.8095** | **9.4726** | **0.0604** | **8,513.6098** |

## 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 | 6.9833 | 0.2026 | 8.6195 | 9.2700e-003 | | 0.5583 | 0.5583 | | 0.5583 | 0.5583 | 58.9516 | 121.6235 | 180.5751 | 0.1838 | 4.0000e-003 | 186.3612 |
| Energy | 0.0817 | 0.6979 | 0.2970 | 4.4500e-003 | | 0.0564 | 0.0564 | | 0.0564 | 0.0564 | 0.0000 | 2,182.9423 | 2,182.9423 | 0.0723 | 0.0266 | 2,192.6632 |
| Mobile | 0.9429 | 5.0445 | 12.6971 | 0.0594 | 6.0671 | 0.0380 | 6.1050 | 1.6250 | 0.0352 | 1.6602 | 0.0000 | 5,521.0204 | 5,521.0204 | 0.2231 | 0.0000 | 5,526.5972 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 132.0801 | 0.0000 | 132.0801 | 7.8057 | 0.0000 | 327.2229 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 9.1776 | 195.7928 | 204.9704 | 0.9507 | 0.0239 | 235.8694 |
| **Total** | **8.0078** | **5.9450** | **21.6135** | **0.0732** | **6.0671** | **0.6526** | **6.7197** | **1.6250** | **0.6499** | **2.2749** | **200.2094** | **8,021.3789** | **8,221.5882** | **9.2355** | **0.0545** | **8,468.7139** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **1.13** | **0.43** | **0.45** | **2.50** | **9.71** | **0.53** |

# 3.0 Construction Detail

## Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 9/22/2028 | 11/29/2029 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 2/22/2029 | 2/22/2030 | 5 | 262 | |
| 3 | Paving | Paving | 12/22/2029 | 2/22/2030 | 5 | 45 | |
| 4 | Architectural Coating | Architectural Coating | 8/22/2029 | 2/22/2030 | 5 | 133 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 10**

**Residential Indoor: 2,538,653; Residential Outdoor: 846,218; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 539.00 | 124.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 108.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2028

**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 | | | | | 0.6247 | 0.0000 | 0.6247 | 0.1619 | 0.0000 | 0.1619 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1030 | 0.9920 | 0.9348 | 2.2000e-003 | | 0.0402 | 0.0402 | | 0.0369 | 0.0369 | 0.0000 | 193.4971 | 193.4971 | 0.0626 | 0.0000 | 195.0616 |
| **Total** | **0.1030** | **0.9920** | **0.9348** | **2.2000e-003** | **0.6247** | **0.0402** | **0.6649** | **0.1619** | **0.0369** | **0.1988** | **0.0000** | **193.4971** | **193.4971** | **0.0626** | **0.0000** | **195.0616** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.0400e-003 | 1.1700e-003 | 0.0151 | 6.0000e-005 | 7.7900e-003 | 5.0000e-005 | 7.8400e-003 | 2.0700e-003 | 4.0000e-005 | 2.1100e-003 | 0.0000 | 5.3051 | 5.3051 | 1.0000e-004 | 0.0000 | 5.3075 |
| **Total** | **2.0400e-003** | **1.1700e-003** | **0.0151** | **6.0000e-005** | **7.7900e-003** | **5.0000e-005** | **7.8400e-003** | **2.0700e-003** | **4.0000e-005** | **2.1100e-003** | **0.0000** | **5.3051** | **5.3051** | **1.0000e-004** | **0.0000** | **5.3075** |

## 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 | | | | | 0.2436 | 0.0000 | 0.2436 | 0.0631 | 0.0000 | 0.0631 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0541 | 0.8514 | 1.3037 | 2.2000e-003 | | 6.9200e-003 | 6.9200e-003 | | 6.9200e-003 | 6.9200e-003 | 0.0000 | 193.4968 | 193.4968 | 0.0626 | 0.0000 | 195.0613 |
| **Total** | **0.0541** | **0.8514** | **1.3037** | **2.2000e-003** | **0.2436** | **6.9200e-003** | **0.2506** | **0.0631** | **6.9200e-003** | **0.0701** | **0.0000** | **193.4968** | **193.4968** | **0.0626** | **0.0000** | **195.0613** |

## Mitigated Construction Off-Site

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.0400e-003 | 1.1700e-003 | 0.0151 | 6.0000e-005 | 7.7900e-003 | 5.0000e-005 | 7.8400e-003 | 2.0700e-003 | 4.0000e-005 | 2.1100e-003 | 0.0000 | 5.3051 | 5.3051 | 1.0000e-004 | 0.0000 | 5.3075 |
| **Total** | **2.0400e-003** | **1.1700e-003** | **0.0151** | **6.0000e-005** | **7.7900e-003** | **5.0000e-005** | **7.8400e-003** | **2.0700e-003** | **4.0000e-005** | **2.1100e-003** | **0.0000** | **5.3051** | **5.3051** | **1.0000e-004** | **0.0000** | **5.3075** |

## 3.2 Grading - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 1.1306 | 0.0000 | 1.1306 | 0.4399 | 0.0000 | 0.4399 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3467 | 3.3392 | 3.1466 | 7.4200e-003 | | 0.1351 | 0.1351 | | 0.1243 | 0.1243 | 0.0000 | 651.3492 | 651.3492 | 0.2107 | 0.0000 | 656.6157 |
| **Total** | **0.3467** | **3.3392** | **3.1466** | **7.4200e-003** | **1.1306** | **0.1351** | **1.2657** | **0.4399** | **0.1243** | **0.5643** | **0.0000** | **651.3492** | **651.3492** | **0.2107** | **0.0000** | **656.6157** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4600e-003 | 3.6300e-003 | 0.0477 | 1.9000e-004 | 0.0262 | 1.4000e-004 | 0.0264 | 6.9600e-003 | 1.3000e-004 | 7.0900e-003 | 0.0000 | 17.3767 | 17.3767 | 3.0000e-004 | 0.0000 | 17.3841 |
| **Total** | **6.4600e-003** | **3.6300e-003** | **0.0477** | **1.9000e-004** | **0.0262** | **1.4000e-004** | **0.0264** | **6.9600e-003** | **1.3000e-004** | **7.0900e-003** | **0.0000** | **17.3767** | **17.3767** | **3.0000e-004** | **0.0000** | **17.3841** |

**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 | | | | | 0.4409 | 0.0000 | 0.4409 | 0.1716 | 0.0000 | 0.1716 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1820 | 2.8659 | 4.3883 | 7.4200e-003 | | 0.0233 | 0.0233 | | 0.0233 | 0.0233 | 0.0000 | 651.3485 | 651.3485 | 0.2107 | 0.0000 | 656.6150 |
| **Total** | **0.1820** | **2.8659** | **4.3883** | **7.4200e-003** | **0.4409** | **0.0233** | **0.4642** | **0.1716** | **0.0233** | **0.1949** | **0.0000** | **651.3485** | **651.3485** | **0.2107** | **0.0000** | **656.6150** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4600e-003 | 3.6300e-003 | 0.0477 | 1.9000e-004 | 0.0262 | 1.4000e-004 | 0.0264 | 6.9600e-003 | 1.3000e-004 | 7.0900e-003 | 0.0000 | 17.3767 | 17.3767 | 3.0000e-004 | 0.0000 | 17.3841 |
| **Total** | **6.4600e-003** | **3.6300e-003** | **0.0477** | **1.9000e-004** | **0.0262** | **1.4000e-004** | **0.0264** | **6.9600e-003** | **1.3000e-004** | **7.0900e-003** | **0.0000** | **17.3767** | **17.3767** | **3.0000e-004** | **0.0000** | **17.3841** |

## 3.3 Building Construction - 2029

**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 | 0.1525 | 1.3904 | 1.7934 | 3.0100e-003 | | 0.0588 | 0.0588 | | 0.0553 | 0.0553 | 0.0000 | 258.5902 | 258.5902 | 0.0608 | 0.0000 | 260.1099 |
| **Total** | **0.1525** | **1.3904** | **1.7934** | **3.0100e-003** | | **0.0588** | **0.0588** | | **0.0553** | **0.0553** | **0.0000** | **258.5902** | **258.5902** | **0.0608** | **0.0000** | **260.1099** |

## 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 | 0.0244 | 0.9141 | 0.2561 | 3.2100e-003 | 0.0871 | 1.0000e-003 | 0.0881 | 0.0251 | 9.5000e-004 | 0.0261 | 0.0000 | 313.8272 | 313.8272 | 0.0168 | 0.0000 | 314.2481 |
| Worker | 0.1623 | 0.0913 | 1.1981 | 4.8300e-003 | 0.6594 | 3.5800e-003 | 0.6629 | 0.1751 | 3.3000e-003 | 0.1784 | 0.0000 | 436.9500 | 436.9500 | 7.4700e-003 | 0.0000 | 437.1368 |
| **Total** | **0.1868** | **1.0054** | **1.4543** | **8.0400e-003** | **0.7465** | **4.5800e-003** | **0.7511** | **0.2003** | **4.2500e-003** | **0.2045** | **0.0000** | **750.7771** | **750.7771** | **0.0243** | **0.0000** | **751.3848** |

## 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 | 0.0751 | 1.2690 | 1.9929 | 3.0100e-003 | | 0.0151 | 0.0151 | | 0.0151 | 0.0151 | 0.0000 | 258.5899 | 258.5899 | 0.0608 | 0.0000 | 260.1096 |
| **Total** | **0.0751** | **1.2690** | **1.9929** | **3.0100e-003** | | **0.0151** | **0.0151** | | **0.0151** | **0.0151** | **0.0000** | **258.5899** | **258.5899** | **0.0608** | **0.0000** | **260.1096** |

**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 | 0.0244 | 0.9141 | 0.2561 | 3.2100e-003 | 0.0871 | 1.0000e-003 | 0.0881 | 0.0251 | 9.5000e-004 | 0.0261 | 0.0000 | 313.8272 | 313.8272 | 0.0168 | 0.0000 | 314.2481 |
| Worker | 0.1623 | 0.0913 | 1.1981 | 4.8300e-003 | 0.6594 | 3.5800e-003 | 0.6629 | 0.1751 | 3.3000e-003 | 0.1784 | 0.0000 | 436.9500 | 436.9500 | 7.4700e-003 | 0.0000 | 437.1368 |
| **Total** | **0.1868** | **1.0054** | **1.4543** | **8.0400e-003** | **0.7465** | **4.5800e-003** | **0.7511** | **0.2003** | **4.2500e-003** | **0.2045** | **0.0000** | **750.7771** | **750.7771** | **0.0243** | **0.0000** | **751.3848** |

## 3.3 Building Construction - 2030

**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 | 0.0255 | 0.1547 | 0.3151 | 6.0000e-004 | | 2.8900e-003 | 2.8900e-003 | | 2.8900e-003 | 2.8900e-003 | 0.0000 | 51.2579 | 51.2579 | 2.0600e-003 | 0.0000 | 51.3093 |
| **Total** | **0.0255** | **0.1547** | **0.3151** | **6.0000e-004** | | **2.8900e-003** | **2.8900e-003** | | **2.8900e-003** | **2.8900e-003** | **0.0000** | **51.2579** | **51.2579** | **2.0600e-003** | **0.0000** | **51.3093** |

**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 | 4.2100e-003 | 0.1586 | 0.0444 | 5.6000e-004 | 0.0152 | 1.7000e-004 | 0.0154 | 4.4000e-003 | 1.6000e-004 | 4.5600e-003 | 0.0000 | 54.6987 | 54.6987 | 2.9100e-003 | 0.0000 | 54.7714 |
| Worker | 0.0266 | 0.0147 | 0.1969 | 8.2000e-004 | 0.1153 | 5.8000e-004 | 0.1159 | 0.0306 | 5.4000e-004 | 0.0312 | 0.0000 | 74.5390 | 74.5390 | 1.2000e-003 | 0.0000 | 74.5690 |
| **Total** | **0.0308** | **0.1733** | **0.2413** | **1.3800e-003** | **0.1306** | **7.5000e-004** | **0.1313** | **0.0350** | **7.0000e-004** | **0.0357** | **0.0000** | **129.2377** | **129.2377** | **4.1100e-003** | **0.0000** | **129.3403** |

## 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 | 0.0131 | 0.2219 | 0.3485 | 6.0000e-004 | | 2.6400e-003 | 2.6400e-003 | | 2.6400e-003 | 2.6400e-003 | 0.0000 | 51.2578 | 51.2578 | 2.0600e-003 | 0.0000 | 51.3093 |
| **Total** | **0.0131** | **0.2219** | **0.3485** | **6.0000e-004** | | **2.6400e-003** | **2.6400e-003** | | **2.6400e-003** | **2.6400e-003** | **0.0000** | **51.2578** | **51.2578** | **2.0600e-003** | **0.0000** | **51.3093** |

## 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 | 4.2100e-003 | 0.1586 | 0.0444 | 5.6000e-004 | 0.0152 | 1.7000e-004 | 0.0154 | 4.4000e-003 | 1.6000e-004 | 4.5600e-003 | 0.0000 | 54.6987 | 54.6987 | 2.9100e-003 | 0.0000 | 54.7714 |
| Worker | 0.0266 | 0.0147 | 0.1969 | 8.2000e-004 | 0.1153 | 5.8000e-004 | 0.1159 | 0.0306 | 5.4000e-004 | 0.0312 | 0.0000 | 74.5390 | 74.5390 | 1.2000e-003 | 0.0000 | 74.5690 |
| **Total** | **0.0308** | **0.1733** | **0.2413** | **1.3800e-003** | **0.1306** | **7.5000e-004** | **0.1313** | **0.0350** | **7.0000e-004** | **0.0357** | **0.0000** | **129.2377** | **129.2377** | **4.1100e-003** | **0.0000** | **129.3403** |

## 3.4 Paving - 2029

### 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 | 2.7500e-003 | 0.0257 | 0.0437 | 7.0000e-005 | | 1.2600e-003 | 1.2600e-003 | | 1.1600e-003 | 1.1600e-003 | 0.0000 | 6.0058 | 6.0058 | 1.9400e-003 | 0.0000 | 6.0543 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **2.7500e-003** | **0.0257** | **0.0437** | **7.0000e-005** | | **1.2600e-003** | **1.2600e-003** | | **1.1600e-003** | **1.1600e-003** | **0.0000** | **6.0058** | **6.0058** | **1.9400e-003** | **0.0000** | **6.0543** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2000e-004 | 7.0000e-005 | 9.0000e-004 | 0.0000 | 4.9000e-004 | 0.0000 | 5.0000e-004 | 1.3000e-004 | 0.0000 | 1.3000e-004 | 0.0000 | 0.3272 | 0.3272 | 1.0000e-005 | 0.0000 | 0.3273 |
| **Total** | **1.2000e-004** | **7.0000e-005** | **9.0000e-004** | **0.0000** | **4.9000e-004** | **0.0000** | **5.0000e-004** | **1.3000e-004** | **0.0000** | **1.3000e-004** | **0.0000** | **0.3272** | **0.3272** | **1.0000e-005** | **0.0000** | **0.3273** |

## 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 | 1.6800e-003 | 0.0271 | 0.0519 | 7.0000e-005 | | 2.7000e-004 | 2.7000e-004 | | 2.7000e-004 | 2.7000e-004 | 0.0000 | 6.0058 | 6.0058 | 1.9400e-003 | 0.0000 | 6.0543 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **1.6800e-003** | **0.0271** | **0.0519** | **7.0000e-005** | | **2.7000e-004** | **2.7000e-004** | | **2.7000e-004** | **2.7000e-004** | **0.0000** | **6.0058** | **6.0058** | **1.9400e-003** | **0.0000** | **6.0543** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2000e-004 | 7.0000e-005 | 9.0000e-004 | 0.0000 | 4.9000e-004 | 0.0000 | 5.0000e-004 | 1.3000e-004 | 0.0000 | 1.3000e-004 | 0.0000 | 0.3272 | 0.3272 | 1.0000e-005 | 0.0000 | 0.3273 |
| **Total** | **1.2000e-004** | **7.0000e-005** | **9.0000e-004** | **0.0000** | **4.9000e-004** | **0.0000** | **5.0000e-004** | **1.3000e-004** | **0.0000** | **1.3000e-004** | **0.0000** | **0.3272** | **0.3272** | **1.0000e-005** | **0.0000** | **0.3273** |

## 3.4 Paving - 2030

### 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 | 0.0270 | 0.1388 | 0.3091 | 5.5000e-004 | | 6.4500e-003 | 6.4500e-003 | | 6.4500e-003 | 6.4500e-003 | 0.0000 | 46.9941 | 46.9941 | 2.2000e-003 | 0.0000 | 47.0491 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0270** | **0.1388** | **0.3091** | **5.5000e-004** | | **6.4500e-003** | **6.4500e-003** | | **6.4500e-003** | **6.4500e-003** | **0.0000** | **46.9941** | **46.9941** | **2.2000e-003** | **0.0000** | **47.0491** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4000e-004 | 4.1000e-004 | 5.4800e-003 | 2.0000e-005 | 3.2100e-003 | 2.0000e-005 | 3.2300e-003 | 8.5000e-004 | 1.0000e-005 | 8.7000e-004 | 0.0000 | 2.0744 | 2.0744 | 3.0000e-005 | 0.0000 | 2.0752 |
| **Total** | **7.4000e-004** | **4.1000e-004** | **5.4800e-003** | **2.0000e-005** | **3.2100e-003** | **2.0000e-005** | **3.2300e-003** | **8.5000e-004** | **1.0000e-005** | **8.7000e-004** | **0.0000** | **2.0744** | **2.0744** | **3.0000e-005** | **0.0000** | **2.0752** |

## 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 | 0.0109 | 0.1762 | 0.3373 | 5.5000e-004 | | 1.7800e-003 | 1.7800e-003 | | 1.7800e-003 | 1.7800e-003 | 0.0000 | 46.9940 | 46.9940 | 2.2000e-003 | 0.0000 | 47.0491 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1762** | **0.3373** | **5.5000e-004** | | **1.7800e-003** | **1.7800e-003** | | **1.7800e-003** | **1.7800e-003** | **0.0000** | **46.9940** | **46.9940** | **2.2000e-003** | **0.0000** | **47.0491** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4000e-004 | 4.1000e-004 | 5.4800e-003 | 2.0000e-005 | 3.2100e-003 | 2.0000e-005 | 3.2300e-003 | 8.5000e-004 | 1.0000e-005 | 8.7000e-004 | 0.0000 | 2.0744 | 2.0744 | 3.0000e-005 | 0.0000 | 2.0752 |
| **Total** | **7.4000e-004** | **4.1000e-004** | **5.4800e-003** | **2.0000e-005** | **3.2100e-003** | **2.0000e-005** | **3.2300e-003** | **8.5000e-004** | **1.0000e-005** | **8.7000e-004** | **0.0000** | **2.0744** | **2.0744** | **3.0000e-005** | **0.0000** | **2.0752** |

## 3.5 Architectural Coating - 2029

**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 | 2.8149 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 8.0300e-003 | 0.0538 | 0.0850 | 1.4000e-004 | | 2.4200e-003 | 2.4200e-003 | | 2.4200e-003 | 2.4200e-003 | 0.0000 | 12.0003 | 12.0003 | 6.5000e-004 | 0.0000 | 12.0167 |
| **Total** | **2.8229** | **0.0538** | **0.0850** | **1.4000e-004** | | **2.4200e-003** | **2.4200e-003** | | **2.4200e-003** | **2.4200e-003** | **0.0000** | **12.0003** | **12.0003** | **6.5000e-004** | **0.0000** | **12.0167** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0137 | 7.7100e-003 | 0.1012 | 4.1000e-004 | 0.0557 | 3.0000e-004 | 0.0560 | 0.0148 | 2.8000e-004 | 0.0151 | 0.0000 | 36.9054 | 36.9054 | 6.3000e-004 | 0.0000 | 36.9212 |
| **Total** | **0.0137** | **7.7100e-003** | **0.1012** | **4.1000e-004** | **0.0557** | **3.0000e-004** | **0.0560** | **0.0148** | **2.8000e-004** | **0.0151** | **0.0000** | **36.9054** | **36.9054** | **6.3000e-004** | **0.0000** | **36.9212** |

## 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 | 2.8149 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 2.7900e-003 | 0.0510 | 0.0861 | 1.4000e-004 | | 6.7000e-004 | 6.7000e-004 | | 6.7000e-004 | 6.7000e-004 | 0.0000 | 12.0003 | 12.0003 | 6.5000e-004 | 0.0000 | 12.0166 |
| **Total** | **2.8177** | **0.0510** | **0.0861** | **1.4000e-004** | | **6.7000e-004** | **6.7000e-004** | | **6.7000e-004** | **6.7000e-004** | **0.0000** | **12.0003** | **12.0003** | **6.5000e-004** | **0.0000** | **12.0166** |

## Mitigated Construction Off-Site

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0137 | 7.7100e-003 | 0.1012 | 4.1000e-004 | 0.0557 | 3.0000e-004 | 0.0560 | 0.0148 | 2.8000e-004 | 0.0151 | 0.0000 | 36.9054 | 36.9054 | 6.3000e-004 | 0.0000 | 36.9212 |
| **Total** | **0.0137** | **7.7100e-003** | **0.1012** | **4.1000e-004** | **0.0557** | **3.0000e-004** | **0.0560** | **0.0148** | **2.8000e-004** | **0.0151** | **0.0000** | **36.9054** | **36.9054** | **6.3000e-004** | **0.0000** | **36.9212** |

## 3.5 Architectural Coating - 2030

### 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 | 1.1679 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 2.5500e-003 | 0.0167 | 0.0351 | 6.0000e-005 | | 4.0000e-004 | 4.0000e-004 | | 4.0000e-004 | 4.0000e-004 | 0.0000 | 4.9788 | 4.9788 | 2.0000e-004 | 0.0000 | 4.9839 |
| **Total** | **1.1704** | **0.0167** | **0.0351** | **6.0000e-005** | | **4.0000e-004** | **4.0000e-004** | | **4.0000e-004** | **4.0000e-004** | **0.0000** | **4.9788** | **4.9788** | **2.0000e-004** | **0.0000** | **4.9839** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.3300e-003 | 2.9400e-003 | 0.0395 | 1.6000e-004 | 0.0231 | 1.2000e-004 | 0.0232 | 6.1400e-003 | 1.1000e-004 | 6.2400e-003 | 0.0000 | 14.9355 | 14.9355 | 2.4000e-004 | 0.0000 | 14.9415 |
| **Total** | **5.3300e-003** | **2.9400e-003** | **0.0395** | **1.6000e-004** | **0.0231** | **1.2000e-004** | **0.0232** | **6.1400e-003** | **1.1000e-004** | **6.2400e-003** | **0.0000** | **14.9355** | **14.9355** | **2.4000e-004** | **0.0000** | **14.9415** |

**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 | 1.1679 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.1600e-003 | 0.0212 | 0.0357 | 6.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | 0.0000 | 4.9788 | 4.9788 | 2.0000e-004 | 0.0000 | 4.9839 |
| **Total** | **1.1691** | **0.0212** | **0.0357** | **6.0000e-005** | | **2.8000e-004** | **2.8000e-004** | | **2.8000e-004** | **2.8000e-004** | **0.0000** | **4.9788** | **4.9788** | **2.0000e-004** | **0.0000** | **4.9839** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.3300e-003 | 2.9400e-003 | 0.0395 | 1.6000e-004 | 0.0231 | 1.2000e-004 | 0.0232 | 6.1400e-003 | 1.1000e-004 | 6.2400e-003 | 0.0000 | 14.9355 | 14.9355 | 2.4000e-004 | 0.0000 | 14.9415 |
| **Total** | **5.3300e-003** | **2.9400e-003** | **0.0395** | **1.6000e-004** | **0.0231** | **1.2000e-004** | **0.0232** | **6.1400e-003** | **1.1000e-004** | **6.2400e-003** | **0.0000** | **14.9355** | **14.9355** | **2.4000e-004** | **0.0000** | **14.9415** |

## 4.0 Operational Detail - Mobile

### 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 | 0.9429 | 5.0445 | 12.6971 | 0.0594 | 6.0671 | 0.0380 | 6.1050 | 1.6250 | 0.0352 | 1.6602 | 0.0000 | 5,521.0204 | 5,521.0204 | 0.2231 | 0.0000 | 5,526.5972 |
| Unmitigated | 0.9429 | 5.0445 | 12.6971 | 0.0594 | 6.0671 | 0.0380 | 6.1050 | 1.6250 | 0.0352 | 1.6602 | 0.0000 | 5,521.0204 | 5,521.0204 | 0.2231 | 0.0000 | 5,526.5972 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 4,712.40 | 4,905.45 | 4266.90 | 15,979,750 | 15,979,750 |
| Total | 4,712.40 | 4,905.45 | 4,266.90 | 15,979,750 | 15,979,750 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |
| Single Family Housing | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1,374.7424 | 1,374.7424 | 0.0568 | 0.0117 | 1,379.6605 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1,374.7424 | 1,374.7424 | 0.0568 | 0.0117 | 1,379.6605 |
| NaturalGas Mitigated | 0.0817 | 0.6979 | 0.2970 | 4.4500e-003 | | 0.0564 | 0.0564 | | 0.0564 | 0.0564 | 0.0000 | 808.1999 | 808.1999 | 0.0155 | 0.0148 | 813.0026 |
| NaturalGas Unmitigated | 0.0817 | 0.6979 | 0.2970 | 4.4500e-003 | | 0.0564 | 0.0564 | | 0.0564 | 0.0564 | 0.0000 | 808.1999 | 808.1999 | 0.0155 | 0.0148 | 813.0026 |

## 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 | | | | | |
| 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 |
| Single Family Housing | 1.51451e+007 | 0.0817 | 0.6979 | 0.2970 | 4.4500e-003 | | 0.0564 | 0.0564 | | 0.0564 | 0.0564 | 0.0000 | 808.1999 | 808.1999 | 0.0155 | 0.0148 | 813.0026 |
| **Total** | | **0.0817** | **0.6979** | **0.2970** | **4.4500e-003** | | **0.0564** | **0.0564** | | **0.0564** | **0.0564** | **0.0000** | **808.1999** | **808.1999** | **0.0155** | **0.0148** | **813.0026** |

### 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 | | | | | |
| 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 |
| Single Family Housing | 1.51451e+007 | 0.0817 | 0.6979 | 0.2970 | 4.4500e-003 | | 0.0564 | 0.0564 | | 0.0564 | 0.0564 | 0.0000 | 808.1999 | 808.1999 | 0.0155 | 0.0148 | 813.0026 |
| **Total** | | **0.0817** | **0.6979** | **0.2970** | **4.4500e-003** | | **0.0564** | **0.0564** | | **0.0564** | **0.0564** | **0.0000** | **808.1999** | **808.1999** | **0.0155** | **0.0148** | **813.0026** |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 4.31466e+006 | 1,374.7424 | 0.0568 | 0.0117 | 1,379.6605 |
| **Total** | | **1,374.7424** | **0.0568** | **0.0117** | **1,379.6605** |

### Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 4.31466e+006 | 1,374.7424 | 0.0568 | 0.0117 | 1,379.6605 |

| | | | | | |
|---|---|---|---|---|---|
| **Total** | | **1,374.7424** | **0.0568** | **0.0117** | **1,379.6605** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 6.9833 | 0.2026 | 8.6195 | 9.2700e-003 | | 0.5583 | 0.5583 | | 0.5583 | 0.5583 | 58.9516 | 121.6235 | 180.5751 | 0.1838 | 4.0000e-003 | 186.3612 |
| Unmitigated | 6.9833 | 0.2026 | 8.6195 | 9.2700e-003 | | 0.5583 | 0.5583 | | 0.5583 | 0.5583 | 58.9516 | 121.6235 | 180.5751 | 0.1838 | 4.0000e-003 | 186.3612 |

### 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 | 0.4549 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer Products | 4.5582 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1.8179 | 0.1439 | 3.5281 | 9.0000e-003 | | 0.5299 | 0.5299 | | 0.5299 | 0.5299 | 58.9516 | 113.2847 | 172.2363 | 0.1758 | 4.0000e-003 | 177.8238 |
| Landscaping | 0.1523 | 0.0587 | 5.0914 | 2.7000e-004 | | 0.0283 | 0.0283 | | 0.0283 | 0.0283 | 0.0000 | 8.3388 | 8.3388 | 7.9500e-003 | 0.0000 | 8.5374 |
| **Total** | **6.9833** | **0.2026** | **8.6195** | **9.2700e-003** | | **0.5583** | **0.5583** | | **0.5583** | **0.5583** | **58.9516** | **121.6235** | **180.5751** | **0.1838** | **4.0000e-003** | **186.3612** |

**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 | 0.4549 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.5582 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1.8179 | 0.1439 | 3.5281 | 9.0000e-003 | | 0.5299 | 0.5299 | | 0.5299 | 0.5299 | 58.9516 | 113.2847 | 172.2363 | 0.1758 | 4.0000e-003 | 177.8238 |
| Landscaping | 0.1523 | 0.0587 | 5.0914 | 2.7000e-004 | | 0.0283 | 0.0283 | | 0.0283 | 0.0283 | 0.0000 | 8.3388 | 8.3388 | 7.9500e-003 | 0.0000 | 8.5374 |
| **Total** | **6.9833** | **0.2026** | **8.6195** | **9.2700e-003** | | **0.5583** | **0.5583** | | **0.5583** | **0.5583** | **58.9516** | **121.6235** | **180.5751** | **0.1838** | **4.0000e-003** | **186.3612** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 204.9704 | 0.9507 | 0.0239 | 235.8694 |
| Unmitigated | 242.1917 | 1.1878 | 0.0298 | 280.7653 |

## 7.2 Water by Land Use

### Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 36.1605 / 22.7968 | 242.1917 | 1.1878 | 0.0298 | 280.7653 |
| **Total** | | **242.1917** | **1.1878** | **0.0298** | **280.7653** |

### Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |

| | | | | | |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 28.9284 / 21.4062 | 204.9704 | 0.9507 | 0.0239 | 235.8694 |
| **Total** | | **204.9704** | **0.9507** | **0.0239** | **235.8694** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

### Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 132.0801 | 7.8057 | 0.0000 | 327.2229 |
| Unmitigated | 132.0801 | 7.8057 | 0.0000 | 327.2229 |

## 8.2 Waste by Land Use

### Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 650.67 | 132.0801 | 7.8057 | 0.0000 | 327.2229 |

| | | | | | |
|---|---|---|---|---|---|
| **Total** | | **132.0801** | **7.8057** | **0.0000** | **327.2229** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 650.67 | 132.0801 | 7.8057 | 0.0000 | 327.2229 |
| **Total** | | **132.0801** | **7.8057** | **0.0000** | **327.2229** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase V Construction - South Coast Air Basin, Summer

# Phase V Construction

**South Coast Air Basin, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 10.00 | Acre | 10.00 | 435,600.00 | 0 |
| Single Family Housing | 495.00 | Dwelling Unit | 83.00 | 1,253,656.00 | 1416 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2031 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Trips and VMT -

Architectural Coating -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 110.00 | 133.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | NumDays | 1,550.00 | 262.00 |
| tblConstructionPhase | NumDays | 155.00 | 310.00 |
| tblConstructionPhase | NumDays | 110.00 | 45.00 |
| tblConstructionPhase | PhaseEndDate | 6/25/2043 | 2/22/2030 |
| tblConstructionPhase | PhaseEndDate | 10/17/2041 | 2/22/2030 |
| tblConstructionPhase | PhaseEndDate | 8/21/2042 | 2/22/2030 |
| tblConstructionPhase | PhaseStartDate | 8/22/2042 | 8/22/2029 |
| tblConstructionPhase | PhaseStartDate | 11/30/2029 | 2/22/2029 |
| tblConstructionPhase | PhaseStartDate | 10/18/2041 | 12/22/2029 |
| tblLandUse | LandUseSquareFeet | 891,000.00 | 1,253,656.00 |
| tblLandUse | LotAcreage | 160.71 | 83.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 2.9586 | 27.9721 | 26.7915 | 0.0638 | 8.8969 | 1.1322 | 10.0291 | 3.6558 | 1.0416 | 4.6974 | 0.0000 | 6,181.2408 | 6,181.2408 | 1.9464 | 0.0000 | 6,229.8997 |
| 2029 | 66.3437 | 50.5800 | 60.8485 | 0.1774 | 16.9223 | 1.7586 | 18.6809 | 5.8022 | 1.6332 | 7.4354 | 0.0000 | 17,596.4584 | 17,596.4584 | 2.8186 | 0.0000 | 17,666.9245 |
| 2030 | 64.5969 | 24.7932 | 49.4517 | 0.1455 | 8.1931 | 0.5445 | 8.7376 | 2.1908 | 0.5412 | 2.7320 | 0.0000 | 14,396.6406 | 14,396.6406 | 0.5008 | 0.0000 | 14,409.1595 |
| **Maximum** | **66.3437** | **50.5800** | **60.8485** | **0.1774** | **16.9223** | **1.7586** | **18.6809** | **5.8022** | **1.6332** | **7.4354** | **0.0000** | **17,596.4584** | **17,596.4584** | **2.8186** | **0.0000** | **17,666.9245** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 1.5804 | 24.0118 | 37.1830 | 0.0638 | 3.6062 | 0.1962 | 3.8024 | 1.4619 | 0.1961 | 1.6580 | 0.0000 | 6,181.2408 | 6,181.2408 | 1.9464 | 0.0000 | 6,229.8997 |
| 2029 | 64.1606 | 45.4710 | 73.0523 | 0.1774 | 11.6316 | 0.3933 | 12.0249 | 3.6083 | 0.3898 | 3.9980 | 0.0000 | 17,596.4584 | 17,596.4584 | 2.8186 | 0.0000 | 17,666.9245 |
| 2030 | 63.0668 | 30.3847 | 52.6493 | 0.1455 | 8.1931 | 0.2866 | 8.4797 | 2.1908 | 0.2833 | 2.4742 | 0.0000 | 14,396.6406 | 14,396.6406 | 0.5008 | 0.0000 | 14,409.1594 |
| **Maximum** | **64.1606** | **45.4710** | **73.0523** | **0.1774** | **11.6316** | **0.3933** | **12.0249** | **3.6083** | **0.3898** | **3.9980** | **0.0000** | **17,596.4584** | **17,596.4584** | **2.8186** | **0.0000** | **17,666.9245** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.80** | **3.37** | **-18.81** | **0.00** | **31.11** | **74.50** | **35.09** | **37.67** | **72.97** | **45.31** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 174.1175 | 11.9849 | 322.9775 | 0.7222 | | 42.6220 | 42.6220 | | 42.6220 | 42.6220 | 5,198.6397 | 10,063.5356 | 15,262.1753 | 15.5734 | 0.3529 | 15,756.6589 |
| Energy | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |
| Mobile | 5.8235 | 28.2007 | 76.9126 | 0.3557 | 35.6152 | 0.2187 | 35.8340 | 9.5246 | 0.2031 | 9.7277 | | 36,402.4526 | 36,402.4526 | 1.4228 | | 36,438.0235 |
| **Total** | **180.3885** | **44.0095** | **401.5173** | **1.1023** | **35.6152** | **43.1499** | **78.7651** | **9.5246** | **43.1343** | **52.6589** | **5,198.6397** | **51,347.5657** | **56,546.2054** | **17.0898** | **0.4424** | **57,105.2687** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 174.1175 | 11.9849 | 322.9775 | 0.7222 | | 42.6220 | 42.6220 | | 42.6220 | 42.6220 | 5,198.6397 | 10,063.5356 | 15,262.1753 | 15.5734 | 0.3529 | 15,756.6589 |
| Energy | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |
| Mobile | 5.8235 | 28.2007 | 76.9126 | 0.3557 | 35.6152 | 0.2187 | 35.8340 | 9.5246 | 0.2031 | 9.7277 | | 36,402.4526 | 36,402.4526 | 1.4228 | | 36,438.0235 |
| **Total** | **180.3885** | **44.0095** | **401.5173** | **1.1023** | **35.6152** | **43.1499** | **78.7651** | **9.5246** | **43.1343** | **52.6589** | **5,198.6397** | **51,347.5657** | **56,546.2054** | **17.0898** | **0.4424** | **57,105.2687** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 9/22/2028 | 11/29/2029 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 2/22/2029 | 2/22/2030 | 5 | 262 | |
| 3 | Paving | Paving | 12/22/2029 | 2/22/2030 | 5 | 45 | |
| 4 | Architectural Coating | Architectural Coating | 8/22/2029 | 2/22/2030 | 5 | 133 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 10**

**Residential Indoor: 2,538,653; Residential Outdoor: 846,218; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 539.00 | 124.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 108.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0573 | 0.0292 | 0.4604 | 1.7300e-003 | 0.2236 | 1.2800e-003 | 0.2248 | 0.0593 | 1.1800e-003 | 0.0605 | | 172.9594 | 172.9594 | 3.1600e-003 | | 173.0383 |
| **Total** | **0.0573** | **0.0292** | **0.4604** | **1.7300e-003** | **0.2236** | **1.2800e-003** | **0.2248** | **0.0593** | **1.1800e-003** | **0.0605** | | **172.9594** | **172.9594** | **3.1600e-003** | | **173.0383** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0573 | 0.0292 | 0.4604 | 1.7300e-003 | 0.2236 | 1.2800e-003 | 0.2248 | 0.0593 | 1.1800e-003 | 0.0605 | | 172.9594 | 172.9594 | 3.1600e-003 | | 173.0383 |
| **Total** | **0.0573** | **0.0292** | **0.4604** | **1.7300e-003** | **0.2236** | **1.2800e-003** | **0.2248** | **0.0593** | **1.1800e-003** | **0.0605** | | **172.9594** | **172.9594** | **3.1600e-003** | | **173.0383** |

## 3.2 Grading - 2029

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0539 | 0.0269 | 0.4327 | 1.6900e-003 | 0.2236 | 1.1900e-003 | 0.2247 | 0.0593 | 1.1000e-003 | 0.0604 | | 168.3139 | 168.3139 | 2.9000e-003 | | 168.3863 |
| **Total** | **0.0539** | **0.0269** | **0.4327** | **1.6900e-003** | **0.2236** | **1.1900e-003** | **0.2247** | **0.0593** | **1.1000e-003** | **0.0604** | | **168.3139** | **168.3139** | **2.9000e-003** | | **168.3863** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0539 | 0.0269 | 0.4327 | 1.6900e-003 | 0.2236 | 1.1900e-003 | 0.2247 | 0.0593 | 1.1000e-003 | 0.0604 | | 168.3139 | 168.3139 | 2.9000e-003 | | 168.3863 |
| **Total** | **0.0539** | **0.0269** | **0.4327** | **1.6900e-003** | **0.2236** | **1.1900e-003** | **0.2247** | **0.0593** | **1.1000e-003** | **0.0604** | | **168.3139** | **168.3139** | **2.9000e-003** | | **168.3863** |

## 3.3 Building Construction - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.2146 | 8.1243 | 2.1915 | 0.0292 | 0.7935 | 8.8600e-003 | 0.8023 | 0.2284 | 8.4700e-003 | 0.2369 | | 3,136.9872 | 3,136.9872 | 0.1625 | | 3,141.0495 |
| Worker | 1.4530 | 0.7254 | 11.6625 | 0.0455 | 6.0248 | 0.0321 | 6.0569 | 1.5978 | 0.0296 | 1.6274 | | 4,536.0587 | 4,536.0587 | 0.0781 | | 4,538.0112 |
| **Total** | **1.6676** | **8.8497** | **13.8540** | **0.0746** | **6.8182** | **0.0410** | **6.8592** | **1.8262** | **0.0380** | **1.8642** | | **7,673.0458** | **7,673.0458** | **0.2406** | | **7,679.0607** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.2146 | 8.1243 | 2.1915 | 0.0292 | 0.7935 | 8.8600e-003 | 0.8023 | 0.2284 | 8.4700e-003 | 0.2369 | | 3,136.9872 | 3,136.9872 | 0.1625 | | 3,141.0495 |
| Worker | 1.4530 | 0.7254 | 11.6625 | 0.0455 | 6.0248 | 0.0321 | 6.0569 | 1.5978 | 0.0296 | 1.6274 | | 4,536.0587 | 4,536.0587 | 0.0781 | | 4,538.0112 |
| **Total** | **1.6676** | **8.8497** | **13.8540** | **0.0746** | **6.8182** | **0.0410** | **6.8592** | **1.8262** | **0.0380** | **1.8642** | | **7,673.0458** | **7,673.0458** | **0.2406** | | **7,679.0607** |

## 3.3 Building Construction - 2030

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.2116 | 8.0632 | 2.1704 | 0.0290 | 0.7935 | 8.7100e-003 | 0.8022 | 0.2284 | 8.3200e-003 | 0.2368 | | 3,126.2823 | 3,126.2823 | 0.1605 | | 3,130.2958 |
| Worker | 1.3592 | 0.6667 | 10.9730 | 0.0443 | 6.0248 | 0.0299 | 6.0547 | 1.5978 | 0.0275 | 1.6253 | | 4,425.0489 | 4,425.0489 | 0.0717 | | 4,426.8411 |
| **Total** | **1.5708** | **8.7299** | **13.1434** | **0.0734** | **6.8182** | **0.0386** | **6.8569** | **1.8262** | **0.0358** | **1.8621** | | **7,551.3312** | **7,551.3312** | **0.2322** | | **7,557.1368** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.2116 | 8.0632 | 2.1704 | 0.0290 | 0.7935 | 8.7100e-003 | 0.8022 | 0.2284 | 8.3200e-003 | 0.2368 | | 3,126.2823 | 3,126.2823 | 0.1605 | | 3,130.2958 |
| Worker | 1.3592 | 0.6667 | 10.9730 | 0.0443 | 6.0248 | 0.0299 | 6.0547 | 1.5978 | 0.0275 | 1.6253 | | 4,425.0489 | 4,425.0489 | 0.0717 | | 4,426.8411 |
| **Total** | **1.5708** | **8.7299** | **13.1434** | **0.0734** | **6.8182** | **0.0386** | **6.8569** | **1.8262** | **0.0358** | **1.8621** | | **7,551.3312** | **7,551.3312** | **0.2322** | | **7,557.1368** |

## 3.4 Paving - 2029

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0404 | 0.0202 | 0.3246 | 1.2700e-003 | 0.1677 | 8.9000e-004 | 0.1686 | 0.0445 | 8.2000e-004 | 0.0453 | | 126.2354 | 126.2354 | 2.1700e-003 | | 126.2897 |
| **Total** | **0.0404** | **0.0202** | **0.3246** | **1.2700e-003** | **0.1677** | **8.9000e-004** | **0.1686** | **0.0445** | **8.2000e-004** | **0.0453** | | **126.2354** | **126.2354** | **2.1700e-003** | | **126.2897** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0404 | 0.0202 | 0.3246 | 1.2700e-003 | 0.1677 | 8.9000e-004 | 0.1686 | 0.0445 | 8.2000e-004 | 0.0453 | | 126.2354 | 126.2354 | 2.1700e-003 | | 126.2897 |
| **Total** | **0.0404** | **0.0202** | **0.3246** | **1.2700e-003** | **0.1677** | **8.9000e-004** | **0.1686** | **0.0445** | **8.2000e-004** | **0.0453** | | **126.2354** | **126.2354** | **2.1700e-003** | | **126.2897** |

## 3.4 Paving - 2030

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3845 | 7.1202 | 15.8495 | 0.0281 | | 0.3306 | 0.3306 | | 0.3306 | 0.3306 | | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3845** | **7.1202** | **15.8495** | **0.0281** | | **0.3306** | **0.3306** | | **0.3306** | **0.3306** | | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0378 | 0.0186 | 0.3054 | 1.2300e-003 | 0.1677 | 8.3000e-004 | 0.1685 | 0.0445 | 7.7000e-004 | 0.0452 | | 123.1461 | 123.1461 | 2.0000e-003 | | 123.1960 |
| **Total** | **0.0378** | **0.0186** | **0.3054** | **1.2300e-003** | **0.1677** | **8.3000e-004** | **0.1685** | **0.0445** | **7.7000e-004** | **0.0452** | | **123.1461** | **123.1461** | **2.0000e-003** | | **123.1960** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0378 | 0.0186 | 0.3054 | 1.2300e-003 | 0.1677 | 8.3000e-004 | 0.1685 | 0.0445 | 7.7000e-004 | 0.0452 | | 123.1461 | 123.1461 | 2.0000e-003 | | 123.1960 |
| **Total** | **0.0378** | **0.0186** | **0.3054** | **1.2300e-003** | **0.1677** | **8.3000e-004** | **0.1685** | **0.0445** | **7.7000e-004** | **0.0452** | | **123.1461** | **123.1461** | **2.0000e-003** | | **123.1960** |

## 3.5 Architectural Coating - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.8916 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **60.0624** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.2911 | 0.1453 | 2.3368 | 9.1100e-003 | 1.2072 | 6.4400e-003 | 1.2136 | 0.3202 | 5.9200e-003 | 0.3261 | | 908.8949 | 908.8949 | 0.0157 | | 909.2861 |
| **Total** | **0.2911** | **0.1453** | **2.3368** | **9.1100e-003** | **1.2072** | **6.4400e-003** | **1.2136** | **0.3202** | **5.9200e-003** | **0.3261** | | **908.8949** | **908.8949** | **0.0157** | | **909.2861** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.8916 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **59.9510** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.2911 | 0.1453 | 2.3368 | 9.1100e-003 | 1.2072 | 6.4400e-003 | 1.2136 | 0.3202 | 5.9200e-003 | 0.3261 | | 908.8949 | 908.8949 | 0.0157 | | 909.2861 |
| **Total** | **0.2911** | **0.1453** | **2.3368** | **9.1100e-003** | **1.2072** | **6.4400e-003** | **1.2136** | **0.3202** | **5.9200e-003** | **0.3261** | | **908.8949** | **908.8949** | **0.0157** | | **909.2861** |

## 3.5 Architectural Coating - 2030

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.8916 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **60.0223** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.2723 | 0.1336 | 2.1987 | 8.8800e-003 | 1.2072 | 5.9900e-003 | 1.2132 | 0.3202 | 5.5100e-003 | 0.3257 | | 886.6517 | 886.6517 | 0.0144 | | 887.0108 |
| **Total** | **0.2723** | **0.1336** | **2.1987** | **8.8800e-003** | **1.2072** | **5.9900e-003** | **1.2132** | **0.3202** | **5.5100e-003** | **0.3257** | | **886.6517** | **886.6517** | **0.0144** | | **887.0108** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.8916 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **59.9510** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.2723 | 0.1336 | 2.1987 | 8.8800e-003 | 1.2072 | 5.9900e-003 | 1.2132 | 0.3202 | 5.5100e-003 | 0.3257 | | 886.6517 | 886.6517 | 0.0144 | | 887.0108 |
| **Total** | **0.2723** | **0.1336** | **2.1987** | **8.8800e-003** | **1.2072** | **5.9900e-003** | **1.2132** | **0.3202** | **5.5100e-003** | **0.3257** | | **886.6517** | **886.6517** | **0.0144** | | **887.0108** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 5.8235 | 28.2007 | 76.9126 | 0.3557 | 35.6152 | 0.2187 | 35.8340 | 9.5246 | 0.2031 | 9.7277 | | 36,402.4526 | 36,402.4526 | 1.4228 | | 36,438.0235 |
| Unmitigated | 5.8235 | 28.2007 | 76.9126 | 0.3557 | 35.6152 | 0.2187 | 35.8340 | 9.5246 | 0.2031 | 9.7277 | | 36,402.4526 | 36,402.4526 | 1.4228 | | 36,438.0235 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |

| | | | | | |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 4,712.40 | 4,905.45 | 4266.90 | 15,979,750 | 15,979,750 |
| Total | 4,712.40 | 4,905.45 | 4,266.90 | 15,979,750 | 15,979,750 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-... | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |
| Single Family Housing | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |
| NaturalGas Unmitigated | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 41493.4 | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |
| **Total** | | **0.4475** | **3.8239** | **1.6272** | **0.0244** | | **0.3092** | **0.3092** | | **0.3092** | **0.3092** | | **4,881.5775** | **4,881.5775** | **0.0936** | **0.0895** | **4,910.5863** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 41.4934 | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |
| **Total** | | **0.4475** | **3.8239** | **1.6272** | **0.0244** | | **0.3092** | **0.3092** | | **0.3092** | **0.3092** | | **4,881.5775** | **4,881.5775** | **0.0936** | **0.0895** | **4,910.5863** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 174.1175 | 11.9849 | 322.9775 | 0.7222 | | 42.6220 | 42.6220 | | 42.6220 | 42.6220 | 5,198.6397 | 10,063.5356 | 15,262.1753 | 15.5734 | 0.3529 | 15,756.6589 |
| Unmitigated | 174.1175 | 11.9849 | 322.9775 | 0.7222 | | 42.6220 | 42.6220 | | 42.6220 | 42.6220 | 5,198.6397 | 10,063.5356 | 15,262.1753 | 15.5734 | 0.3529 | 15,756.6589 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.4925 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.9767 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 145.4300 | 11.5153 | 282.2463 | 0.7200 | | 42.3955 | 42.3955 | | 42.3955 | 42.3955 | 5,198.6397 | 9,990.0000 | 15,188.6397 | 15.5034 | 0.3529 | 15,681.3718 |
| Landscaping | 1.2184 | 0.4696 | 40.7312 | 2.1600e-003 | | 0.2265 | 0.2265 | | 0.2265 | 0.2265 | | 73.5356 | 73.5356 | 0.0701 | | 75.2872 |
| **Total** | **174.1175** | **11.9849** | **322.9775** | **0.7222** | | **42.6220** | **42.6220** | | **42.6220** | **42.6220** | **5,198.6397** | **10,063.5356** | **15,262.1753** | **15.5734** | **0.3529** | **15,756.6589** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.4925 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.9767 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 145.4300 | 11.5153 | 282.2463 | 0.7200 | | 42.3955 | 42.3955 | | 42.3955 | 42.3955 | 5,198.6397 | 9,990.0000 | 15,188.6397 | 15.5034 | 0.3529 | 15,681.3718 |
| Landscaping | 1.2184 | 0.4696 | 40.7312 | 2.1600e-003 | | 0.2265 | 0.2265 | | 0.2265 | 0.2265 | | 73.5356 | 73.5356 | 0.0701 | | 75.2872 |
| **Total** | **174.1175** | **11.9849** | **322.9775** | **0.7222** | | **42.6220** | **42.6220** | | **42.6220** | **42.6220** | **5,198.6397** | **10,063.5356** | **15,262.1753** | **15.5734** | **0.3529** | **15,756.6589** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase V Construction - South Coast Air Basin, Winter

# Phase V Construction

**South Coast Air Basin, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 10.00 | Acre | 10.00 | 435,600.00 | 0 |
| Single Family Housing | 495.00 | Dwelling Unit | 83.00 | 1,253,656.00 | 1416 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2031 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Trips and VMT -

Architectural Coating -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 110.00 | 133.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | NumDays | 1,550.00 | 262.00 |
| tblConstructionPhase | NumDays | 155.00 | 310.00 |
| tblConstructionPhase | NumDays | 110.00 | 45.00 |
| tblConstructionPhase | PhaseEndDate | 6/25/2043 | 2/22/2030 |
| tblConstructionPhase | PhaseEndDate | 10/17/2041 | 2/22/2030 |
| tblConstructionPhase | PhaseEndDate | 8/21/2042 | 2/22/2030 |
| tblConstructionPhase | PhaseStartDate | 8/22/2042 | 8/22/2029 |
| tblConstructionPhase | PhaseStartDate | 11/30/2029 | 2/22/2029 |
| tblConstructionPhase | PhaseStartDate | 10/18/2041 | 12/22/2029 |
| tblLandUse | LandUseSquareFeet | 891,000.00 | 1,253,656.00 |
| tblLandUse | LotAcreage | 160.71 | 83.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 2.9657 | 27.9749 | 26.7439 | 0.0637 | 8.8969 | 1.1322 | 10.0291 | 3.6558 | 1.0416 | 4.6974 | 0.0000 | 6,170.4540 | 6,170.4540 | 1.9461 | 0.0000 | 6,219.1074 |
| 2029 | 66.5806 | 50.6237 | 59.5409 | 0.1731 | 16.9223 | 1.7588 | 18.6811 | 5.8022 | 1.6335 | 7.4356 | 0.0000 | 17,163.8378 | 17,163.8378 | 2.8207 | 0.0000 | 17,234.3563 |
| 2030 | 64.8206 | 24.8286 | 48.2245 | 0.1413 | 8.1931 | 0.5447 | 8.7378 | 2.1908 | 0.5414 | 2.7322 | 0.0000 | 13,975.0002 | 13,975.0002 | 0.5032 | 0.0000 | 13,987.5791 |
| **Maximum** | **66.5806** | **50.6237** | **59.5409** | **0.1731** | **16.9223** | **1.7588** | **18.6811** | **5.8022** | **1.6335** | **7.4356** | **0.0000** | **17,163.8378** | **17,163.8378** | **2.8207** | **0.0000** | **17,234.3563** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 1.5875 | 24.0146 | 37.1354 | 0.0637 | 3.6062 | 0.1962 | 3.8024 | 1.4619 | 0.1961 | 1.6580 | 0.0000 | 6,170.4540 | 6,170.4540 | 1.9461 | 0.0000 | 6,219.1074 |
| 2029 | 64.3975 | 45.5146 | 71.7447 | 0.1731 | 11.6316 | 0.3936 | 12.0251 | 3.6083 | 0.3900 | 3.9983 | 0.0000 | 17,163.8378 | 17,163.8378 | 2.8207 | 0.0000 | 17,234.3563 |
| 2030 | 63.2905 | 30.4201 | 51.4221 | 0.1413 | 8.1931 | 0.2869 | 8.4800 | 2.1908 | 0.2835 | 2.4744 | 0.0000 | 13,975.0002 | 13,975.0002 | 0.5032 | 0.0000 | 13,987.5791 |
| **Maximum** | **64.3975** | **45.5146** | **71.7447** | **0.1731** | **11.6316** | **0.3936** | **12.0251** | **3.6083** | **0.3900** | **3.9983** | **0.0000** | **17,163.8378** | **17,163.8378** | **2.8207** | **0.0000** | **17,234.3563** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.79** | **3.36** | **-19.18** | **0.00** | **31.11** | **74.48** | **35.09** | **37.67** | **72.96** | **45.30** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 174.1175 | 11.9849 | 322.9775 | 0.7222 | | 42.6220 | 42.6220 | | 42.6220 | 42.6220 | 5,198.6397 | 10,063.5356 | 15,262.1753 | 15.5734 | 0.3529 | 15,756.6589 |
| Energy | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |
| Mobile | 5.5709 | 28.6103 | 72.0964 | 0.3381 | 35.6152 | 0.2194 | 35.8346 | 9.5246 | 0.2037 | 9.7283 | | 34,623.7886 | 34,623.7886 | 1.4270 | | 34,659.4641 |
| **Total** | **180.1359** | **44.4191** | **396.7010** | **1.0847** | **35.6152** | **43.1506** | **78.7658** | **9.5246** | **43.1349** | **52.6595** | **5,198.6397** | **49,568.9017** | **54,767.5414** | **17.0940** | **0.4424** | **55,326.7094** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 174.1175 | 11.9849 | 322.9775 | 0.7222 | | 42.6220 | 42.6220 | | 42.6220 | 42.6220 | 5,198.6397 | 10,063.5356 | 15,262.1753 | 15.5734 | 0.3529 | 15,756.6589 |
| Energy | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |
| Mobile | 5.5709 | 28.6103 | 72.0964 | 0.3381 | 35.6152 | 0.2194 | 35.8346 | 9.5246 | 0.2037 | 9.7283 | | 34,623.7886 | 34,623.7886 | 1.4270 | | 34,659.4641 |
| **Total** | **180.1359** | **44.4191** | **396.7010** | **1.0847** | **35.6152** | **43.1506** | **78.7658** | **9.5246** | **43.1349** | **52.6595** | **5,198.6397** | **49,568.9017** | **54,767.5414** | **17.0940** | **0.4424** | **55,326.7094** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 9/22/2028 | 11/29/2029 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 2/22/2029 | 2/22/2030 | 5 | 262 | |
| 3 | Paving | Paving | 12/22/2029 | 2/22/2030 | 5 | 45 | |
| 4 | Architectural Coating | Architectural Coating | 8/22/2029 | 2/22/2030 | 5 | 133 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 10**

**Residential Indoor: 2,538,653; Residential Outdoor: 846,218; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 539.00 | 124.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 108.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0644 | 0.0320 | 0.4128 | 1.6300e-003 | 0.2236 | 1.2800e-003 | 0.2248 | 0.0593 | 1.1800e-003 | 0.0605 | | 162.1726 | 162.1726 | 2.9400e-003 | | 162.2460 |
| **Total** | **0.0644** | **0.0320** | **0.4128** | **1.6300e-003** | **0.2236** | **1.2800e-003** | **0.2248** | **0.0593** | **1.1800e-003** | **0.0605** | | **162.1726** | **162.1726** | **2.9400e-003** | | **162.2460** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0644 | 0.0320 | 0.4128 | 1.6300e-003 | 0.2236 | 1.2800e-003 | 0.2248 | 0.0593 | 1.1800e-003 | 0.0605 | | 162.1726 | 162.1726 | 2.9400e-003 | | 162.2460 |
| **Total** | **0.0644** | **0.0320** | **0.4128** | **1.6300e-003** | **0.2236** | **1.2800e-003** | **0.2248** | **0.0593** | **1.1800e-003** | **0.0605** | | **162.1726** | **162.1726** | **2.9400e-003** | | **162.2460** |

## 3.2 Grading - 2029

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0295 | 0.3875 | 1.5800e-003 | 0.2236 | 1.1900e-003 | 0.2247 | 0.0593 | 1.1000e-003 | 0.0604 | | 157.7998 | 157.7998 | 2.6900e-003 | | 157.8671 |
| **Total** | **0.0607** | **0.0295** | **0.3875** | **1.5800e-003** | **0.2236** | **1.1900e-003** | **0.2247** | **0.0593** | **1.1000e-003** | **0.0604** | | **157.7998** | **157.7998** | **2.6900e-003** | | **157.8671** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0295 | 0.3875 | 1.5800e-003 | 0.2236 | 1.1900e-003 | 0.2247 | 0.0593 | 1.1000e-003 | 0.0604 | | 157.7998 | 157.7998 | 2.6900e-003 | | 157.8671 |
| **Total** | **0.0607** | **0.0295** | **0.3875** | **1.5800e-003** | **0.2236** | **1.1900e-003** | **0.2247** | **0.0593** | **1.1000e-003** | **0.0604** | | **157.7998** | **157.7998** | **2.6900e-003** | | **157.8671** |

## 3.3 Building Construction - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.2253 | 8.0822 | 2.3934 | 0.0284 | 0.7935 | 9.1000e-003 | 0.8026 | 0.2284 | 8.7000e-003 | 0.2371 | | 3,055.0113 | 3,055.0113 | 0.1714 | | 3,059.2960 |
| Worker | 1.6358 | 0.7947 | 10.4427 | 0.0426 | 6.0248 | 0.0321 | 6.0569 | 1.5978 | 0.0296 | 1.6274 | | 4,252.7041 | 4,252.7041 | 0.0726 | | 4,254.5193 |
| **Total** | **1.8610** | **8.8769** | **12.8361** | **0.0710** | **6.8182** | **0.0412** | **6.8595** | **1.8262** | **0.0383** | **1.8645** | | **7,307.7154** | **7,307.7154** | **0.2440** | | **7,313.8153** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.2253 | 8.0822 | 2.3934 | 0.0284 | 0.7935 | 9.1000e-003 | 0.8026 | 0.2284 | 8.7000e-003 | 0.2371 | | 3,055.0113 | 3,055.0113 | 0.1714 | | 3,059.2960 |
| Worker | 1.6358 | 0.7947 | 10.4427 | 0.0426 | 6.0248 | 0.0321 | 6.0569 | 1.5978 | 0.0296 | 1.6274 | | 4,252.7041 | 4,252.7041 | 0.0726 | | 4,254.5193 |
| **Total** | **1.8610** | **8.8769** | **12.8361** | **0.0710** | **6.8182** | **0.0412** | **6.8595** | **1.8262** | **0.0383** | **1.8645** | | **7,307.7154** | **7,307.7154** | **0.2440** | | **7,313.8153** |

## 3.3 Building Construction - 2030

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.2221 | 8.0209 | 2.3703 | 0.0283 | 0.7935 | 8.9200e-003 | 0.8024 | 0.2284 | 8.5300e-003 | 0.2370 | | 3,044.7738 | 3,044.7738 | 0.1692 | | 3,049.0039 |
| Worker | 1.5328 | 0.7300 | 9.8111 | 0.0416 | 6.0248 | 0.0299 | 6.0547 | 1.5978 | 0.0275 | 1.6253 | | 4,148.1137 | 4,148.1137 | 0.0666 | | 4,149.7784 |
| **Total** | **1.7549** | **8.7509** | **12.1814** | **0.0699** | **6.8182** | **0.0388** | **6.8571** | **1.8262** | **0.0361** | **1.8623** | | **7,192.8876** | **7,192.8876** | **0.2358** | | **7,198.7823** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.2221 | 8.0209 | 2.3703 | 0.0283 | 0.7935 | 8.9200e-003 | 0.8024 | 0.2284 | 8.5300e-003 | 0.2370 | | 3,044.7738 | 3,044.7738 | 0.1692 | | 3,049.0039 |
| Worker | 1.5328 | 0.7300 | 9.8111 | 0.0416 | 6.0248 | 0.0299 | 6.0547 | 1.5978 | 0.0275 | 1.6253 | | 4,148.1137 | 4,148.1137 | 0.0666 | | 4,149.7784 |
| **Total** | **1.7549** | **8.7509** | **12.1814** | **0.0699** | **6.8182** | **0.0388** | **6.8571** | **1.8262** | **0.0361** | **1.8623** | | **7,192.8876** | **7,192.8876** | **0.2358** | | **7,198.7823** |

## 3.4 Paving - 2029

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0455 | 0.0221 | 0.2906 | 1.1900e-003 | 0.1677 | 8.9000e-004 | 0.1686 | 0.0445 | 8.2000e-004 | 0.0453 | | 118.3498 | 118.3498 | 2.0200e-003 | | 118.4004 |
| **Total** | **0.0455** | **0.0221** | **0.2906** | **1.1900e-003** | **0.1677** | **8.9000e-004** | **0.1686** | **0.0445** | **8.2000e-004** | **0.0453** | | **118.3498** | **118.3498** | **2.0200e-003** | | **118.4004** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0455 | 0.0221 | 0.2906 | 1.1900e-003 | 0.1677 | 8.9000e-004 | 0.1686 | 0.0445 | 8.2000e-004 | 0.0453 | | 118.3498 | 118.3498 | 2.0200e-003 | | 118.4004 |
| **Total** | **0.0455** | **0.0221** | **0.2906** | **1.1900e-003** | **0.1677** | **8.9000e-004** | **0.1686** | **0.0445** | **8.2000e-004** | **0.0453** | | **118.3498** | **118.3498** | **2.0200e-003** | | **118.4004** |

## 3.4 Paving - 2030

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3845 | 7.1202 | 15.8495 | 0.0281 | | 0.3306 | 0.3306 | | 0.3306 | 0.3306 | | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3845** | **7.1202** | **15.8495** | **0.0281** | | **0.3306** | **0.3306** | | **0.3306** | **0.3306** | | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0203 | 0.2730 | 1.1600e-003 | 0.1677 | 8.3000e-004 | 0.1685 | 0.0445 | 7.7000e-004 | 0.0452 | | 115.4392 | 115.4392 | 1.8500e-003 | | 115.4855 |
| **Total** | **0.0427** | **0.0203** | **0.2730** | **1.1600e-003** | **0.1677** | **8.3000e-004** | **0.1685** | **0.0445** | **7.7000e-004** | **0.0452** | | **115.4392** | **115.4392** | **1.8500e-003** | | **115.4855** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0203 | 0.2730 | 1.1600e-003 | 0.1677 | 8.3000e-004 | 0.1685 | 0.0445 | 7.7000e-004 | 0.0452 | | 115.4392 | 115.4392 | 1.8500e-003 | | 115.4855 |
| **Total** | **0.0427** | **0.0203** | **0.2730** | **1.1600e-003** | **0.1677** | **8.3000e-004** | **0.1685** | **0.0445** | **7.7000e-004** | **0.0452** | | **115.4392** | **115.4392** | **1.8500e-003** | | **115.4855** |

## 3.5 Architectural Coating - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.8916 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **60.0624** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3278 | 0.1592 | 2.0924 | 8.5400e-003 | 1.2072 | 6.4400e-003 | 1.2136 | 0.3202 | 5.9200e-003 | 0.3261 | | 852.1188 | 852.1188 | 0.0146 | | 852.4825 |
| **Total** | **0.3278** | **0.1592** | **2.0924** | **8.5400e-003** | **1.2072** | **6.4400e-003** | **1.2136** | **0.3202** | **5.9200e-003** | **0.3261** | | **852.1188** | **852.1188** | **0.0146** | | **852.4825** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.8916 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **59.9510** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3278 | 0.1592 | 2.0924 | 8.5400e-003 | 1.2072 | 6.4400e-003 | 1.2136 | 0.3202 | 5.9200e-003 | 0.3261 | | 852.1188 | 852.1188 | 0.0146 | | 852.4825 |
| **Total** | **0.3278** | **0.1592** | **2.0924** | **8.5400e-003** | **1.2072** | **6.4400e-003** | **1.2136** | **0.3202** | **5.9200e-003** | **0.3261** | | **852.1188** | **852.1188** | **0.0146** | | **852.4825** |

## 3.5 Architectural Coating - 2030

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.8916 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **60.0223** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3071 | 0.1463 | 1.9659 | 8.3300e-003 | 1.2072 | 5.9900e-003 | 1.2132 | 0.3202 | 5.5100e-003 | 0.3257 | | 831.1619 | 831.1619 | 0.0133 | | 831.4955 |
| **Total** | **0.3071** | **0.1463** | **1.9659** | **8.3300e-003** | **1.2072** | **5.9900e-003** | **1.2132** | **0.3202** | **5.5100e-003** | **0.3257** | | **831.1619** | **831.1619** | **0.0133** | | **831.4955** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 59.8916 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **59.9510** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3071 | 0.1463 | 1.9659 | 8.3300e-003 | 1.2072 | 5.9900e-003 | 1.2132 | 0.3202 | 5.5100e-003 | 0.3257 | | 831.1619 | 831.1619 | 0.0133 | | 831.4955 |
| **Total** | **0.3071** | **0.1463** | **1.9659** | **8.3300e-003** | **1.2072** | **5.9900e-003** | **1.2132** | **0.3202** | **5.5100e-003** | **0.3257** | | **831.1619** | **831.1619** | **0.0133** | | **831.4955** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 5.5709 | 28.6103 | 72.0964 | 0.3381 | 35.6152 | 0.2194 | 35.8346 | 9.5246 | 0.2037 | 9.7283 | | 34,623.7886 | 34,623.7886 | 1.4270 | | 34,659.4641 |
| Unmitigated | 5.5709 | 28.6103 | 72.0964 | 0.3381 | 35.6152 | 0.2194 | 35.8346 | 9.5246 | 0.2037 | 9.7283 | | 34,623.7886 | 34,623.7886 | 1.4270 | | 34,659.4641 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |

| | | | | | |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 4,712.40 | 4,905.45 | 4266.90 | 15,979,750 | 15,979,750 |
| Total | 4,712.40 | 4,905.45 | 4,266.90 | 15,979,750 | 15,979,750 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-... | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |
| Single Family Housing | 0.554577 | 0.041789 | 0.206455 | 0.111677 | 0.013024 | 0.005776 | 0.022231 | 0.034458 | 0.002161 | 0.001509 | 0.004856 | 0.000717 | 0.000770 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |
| NaturalGas Unmitigated | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 41493.4 | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |
| **Total** | | **0.4475** | **3.8239** | **1.6272** | **0.0244** | | **0.3092** | **0.3092** | | **0.3092** | **0.3092** | | **4,881.5775** | **4,881.5775** | **0.0936** | **0.0895** | **4,910.5863** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 41.4934 | 0.4475 | 3.8239 | 1.6272 | 0.0244 | | 0.3092 | 0.3092 | | 0.3092 | 0.3092 | | 4,881.5775 | 4,881.5775 | 0.0936 | 0.0895 | 4,910.5863 |
| **Total** | | **0.4475** | **3.8239** | **1.6272** | **0.0244** | | **0.3092** | **0.3092** | | **0.3092** | **0.3092** | | **4,881.5775** | **4,881.5775** | **0.0936** | **0.0895** | **4,910.5863** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 174.1175 | 11.9849 | 322.9775 | 0.7222 | | 42.6220 | 42.6220 | | 42.6220 | 42.6220 | 5,198.6397 | 10,063.5356 | 15,262.1753 | 15.5734 | 0.3529 | 15,756.6589 |
| Unmitigated | 174.1175 | 11.9849 | 322.9775 | 0.7222 | | 42.6220 | 42.6220 | | 42.6220 | 42.6220 | 5,198.6397 | 10,063.5356 | 15,262.1753 | 15.5734 | 0.3529 | 15,756.6589 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.4925 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.9767 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 145.4300 | 11.5153 | 282.2463 | 0.7200 | | 42.3955 | 42.3955 | | 42.3955 | 42.3955 | 5,198.6397 | 9,990.0000 | 15,188.6397 | 15.5034 | 0.3529 | 15,681.3718 |
| Landscaping | 1.2184 | 0.4696 | 40.7312 | 2.1600e-003 | | 0.2265 | 0.2265 | | 0.2265 | 0.2265 | | 73.5356 | 73.5356 | 0.0701 | | 75.2872 |
| **Total** | **174.1175** | **11.9849** | **322.9775** | **0.7222** | | **42.6220** | **42.6220** | | **42.6220** | **42.6220** | **5,198.6397** | **10,063.5356** | **15,262.1753** | **15.5734** | **0.3529** | **15,756.6589** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.4925 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.9767 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 145.4300 | 11.5153 | 282.2463 | 0.7200 | | 42.3955 | 42.3955 | | 42.3955 | 42.3955 | 5,198.6397 | 9,990.0000 | 15,188.6397 | 15.5034 | 0.3529 | 15,681.3718 |
| Landscaping | 1.2184 | 0.4696 | 40.7312 | 2.1600e-003 | | 0.2265 | 0.2265 | | 0.2265 | 0.2265 | | 73.5356 | 73.5356 | 0.0701 | | 75.2872 |
| **Total** | **174.1175** | **11.9849** | **322.9775** | **0.7222** | | **42.6220** | **42.6220** | | **42.6220** | **42.6220** | **5,198.6397** | **10,063.5356** | **15,262.1753** | **15.5734** | **0.3529** | **15,756.6589** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase VI Construction - South Coast Air Basin, Annual

# Phase VI Construction

**South Coast Air Basin, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 20.00 | Acre | 20.00 | 871,200.00 | 0 |
| Single Family Housing | 481.00 | Dwelling Unit | 73.00 | 1,083,997.00 | 1376 |
| Regional Shopping Center | 479.16 | 1000sqft | 11.00 | 479,160.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2032 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park, Utility Corridor/Bank Easement and Shops/Restaurants

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Trips and VMT -

Architectural Coating -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
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| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| tblConstEquipMitigation | Tier | No Change | Tier 3 |
|---|---|---|---|
| tblConstructionPhase | NumDays | 220.00 | 173.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 262.00 |
| tblConstructionPhase | NumDays | 220.00 | 44.00 |
| tblConstructionPhase | PhaseEndDate | 11/24/2044 | 7/22/2031 |
| tblConstructionPhase | PhaseEndDate | 3/19/2043 | 7/22/3031 |
| tblConstructionPhase | PhaseEndDate | 5/1/2031 | 5/2/2031 |
| tblConstructionPhase | PhaseEndDate | 1/21/2044 | 7/22/2031 |
| tblConstructionPhase | PhaseStartDate | 1/22/2044 | 11/22/2030 |
| tblConstructionPhase | PhaseStartDate | 5/2/2031 | 7/22/3030 |
| tblConstructionPhase | PhaseStartDate | 2/22/2030 | 2/23/2030 |
| tblConstructionPhase | PhaseStartDate | 3/20/2043 | 5/22/2031 |
| tblLandUse | LandUseSquareFeet | 865,800.00 | 1,083,997.00 |
| tblLandUse | LotAcreage | 156.17 | 73.00 |

# 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 | | | | | |
| 2030 | 1.3044 | 1.5547 | 2.6586 | 8.1300e-003 | 1.1250 | 0.0547 | 1.1796 | 0.4239 | 0.0547 | 0.4786 | 0.0000 | 759.3620 | 759.3620 | 0.0300 | 0.0000 | 760.1113 |
| 2031 | 5.0160 | 0.8422 | 1.6894 | 4.7700e-003 | 0.7990 | 0.0308 | 0.8298 | 0.2227 | 0.0308 | 0.2535 | 0.0000 | 437.2961 | 437.2961 | 0.0160 | 0.0000 | 437.6971 |
| 3030 | | | | | 0.4563 | 0.0000 | 0.4563 | 0.1120 | 0.0000 | 0.1120 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 3031 | | | | | 0.5655 | 0.0000 | 0.5655 | 0.1388 | 0.0000 | 0.1388 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **5.0160** | **1.5547** | **2.6586** | **8.1300e-003** | **1.1250** | **0.0547** | **1.1796** | **0.4239** | **0.0547** | **0.4786** | **0.0000** | **759.3620** | **759.3620** | **0.0300** | **0.0000** | **760.1113** |

## 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 | | | | | |
| 2030 | 1.1084 | 2.6831 | 4.1797 | 8.1300e-003 | 0.4665 | 0.0221 | 0.4886 | 0.1727 | 0.0221 | 0.1948 | 0.0000 | 759.3611 | 759.3611 | 0.0300 | 0.0000 | 760.1104 |
| 2031 | 4.9154 | 1.3470 | 2.3265 | 4.7700e-003 | 0.3867 | 0.0122 | 0.3989 | 0.1068 | 0.0122 | 0.1189 | 0.0000 | 437.2957 | 437.2957 | 0.0160 | 0.0000 | 437.6967 |
| 3030 | | | | | 0.4563 | 0.0000 | 0.4563 | 0.1120 | 0.0000 | 0.1120 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 3031 | | | | | 0.5655 | 0.0000 | 0.5655 | 0.1388 | 0.0000 | 0.1388 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **4.9154** | **2.6831** | **4.1797** | **8.1300e-003** | **0.5655** | **0.0221** | **0.5655** | **0.1727** | **0.0221** | **0.1948** | **0.0000** | **759.3611** | **759.3611** | **0.0300** | **0.0000** | **760.1104** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **4.69** | **-68.13** | **-49.63** | **0.00** | **36.35** | **59.91** | **37.01** | **40.91** | **59.95** | **42.56** | **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 | 2-22-2030 | 5-21-2030 | 0.5408 | 0.8041 |
| 2 | 5-22-2030 | 8-21-2030 | 0.5652 | 0.8405 |
| 3 | 8-22-2030 | 11-21-2030 | 0.5654 | 0.8407 |
| 4 | 11-22-2030 | 2-21-2031 | 2.7939 | 3.0744 |
| 5 | 2-22-2031 | 5-21-2031 | 2.5842 | 2.7987 |
| 6 | 5-22-2031 | 8-21-2031 | 1.6896 | 1.7173 |
| | | Highest | 2.7939 | 3.0744 |

## 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 | 8.0022 | 0.1818 | 8.0113 | 8.0600e-003 | | 0.4868 | 0.4868 | | 0.4868 | 0.4868 | 51.0914 | 106.2952 | 157.3865 | 0.1601 | 3.4700e-003 | 162.4228 |
| Energy | 0.0851 | 0.7303 | 0.3324 | 4.6400e-003 | | 0.0588 | 0.0588 | | 0.0588 | 0.0588 | 0.0000 | 4,106.1976 | 4,106.1976 | 0.1509 | 0.0433 | 4,122.8792 |
| Mobile | 3.7273 | 21.8365 | 44.0562 | 0.2126 | 22.1251 | 0.1220 | 22.2471 | 5.9258 | 0.1133 | 6.0390 | 0.0000 | 19,803.8774 | 19,803.8774 | 0.8048 | 0.0000 | 19,823.9981 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 216.6482 | 0.0000 | 216.6482 | 12.8035 | 0.0000 | 536.7367 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 21.2026 | 424.2125 | 445.4152 | 2.1952 | 0.0550 | 516.6989 |
| **Total** | **11.8146** | **22.7487** | **52.3998** | **0.2253** | **22.1251** | **0.6676** | **22.7927** | **5.9258** | **0.6589** | **6.5846** | **288.9422** | **24,440.5827** | **24,729.5249** | **16.1146** | **0.1018** | **25,162.7357** |

## 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 | 8.0022 | 0.1818 | 8.0113 | 8.0600e-003 | | 0.4868 | 0.4868 | | 0.4868 | 0.4868 | 51.0914 | 106.2952 | 157.3865 | 0.1601 | 3.4700e-003 | 162.4228 |
| Energy | 0.0851 | 0.7303 | 0.3324 | 4.6400e-003 | | 0.0588 | 0.0588 | | 0.0588 | 0.0588 | 0.0000 | 4,106.1976 | 4,106.1976 | 0.1509 | 0.0433 | 4,122.8792 |
| Mobile | 3.7273 | 21.8365 | 44.0562 | 0.2126 | 22.1251 | 0.1220 | 22.2471 | 5.9258 | 0.1133 | 6.0390 | 0.0000 | 19,803.8774 | 19,803.8774 | 0.8048 | 0.0000 | 19,823.9981 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 216.6482 | 0.0000 | 216.6482 | 12.8035 | 0.0000 | 536.7367 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 16.9621 | 359.7952 | 376.7572 | 1.7570 | 0.0442 | 433.8573 |
| **Total** | **11.8146** | **22.7487** | **52.3998** | **0.2253** | **22.1251** | **0.6676** | **22.7927** | **5.9258** | **0.6589** | **6.5846** | **284.7017** | **24,376.1653** | **24,660.8670** | **15.6764** | **0.0910** | **25,079.8941** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **1.47** | **0.26** | **0.28** | **2.72** | **10.64** | **0.33** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 2/23/2030 | 5/2/2031 | 5 | 310 | |
| 2 | Architectural Coating | Architectural Coating | 11/22/2030 | 7/22/2031 | 5 | 173 | |
| 3 | Paving | Paving | 5/22/2031 | 7/22/2031 | 5 | 44 | |
| 4 | Building Construction | Building Construction | 7/22/3030 | 7/22/3031 | 5 | 262 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 20**

**Residential Indoor: 2,195,094; Residential Outdoor: 731,698; Non-Residential Indoor: 718,740; Non-Residential Outdoor: 239,580;**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

| | | | | | |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 692.00 | 273.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 138.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2030

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 1.0794 | 0.0000 | 1.0794 | 0.4118 | 0.0000 | 0.4118 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3642 | 1.5369 | 2.5557 | 7.7600e-003 | | 0.0542 | 0.0542 | | 0.0542 | 0.0542 | 0.0000 | 726.3420 | 726.3420 | 0.0294 | 0.0000 | 727.0759 |
| **Total** | **0.3642** | **1.5369** | **2.5557** | **7.7600e-003** | **1.0794** | **0.0542** | **1.1336** | **0.4118** | **0.0542** | **0.4660** | **0.0000** | **726.3420** | **726.3420** | **0.0294** | **0.0000** | **727.0759** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.6100e-003 | 3.1000e-003 | 0.0416 | 1.7000e-004 | 0.0244 | 1.2000e-004 | 0.0245 | 6.4700e-003 | 1.1000e-004 | 6.5800e-003 | 0.0000 | 15.7439 | 15.7439 | 2.5000e-004 | 0.0000 | 15.7503 |
| **Total** | **5.6100e-003** | **3.1000e-003** | **0.0416** | **1.7000e-004** | **0.0244** | **1.2000e-004** | **0.0245** | **6.4700e-003** | **1.1000e-004** | **6.5800e-003** | **0.0000** | **15.7439** | **15.7439** | **2.5000e-004** | **0.0000** | **15.7503** |

## 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 | | | | | 0.4210 | 0.0000 | 0.4210 | 0.1606 | 0.0000 | 0.1606 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1691 | 2.6621 | 4.0762 | 7.7600e-003 | | 0.0216 | 0.0216 | | 0.0216 | 0.0216 | 0.0000 | 726.3412 | 726.3412 | 0.0294 | 0.0000 | 727.0750 |
| **Total** | **0.1691** | **2.6621** | **4.0762** | **7.7600e-003** | **0.4210** | **0.0216** | **0.4426** | **0.1606** | **0.0216** | **0.1822** | **0.0000** | **726.3412** | **726.3412** | **0.0294** | **0.0000** | **727.0750** |

## Mitigated Construction Off-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.6100e-003 | 3.1000e-003 | 0.0416 | 1.7000e-004 | 0.0244 | 1.2000e-004 | 0.0245 | 6.4700e-003 | 1.1000e-004 | 6.5800e-003 | 0.0000 | 15.7439 | 15.7439 | 2.5000e-004 | 0.0000 | 15.7503 |
| **Total** | **5.6100e-003** | **3.1000e-003** | **0.0416** | **1.7000e-004** | **0.0244** | **1.2000e-004** | **0.0245** | **6.4700e-003** | **1.1000e-004** | **6.5800e-003** | **0.0000** | **15.7439** | **15.7439** | **2.5000e-004** | **0.0000** | **15.7503** |

## 3.2 Grading - 2031

### 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 | | | | | 0.6759 | 0.0000 | 0.6759 | 0.1900 | 0.0000 | 0.1900 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1444 | 0.6092 | 1.0131 | 3.0800e-003 | | 0.0215 | 0.0215 | | 0.0215 | 0.0215 | 0.0000 | 287.9194 | 287.9194 | 0.0116 | 0.0000 | 288.2103 |
| **Total** | **0.1444** | **0.6092** | **1.0131** | **3.0800e-003** | **0.6759** | **0.0215** | **0.6974** | **0.1900** | **0.0215** | **0.2115** | **0.0000** | **287.9194** | **287.9194** | **0.0116** | **0.0000** | **288.2103** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.0600e-003 | 1.1200e-003 | 0.0155 | 7.0000e-005 | 9.6500e-003 | 5.0000e-005 | 9.7000e-003 | 2.5600e-003 | 4.0000e-005 | 2.6100e-003 | 0.0000 | 6.1084 | 6.1084 | 9.0000e-005 | 0.0000 | 6.1106 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **2.0600e-003** | **1.1200e-003** | **0.0155** | **7.0000e-005** | **9.6500e-003** | **5.0000e-005** | **9.7000e-003** | **2.5600e-003** | **4.0000e-005** | **2.6100e-003** | **0.0000** | **6.1084** | **6.1084** | **9.0000e-005** | **0.0000** | **6.1106** |

**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 | | | | | 0.2636 | 0.0000 | 0.2636 | 0.0741 | 0.0000 | 0.0741 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0670 | 1.0552 | 1.6158 | 3.0800e-003 | | 8.5800e-003 | 8.5800e-003 | | 8.5800e-003 | 8.5800e-003 | 0.0000 | 287.9190 | 287.9190 | 0.0116 | 0.0000 | 288.2099 |
| **Total** | **0.0670** | **1.0552** | **1.6158** | **3.0800e-003** | **0.2636** | **8.5800e-003** | **0.2722** | **0.0741** | **8.5800e-003** | **0.0827** | **0.0000** | **287.9190** | **287.9190** | **0.0116** | **0.0000** | **288.2099** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.0600e-003 | 1.1200e-003 | 0.0155 | 7.0000e-005 | 9.6500e-003 | 5.0000e-005 | 9.7000e-003 | 2.5600e-003 | 4.0000e-005 | 2.6100e-003 | 0.0000 | 6.1084 | 6.1084 | 9.0000e-005 | 0.0000 | 6.1106 |
| **Total** | **2.0600e-003** | **1.1200e-003** | **0.0155** | **7.0000e-005** | **9.6500e-003** | **5.0000e-005** | **9.7000e-003** | **2.5600e-003** | **4.0000e-005** | **2.6100e-003** | **0.0000** | **6.1084** | **6.1084** | **9.0000e-005** | **0.0000** | **6.1106** |

## 3.3 Architectural Coating - 2030

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.9280 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.8300e-003 | 0.0120 | 0.0252 | 4.0000e-005 | | 2.8000e-004 | 2.8000e-004 | | 2.8000e-004 | 2.8000e-004 | 0.0000 | 3.5746 | 3.5746 | 1.4000e-004 | 0.0000 | 3.5782 |
| **Total** | **0.9298** | **0.0120** | **0.0252** | **4.0000e-005** | | **2.8000e-004** | **2.8000e-004** | | **2.8000e-004** | **2.8000e-004** | **0.0000** | **3.5746** | **3.5746** | **1.4000e-004** | **0.0000** | **3.5782** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.8900e-003 | 2.7000e-003 | 0.0362 | 1.5000e-004 | 0.0212 | 1.1000e-004 | 0.0213 | 5.6300e-003 | 1.0000e-004 | 5.7300e-003 | 0.0000 | 13.7015 | 13.7015 | 2.2000e-004 | 0.0000 | 13.7070 |
| **Total** | **4.8900e-003** | **2.7000e-003** | **0.0362** | **1.5000e-004** | **0.0212** | **1.1000e-004** | **0.0213** | **5.6300e-003** | **1.0000e-004** | **5.7300e-003** | **0.0000** | **13.7015** | **13.7015** | **2.2000e-004** | **0.0000** | **13.7070** |

## Mitigated Construction On-Site

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Archit. Coating | 0.9280 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 8.3000e-004 | 0.0152 | 0.0257 | 4.0000e-005 | | 2.0000e-004 | 2.0000e-004 | | 2.0000e-004 | 2.0000e-004 | 0.0000 | 3.5746 | 3.5746 | 1.4000e-004 | 0.0000 | 3.5782 |
| **Total** | **0.9288** | **0.0152** | **0.0257** | **4.0000e-005** | | **2.0000e-004** | **2.0000e-004** | | **2.0000e-004** | **2.0000e-004** | **0.0000** | **3.5746** | **3.5746** | **1.4000e-004** | **0.0000** | **3.5782** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.8900e-003 | 2.7000e-003 | 0.0362 | 1.5000e-004 | 0.0212 | 1.1000e-004 | 0.0213 | 5.6300e-003 | 1.0000e-004 | 5.7300e-003 | 0.0000 | 13.7015 | 13.7015 | 2.2000e-004 | 0.0000 | 13.7070 |
| **Total** | **4.8900e-003** | **2.7000e-003** | **0.0362** | **1.5000e-004** | **0.0212** | **1.1000e-004** | **0.0213** | **5.6300e-003** | **1.0000e-004** | **5.7300e-003** | **0.0000** | **13.7015** | **13.7015** | **2.2000e-004** | **0.0000** | **13.7070** |

## 3.3 Architectural Coating - 2031

**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 | 4.8055 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 9.4800e-003 | 0.0621 | 0.1303 | 2.2000e-004 | | 1.4700e-003 | 1.4700e-003 | | 1.4700e-003 | 1.4700e-003 | 0.0000 | 18.5111 | 18.5111 | 7.5000e-004 | 0.0000 | 18.5298 |
| **Total** | **4.8150** | **0.0621** | **0.1303** | **2.2000e-004** | | **1.4700e-003** | **1.4700e-003** | | **1.4700e-003** | **1.4700e-003** | **0.0000** | **18.5111** | **18.5111** | **7.5000e-004** | **0.0000** | **18.5298** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0234 | 0.0128 | 0.1761 | 7.7000e-004 | 0.1098 | 5.2000e-004 | 0.1103 | 0.0292 | 4.8000e-004 | 0.0296 | 0.0000 | 69.4477 | 69.4477 | 1.0400e-003 | 0.0000 | 69.4739 |
| **Total** | **0.0234** | **0.0128** | **0.1761** | **7.7000e-004** | **0.1098** | **5.2000e-004** | **0.1103** | **0.0292** | **4.8000e-004** | **0.0296** | **0.0000** | **69.4477** | **69.4477** | **1.0400e-003** | **0.0000** | **69.4739** |

## 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 | 4.8055 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.3100e-003 | 0.0787 | 0.1329 | 2.2000e-004 | | 1.0300e-003 | 1.0300e-003 | | 1.0300e-003 | 1.0300e-003 | 0.0000 | 18.5111 | 18.5111 | 7.5000e-004 | 0.0000 | 18.5298 |
| **Total** | **4.8098** | **0.0787** | **0.1329** | **2.2000e-004** | | **1.0300e-003** | **1.0300e-003** | | **1.0300e-003** | **1.0300e-003** | **0.0000** | **18.5111** | **18.5111** | **7.5000e-004** | **0.0000** | **18.5298** |

## Mitigated Construction Off-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0234 | 0.0128 | 0.1761 | 7.7000e-004 | 0.1098 | 5.2000e-004 | 0.1103 | 0.0292 | 4.8000e-004 | 0.0296 | 0.0000 | 69.4477 | 69.4477 | 1.0400e-003 | 0.0000 | 69.4739 |
| **Total** | **0.0234** | **0.0128** | **0.1761** | **7.7000e-004** | **0.1098** | **5.2000e-004** | **0.1103** | **0.0292** | **4.8000e-004** | **0.0296** | **0.0000** | **69.4477** | **69.4477** | **1.0400e-003** | **0.0000** | **69.4739** |

## 3.4 Paving - 2031

### 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 | 0.0305 | 0.1566 | 0.3487 | 6.2000e-004 | | 7.2700e-003 | 7.2700e-003 | | 7.2700e-003 | 7.2700e-003 | 0.0000 | 53.0189 | 53.0189 | 2.4900e-003 | 0.0000 | 53.0811 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0305** | **0.1566** | **0.3487** | **6.2000e-004** | | **7.2700e-003** | **7.2700e-003** | | **7.2700e-003** | **7.2700e-003** | **0.0000** | **53.0189** | **53.0189** | **2.4900e-003** | **0.0000** | **53.0811** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.7000e-004 | 4.2000e-004 | 5.8100e-003 | 3.0000e-005 | 3.6200e-003 | 2.0000e-005 | 3.6400e-003 | 9.6000e-004 | 2.0000e-005 | 9.8000e-004 | 0.0000 | 2.2906 | 2.2906 | 3.0000e-005 | 0.0000 | 2.2915 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **7.7000e-004** | **4.2000e-004** | **5.8100e-003** | **3.0000e-005** | **3.6200e-003** | **2.0000e-005** | **3.6400e-003** | **9.6000e-004** | **2.0000e-005** | **9.8000e-004** | **0.0000** | **2.2906** | **2.2906** | **3.0000e-005** | **0.0000** | **2.2915** |

**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 | 0.0123 | 0.1988 | 0.3805 | 6.2000e-004 | | 2.0100e-003 | 2.0100e-003 | | 2.0100e-003 | 2.0100e-003 | 0.0000 | 53.0189 | 53.0189 | 2.4900e-003 | 0.0000 | 53.0810 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0123** | **0.1988** | **0.3805** | **6.2000e-004** | | **2.0100e-003** | **2.0100e-003** | | **2.0100e-003** | **2.0100e-003** | **0.0000** | **53.0189** | **53.0189** | **2.4900e-003** | **0.0000** | **53.0810** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.7000e-004 | 4.2000e-004 | 5.8100e-003 | 3.0000e-005 | 3.6200e-003 | 2.0000e-005 | 3.6400e-003 | 9.6000e-004 | 2.0000e-005 | 9.8000e-004 | 0.0000 | 2.2906 | 2.2906 | 3.0000e-005 | 0.0000 | 2.2915 |
| **Total** | **7.7000e-004** | **4.2000e-004** | **5.8100e-003** | **3.0000e-005** | **3.6200e-003** | **2.0000e-005** | **3.6400e-003** | **9.6000e-004** | **2.0000e-005** | **9.8000e-004** | **0.0000** | **2.2906** | **2.2906** | **3.0000e-005** | **0.0000** | **2.2915** |

## 3.5 Building Construction - 3030

**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 |
| Vendor | | | | | 0.0713 | 0.0000 | 0.0713 | 0.0175 | 0.0000 | 0.0175 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | | | | | 0.3850 | 0.0000 | 0.3850 | 0.0945 | 0.0000 | 0.0945 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | | | | **0.4563** | **0.0000** | **0.4563** | **0.1120** | **0.0000** | **0.1120** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

**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 |
| Vendor | | | | | 0.0713 | 0.0000 | 0.0713 | 0.0175 | 0.0000 | 0.0175 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | | | | | 0.3850 | 0.0000 | 0.3850 | 0.0945 | 0.0000 | 0.0945 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | | | | **0.4563** | **0.0000** | **0.4563** | **0.1120** | **0.0000** | **0.1120** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.5 Building Construction - 3031

**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 |
| Vendor | | | | | 0.0884 | 0.0000 | 0.0884 | 0.0217 | 0.0000 | 0.0217 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | | | | | 0.4772 | 0.0000 | 0.4772 | 0.1171 | 0.0000 | 0.1171 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | | | | **0.5655** | **0.0000** | **0.5655** | **0.1388** | **0.0000** | **0.1388** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

**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 |
| Vendor | | | | | 0.0884 | 0.0000 | 0.0884 | 0.0217 | 0.0000 | 0.0217 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | | | | | 0.4772 | 0.0000 | 0.4772 | 0.1171 | 0.0000 | 0.1171 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | | | | **0.5655** | **0.0000** | **0.5655** | **0.1388** | **0.0000** | **0.1388** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 4.0 Operational Detail - Mobile

### 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 | 3.7273 | 21.8365 | 44.0562 | 0.2126 | 22.1251 | 0.1220 | 22.2471 | 5.9258 | 0.1133 | 6.0390 | 0.0000 | 19,803.8774 | 19,803.8774 | 0.8048 | 0.0000 | 19,823.9981 |
| Unmitigated | 3.7273 | 21.8365 | 44.0562 | 0.2126 | 22.1251 | 0.1220 | 22.2471 | 5.9258 | 0.1133 | 6.0390 | 0.0000 | 19,803.8774 | 19,803.8774 | 0.8048 | 0.0000 | 19,823.9981 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 4,579.12 | 4,766.71 | 4146.22 | 15,527,797 | 15,527,797 |
| Regional Shopping Center | 20,460.13 | 23,943.63 | 12094.00 | 42,743,446 | 42,743,446 |
| Total | 25,039.25 | 28,710.34 | 16,240.22 | 58,271,243 | 58,271,243 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554583 | 0.041470 | 0.206790 | 0.110892 | 0.012526 | 0.005776 | 0.022446 | 0.035556 | 0.002182 | 0.001462 | 0.004853 | 0.000717 | 0.000746 |
| Single Family Housing | 0.554583 | 0.041470 | 0.206790 | 0.110892 | 0.012526 | 0.005776 | 0.022446 | 0.035556 | 0.002182 | 0.001462 | 0.004853 | 0.000717 | 0.000746 |
| Regional Shopping Center | 0.554583 | 0.041470 | 0.206790 | 0.110892 | 0.012526 | 0.005776 | 0.022446 | 0.035556 | 0.002182 | 0.001462 | 0.004853 | 0.000717 | 0.000746 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 3,264.0910 | 3,264.0910 | 0.1348 | 0.0279 | 3,275.7683 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 3,264.0910 | 3,264.0910 | 0.1348 | 0.0279 | 3,275.7683 |
| NaturalGas Mitigated | 0.0851 | 0.7303 | 0.3324 | 4.6400e-003 | | 0.0588 | 0.0588 | | 0.0588 | 0.0588 | 0.0000 | 842.1067 | 842.1067 | 0.0161 | 0.0154 | 847.1109 |
| NaturalGas Unmitigated | 0.0851 | 0.7303 | 0.3324 | 4.6400e-003 | | 0.0588 | 0.0588 | | 0.0588 | 0.0588 | 0.0000 | 842.1067 | 842.1067 | 0.0161 | 0.0154 | 847.1109 |

## 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 | | | | | |
| 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 |
| Regional Shopping Center | 1.06374e+006 | 5.7400e-003 | 0.0521 | 0.0438 | 3.1000e-004 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 56.7650 | 56.7650 | 1.0900e-003 | 1.0400e-003 | 57.1023 |
| Single Family Housing | 1.47167e+007 | 0.0794 | 0.6781 | 0.2886 | 4.3300e-003 | | 0.0548 | 0.0548 | | 0.0548 | 0.0548 | 0.0000 | 785.3417 | 785.3417 | 0.0151 | 0.0144 | 790.0086 |
| **Total** | | **0.0851** | **0.7303** | **0.3324** | **4.6400e-003** | | **0.0588** | **0.0588** | | **0.0588** | **0.0588** | **0.0000** | **842.1067** | **842.1067** | **0.0161** | **0.0154** | **847.1109** |

### 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 | | | | | |
| 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 |
| Regional Shopping Center | 1.06374e+006 | 5.7400e-003 | 0.0521 | 0.0438 | 3.1000e-004 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 56.7650 | 56.7650 | 1.0900e-003 | 1.0400e-003 | 57.1023 |
| Single Family Housing | 1.47167e+007 | 0.0794 | 0.6781 | 0.2886 | 4.3300e-003 | | 0.0548 | 0.0548 | | 0.0548 | 0.0548 | 0.0000 | 785.3417 | 785.3417 | 0.0151 | 0.0144 | 790.0086 |
| **Total** | | **0.0851** | **0.7303** | **0.3324** | **4.6400e-003** | | **0.0588** | **0.0588** | | **0.0588** | **0.0588** | **0.0000** | **842.1067** | **842.1067** | **0.0161** | **0.0154** | **847.1109** |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 6.05179e+006 | 1,928.2302 | 0.0796 | 0.0165 | 1,935.1285 |
| Single Family Housing | 4.19263e+006 | 1,335.8608 | 0.0552 | 0.0114 | 1,340.6398 |
| **Total** | | **3,264.0910** | **0.1348** | **0.0279** | **3,275.7683** |

### Mitigated

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

| | | | | | |
|---|---|---|---|---|---|
| Regional Shopping Center | 6.05179e+006 | 1,928.2302 | 0.0796 | 0.0165 | 1,935.1285 |
| Single Family Housing | 4.19263e+006 | 1,335.8608 | 0.0552 | 0.0114 | 1,340.6398 |
| **Total** | | **3,264.0910** | **0.1348** | **0.0279** | **3,275.7683** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 8.0022 | 0.1818 | 8.0113 | 8.0600e-003 | | 0.4868 | 0.4868 | | 0.4868 | 0.4868 | 51.0914 | 106.2952 | 157.3865 | 0.1601 | 3.4700e-003 | 162.4228 |
| Unmitigated | 8.0022 | 0.1818 | 8.0113 | 8.0600e-003 | | 0.4868 | 0.4868 | | 0.4868 | 0.4868 | 51.0914 | 106.2952 | 157.3865 | 0.1601 | 3.4700e-003 | 162.4228 |

### 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 | 0.5734 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 5.7048 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1.5755 | 0.1248 | 3.0577 | 7.8000e-003 | | 0.4593 | 0.4593 | | 0.4593 | 0.4593 | 51.0914 | 98.1801 | 149.2714 | 0.1524 | 3.4700e-003 | 154.1139 |
| Landscaping | 0.1486 | 0.0571 | 4.9536 | 2.6000e-004 | | 0.0275 | 0.0275 | | 0.0275 | 0.0275 | 0.0000 | 8.1151 | 8.1151 | 7.7500e-003 | 0.0000 | 8.3089 |
| **Total** | **8.0022** | **0.1818** | **8.0113** | **8.0600e-003** | | **0.4868** | **0.4868** | | **0.4868** | **0.4868** | **51.0914** | **106.2952** | **157.3865** | **0.1601** | **3.4700e-003** | **162.4228** |

**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 | 0.5734 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 5.7048 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1.5755 | 0.1248 | 3.0577 | 7.8000e-003 | | 0.4593 | 0.4593 | | 0.4593 | 0.4593 | 51.0914 | 98.1801 | 149.2714 | 0.1524 | 3.4700e-003 | 154.1139 |
| Landscaping | 0.1486 | 0.0571 | 4.9536 | 2.6000e-004 | | 0.0275 | 0.0275 | | 0.0275 | 0.0275 | 0.0000 | 8.1151 | 8.1151 | 7.7500e-003 | 0.0000 | 8.3089 |
| **Total** | **8.0022** | **0.1818** | **8.0113** | **8.0600e-003** | | **0.4868** | **0.4868** | | **0.4868** | **0.4868** | **51.0914** | **106.2952** | **157.3865** | **0.1601** | **3.4700e-003** | **162.4228** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 376.7572 | 1.7570 | 0.0442 | 433.8573 |
| Unmitigated | 445.4152 | 2.1952 | 0.0550 | 516.6989 |

## 7.2 Water by Land Use

### Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 35.4926 / 21.7535 | 235.5157 | 1.1658 | 0.0292 | 273.3689 |
| Single Family Housing | 31.3391 / 19.7573 | 209.8995 | 1.0294 | 0.0258 | 243.3299 |
| **Total** | | **445.4152** | **2.1952** | **0.0550** | **516.6989** |

### Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 28.3941 / 20.4266 | 199.1162 | 0.9331 | 0.0235 | 229.4371 |
| Single Family Housing | 25.0713 / 18.5521 | 177.6410 | 0.8240 | 0.0207 | 204.4202 |
| **Total** | | **376.7572** | **1.7570** | **0.0442** | **433.8573** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 216.6482 | 12.8035 | 0.0000 | 536.7367 |
| Unmitigated | 216.6482 | 12.8035 | 0.0000 | 536.7367 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|

| Land Use | tons | MT/yr | | | |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 503.12 | 102.1288 | 6.0356 | 0.0000 | 253.0198 |
| Single Family Housing | 564.16 | 114.5194 | 6.7679 | 0.0000 | 283.7169 |
| **Total** | | **216.6482** | **12.8035** | **0.0000** | **536.7367** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 503.12 | 102.1288 | 6.0356 | 0.0000 | 253.0198 |
| Single Family Housing | 564.16 | 114.5194 | 6.7679 | 0.0000 | 283.7169 |
| **Total** | | **216.6482** | **12.8035** | **0.0000** | **536.7367** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase VI Construction - South Coast Air Basin, Summer

# Phase VI Construction

**South Coast Air Basin, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 20.00 | Acre | 20.00 | 871,200.00 | 0 |
| Single Family Housing | 481.00 | Dwelling Unit | 73.00 | 1,083,997.00 | 1376 |
| Regional Shopping Center | 479.16 | 1000sqft | 11.00 | 479,160.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2032 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park, Utility Corridor/Bank Easement and Shops/Restaurants

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Trips and VMT -

Architectural Coating -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| tblConstEquipMitigation | Tier | No Change | Tier 3 |
|---|---|---|---|
| tblConstructionPhase | NumDays | 220.00 | 173.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 262.00 |
| tblConstructionPhase | NumDays | 220.00 | 44.00 |
| tblConstructionPhase | PhaseEndDate | 11/24/2044 | 7/22/2031 |
| tblConstructionPhase | PhaseEndDate | 3/19/2043 | 7/22/3031 |
| tblConstructionPhase | PhaseEndDate | 5/1/2031 | 5/2/2031 |
| tblConstructionPhase | PhaseEndDate | 1/21/2044 | 7/22/2031 |
| tblConstructionPhase | PhaseStartDate | 1/22/2044 | 11/22/2030 |
| tblConstructionPhase | PhaseStartDate | 5/2/2031 | 7/22/3030 |
| tblConstructionPhase | PhaseStartDate | 2/22/2030 | 2/23/2030 |
| tblConstructionPhase | PhaseStartDate | 3/20/2043 | 5/22/2031 |
| tblLandUse | LandUseSquareFeet | 865,800.00 | 1,083,997.00 |
| tblLandUse | LotAcreage | 156.17 | 73.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2030 | 70.0927 | 14.8979 | 28.0382 | 0.0859 | 10.4394 | 0.5170 | 10.9564 | 4.0649 | 0.5163 | 4.5812 | 0.0000 | 8,791.6952 | 8,791.6952 | 0.3239 | 0.0000 | 8,799.7931 |
| 2031 | 70.0628 | 14.8810 | 27.8477 | 0.0856 | 10.4394 | 0.5164 | 10.9558 | 4.0649 | 0.5158 | 4.5807 | 0.0000 | 8,764.3681 | 8,764.3681 | 0.3222 | 0.0000 | 8,772.4221 |
| 3030 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 7.9698 | 0.0000 | 7.9698 | 1.9562 | 0.0000 | 1.9562 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 3031 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 7.9698 | 0.0000 | 7.9698 | 1.9562 | 0.0000 | 1.9562 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **70.0927** | **14.8979** | **28.0382** | **0.0859** | **10.4394** | **0.5170** | **10.9564** | **4.0649** | **0.5163** | **4.5812** | **0.0000** | **8,791.6952** | **8,791.6952** | **0.3239** | **0.0000** | **8,799.7931** |

## Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2030 | 68.2638 | 25.2636 | 41.7716 | 0.0859 | 5.1487 | 0.2180 | 5.3666 | 1.8710 | 0.2172 | 2.0883 | 0.0000 | 8,791.6952 | 8,791.6952 | 0.3239 | 0.0000 | 8,799.7931 |
| 2031 | 68.2339 | 25.2467 | 41.5810 | 0.0856 | 5.1487 | 0.2174 | 5.3660 | 1.8710 | 0.2167 | 2.0877 | 0.0000 | 8,764.3681 | 8,764.3681 | 0.3222 | 0.0000 | 8,772.4220 |
| 3030 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 7.9698 | 0.0000 | 7.9698 | 1.9562 | 0.0000 | 1.9562 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 3031 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 7.9698 | 0.0000 | 7.9698 | 1.9562 | 0.0000 | 1.9562 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **68.2638** | **25.2636** | **41.7716** | **0.0859** | **7.9698** | **0.2180** | **7.9698** | **1.9562** | **0.2172** | **2.0883** | **0.0000** | **8,791.6952** | **8,791.6952** | **0.3239** | **0.0000** | **8,799.7931** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **2.61** | **-69.62** | **-49.15** | **0.00** | **28.74** | **57.88** | **29.54** | **36.44** | **57.95** | **38.13** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 161.6285 | 10.4367 | 284.2424 | 0.6261 | | 36.9630 | 36.9630 | | 36.9630 | 36.9630 | 4,505.4878 | 8,729.5629 | 13,235.0507 | 13.5046 | 0.3058 | 13,663.7941 |
| Energy | 0.4663 | 4.0015 | 1.8212 | 0.0254 | | 0.3221 | 0.3221 | | 0.3221 | 0.3221 | | 5,086.3766 | 5,086.3766 | 0.0975 | 0.0933 | 5,116.6024 |
| Mobile | 26.0264 | 138.3720 | 294.7351 | 1.4179 | 144.6443 | 0.7838 | 145.4281 | 38.6812 | 0.7278 | 39.4090 | | 145,528.2525 | 145,528.2525 | 5.6962 | | 145,670.6581 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **188.1212** | **152.8101** | **580.7987** | **2.0695** | **144.6443** | **38.0689** | **182.7132** | **38.6812** | **38.0129** | **76.6941** | **4,505.4878** | **159,344.1920** | **163,849.6797** | **19.2983** | **0.3991** | **164,451.0545** |

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 161.6285 | 10.4367 | 284.2424 | 0.6261 | | 36.9630 | 36.9630 | | 36.9630 | 36.9630 | 4,505.4878 | 8,729.5629 | 13,235.0507 | 13.5046 | 0.3058 | 13,663.7941 |
| Energy | 0.4663 | 4.0015 | 1.8212 | 0.0254 | | 0.3221 | 0.3221 | | 0.3221 | 0.3221 | | 5,086.3766 | 5,086.3766 | 0.0975 | 0.0933 | 5,116.6024 |
| Mobile | 26.0264 | 138.3720 | 294.7351 | 1.4179 | 144.6443 | 0.7838 | 145.4281 | 38.6812 | 0.7278 | 39.4090 | | 145,528.2525 | 145,528.2525 | 5.6962 | | 145,670.6581 |
| **Total** | **188.1212** | **152.8101** | **580.7987** | **2.0695** | **144.6443** | **38.0689** | **182.7132** | **38.6812** | **38.0129** | **76.6941** | **4,505.4878** | **159,344.1920** | **163,849.6797** | **19.2983** | **0.3991** | **164,451.0545** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 2/23/2030 | 5/2/2031 | 5 | 310 | |
| 2 | Architectural Coating | Architectural Coating | 11/22/2030 | 7/22/2031 | 5 | 173 | |
| 3 | Paving | Paving | 5/22/2031 | 7/22/2031 | 5 | 44 | |
| 4 | Building Construction | Building Construction | 7/22/3030 | 7/22/3031 | 5 | 262 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 20**

**Residential Indoor: 2,195,094; Residential Outdoor: 731,698; Non-Residential Indoor: 718,740; Non-Residential Outdoor: 239,580; Striped**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 692.00 | 273.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 138.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

### 3.2 Grading - 2030

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2807 | 13.8462 | 23.0239 | 0.0699 | | 0.4879 | 0.4879 | | 0.4879 | 0.4879 | | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **3.2807** | **13.8462** | **23.0239** | **0.0699** | **8.6733** | **0.4879** | **9.1613** | **3.5965** | **0.4879** | **4.0844** | | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0504 | 0.0247 | 0.4072 | 1.6500e-003 | 0.2236 | 1.1100e-003 | 0.2247 | 0.0593 | 1.0200e-003 | 0.0603 | | 164.1948 | 164.1948 | 2.6600e-003 | | 164.2613 |
| **Total** | **0.0504** | **0.0247** | **0.4072** | **1.6500e-003** | **0.2236** | **1.1100e-003** | **0.2247** | **0.0593** | **1.0200e-003** | **0.0603** | | **164.1948** | **164.1948** | **2.6600e-003** | | **164.2613** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0504 | 0.0247 | 0.4072 | 1.6500e-003 | 0.2236 | 1.1100e-003 | 0.2247 | 0.0593 | 1.0200e-003 | 0.0603 | | 164.1948 | 164.1948 | 2.6600e-003 | | 164.2613 |
| **Total** | **0.0504** | **0.0247** | **0.4072** | **1.6500e-003** | **0.2236** | **1.1100e-003** | **0.2247** | **0.0593** | **1.0200e-003** | **0.0603** | | **164.1948** | **164.1948** | **2.6600e-003** | | **164.2613** |

## 3.2 Grading - 2031

**Unmitigated Construction On-Site**

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2807 | 13.8462 | 23.0239 | 0.0699 | | 0.4879 | 0.4879 | | 0.4879 | 0.4879 | | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **3.2807** | **13.8462** | **23.0239** | **0.0699** | **8.6733** | **0.4879** | **9.1613** | **3.5965** | **0.4879** | **4.0844** | | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0466 | 0.0226 | 0.3830 | 1.6100e-003 | 0.2236 | 1.0400e-003 | 0.2246 | 0.0593 | 9.5000e-004 | 0.0602 | | 160.7356 | 160.7356 | 2.4400e-003 | | 160.7966 |
| **Total** | **0.0466** | **0.0226** | **0.3830** | **1.6100e-003** | **0.2236** | **1.0400e-003** | **0.2246** | **0.0593** | **9.5000e-004** | **0.0602** | | **160.7356** | **160.7356** | **2.4400e-003** | | **160.7966** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0466 | 0.0226 | 0.3830 | 1.6100e-003 | 0.2236 | 1.0400e-003 | 0.2246 | 0.0593 | 9.5000e-004 | 0.0602 | | 160.7356 | 160.7356 | 2.4400e-003 | | 160.7966 |
| **Total** | **0.0466** | **0.0226** | **0.3830** | **1.6100e-003** | **0.2236** | **1.0400e-003** | **0.2246** | **0.0593** | **9.5000e-004** | **0.0602** | | **160.7356** | **160.7356** | **2.4400e-003** | | **160.7966** |

## 3.3 Architectural Coating - 2030

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 66.2829 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **66.4136** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3480 | 0.1707 | 2.8094 | 0.0114 | 1.5425 | 7.6600e-003 | 1.5502 | 0.4091 | 7.0500e-003 | 0.4161 | | 1,132.9439 | 1,132.9439 | 0.0184 | | 1,133.4027 |
| **Total** | **0.3480** | **0.1707** | **2.8094** | **0.0114** | **1.5425** | **7.6600e-003** | **1.5502** | **0.4091** | **7.0500e-003** | **0.4161** | | **1,132.9439** | **1,132.9439** | **0.0184** | | **1,133.4027** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 66.2829 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **66.3423** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3480 | 0.1707 | 2.8094 | 0.0114 | 1.5425 | 7.6600e-003 | 1.5502 | 0.4091 | 7.0500e-003 | 0.4161 | | 1,132.9439 | 1,132.9439 | 0.0184 | | 1,133.4027 |
| **Total** | **0.3480** | **0.1707** | **2.8094** | **0.0114** | **1.5425** | **7.6600e-003** | **1.5502** | **0.4091** | **7.0500e-003** | **0.4161** | | **1,132.9439** | **1,132.9439** | **0.0184** | | **1,133.4027** |

## 3.3 Architectural Coating - 2031

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 66.2829 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **66.4136** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3219 | 0.1559 | 2.6430 | 0.0111 | 1.5425 | 7.1600e-003 | 1.5497 | 0.4091 | 6.5800e-003 | 0.4157 | | 1,109.0758 | 1,109.0758 | 0.0168 | | 1,109.4964 |
| **Total** | **0.3219** | **0.1559** | **2.6430** | **0.0111** | **1.5425** | **7.1600e-003** | **1.5497** | **0.4091** | **6.5800e-003** | **0.4157** | | **1,109.0758** | **1,109.0758** | **0.0168** | | **1,109.4964** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 66.2829 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **66.3423** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3219 | 0.1559 | 2.6430 | 0.0111 | 1.5425 | 7.1600e-003 | 1.5497 | 0.4091 | 6.5800e-003 | 0.4157 | | 1,109.0758 | 1,109.0758 | 0.0168 | | 1,109.4964 |
| **Total** | **0.3219** | **0.1559** | **2.6430** | **0.0111** | **1.5425** | **7.1600e-003** | **1.5497** | **0.4091** | **6.5800e-003** | **0.4157** | | **1,109.0758** | **1,109.0758** | **0.0168** | | **1,109.4964** |

## 3.4 Paving - 2031

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3845 | 7.1202 | 15.8495 | 0.0281 | | 0.3306 | 0.3306 | | 0.3306 | 0.3306 | | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3845** | **7.1202** | **15.8495** | **0.0281** | | **0.3306** | **0.3306** | | **0.3306** | **0.3306** | | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0350 | 0.0170 | 0.2873 | 1.2100e-003 | 0.1677 | 7.8000e-004 | 0.1684 | 0.0445 | 7.2000e-004 | 0.0452 | | 120.5517 | 120.5517 | 1.8300e-003 | | 120.5974 |
| **Total** | **0.0350** | **0.0170** | **0.2873** | **1.2100e-003** | **0.1677** | **7.8000e-004** | **0.1684** | **0.0445** | **7.2000e-004** | **0.0452** | | **120.5517** | **120.5517** | **1.8300e-003** | | **120.5974** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0350 | 0.0170 | 0.2873 | 1.2100e-003 | 0.1677 | 7.8000e-004 | 0.1684 | 0.0445 | 7.2000e-004 | 0.0452 | | 120.5517 | 120.5517 | 1.8300e-003 | | 120.5974 |
| **Total** | **0.0350** | **0.0170** | **0.2873** | **1.2100e-003** | **0.1677** | **7.8000e-004** | **0.1684** | **0.0445** | **7.2000e-004** | **0.0452** | | **120.5517** | **120.5517** | **1.8300e-003** | | **120.5974** |

## 3.5 Building Construction - 3030

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Vendor | | | | | 1.2452 | 0.0000 | 1.2452 | 0.3057 | 0.0000 | 0.3057 | | | 0.0000 | | | 0.0000 |
| Worker | | | | | 6.7245 | 0.0000 | 6.7245 | 1.6506 | 0.0000 | 1.6506 | | | 0.0000 | | | 0.0000 |
| **Total** | | | | | **7.9698** | **0.0000** | **7.9698** | **1.9562** | **0.0000** | **1.9562** | | | **0.0000** | | | **0.0000** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Vendor | | | | | 1.2452 | 0.0000 | 1.2452 | 0.3057 | 0.0000 | 0.3057 | | | 0.0000 | | | 0.0000 |
| Worker | | | | | 6.7245 | 0.0000 | 6.7245 | 1.6506 | 0.0000 | 1.6506 | | | 0.0000 | | | 0.0000 |
| **Total** | | | | | **7.9698** | **0.0000** | **7.9698** | **1.9562** | **0.0000** | **1.9562** | | | **0.0000** | | | **0.0000** |

## 3.5 Building Construction - 3031

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Vendor | | | | | 1.2452 | 0.0000 | 1.2452 | 0.3057 | 0.0000 | 0.3057 | | | 0.0000 | | | 0.0000 |
| Worker | | | | | 6.7245 | 0.0000 | 6.7245 | 1.6506 | 0.0000 | 1.6506 | | | 0.0000 | | | 0.0000 |
| **Total** | | | | | **7.9698** | **0.0000** | **7.9698** | **1.9562** | **0.0000** | **1.9562** | | | **0.0000** | | | **0.0000** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Vendor | | | | | 1.2452 | 0.0000 | 1.2452 | 0.3057 | 0.0000 | 0.3057 | | | 0.0000 | | | 0.0000 |
| Worker | | | | | 6.7245 | 0.0000 | 6.7245 | 1.6506 | 0.0000 | 1.6506 | | | 0.0000 | | | 0.0000 |
| **Total** | | | | | **7.9698** | **0.0000** | **7.9698** | **1.9562** | **0.0000** | **1.9562** | | | **0.0000** | | | **0.0000** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 26.0264 | 138.3720 | 294.7351 | 1.4179 | 144.6443 | 0.7838 | 145.4281 | 38.6812 | 0.7278 | 39.4090 | | 145,528.2525 | 145,528.2525 | 5.6962 | | 145,670.6581 |
| Unmitigated | 26.0264 | 138.3720 | 294.7351 | 1.4179 | 144.6443 | 0.7838 | 145.4281 | 38.6812 | 0.7278 | 39.4090 | | 145,528.2525 | 145,528.2525 | 5.6962 | | 145,670.6581 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 4,579.12 | 4,766.71 | 4146.22 | 15,527,797 | 15,527,797 |
| Regional Shopping Center | 20,460.13 | 23,943.63 | 12094.00 | 42,743,446 | 42,743,446 |

| | | | | | |
|---|---|---|---|---|---|
| Total | 25,039.25 | 28,710.34 | 16,240.22 | 58,271,243 | 58,271,243 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554583 | 0.041470 | 0.206790 | 0.110892 | 0.012526 | 0.005776 | 0.022446 | 0.035556 | 0.002182 | 0.001462 | 0.004853 | 0.000717 | 0.000746 |
| Single Family Housing | 0.554583 | 0.041470 | 0.206790 | 0.110892 | 0.012526 | 0.005776 | 0.022446 | 0.035556 | 0.002182 | 0.001462 | 0.004853 | 0.000717 | 0.000746 |
| Regional Shopping Center | 0.554583 | 0.041470 | 0.206790 | 0.110892 | 0.012526 | 0.005776 | 0.022446 | 0.035556 | 0.002182 | 0.001462 | 0.004853 | 0.000717 | 0.000746 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.4663 | 4.0015 | 1.8212 | 0.0254 | | 0.3221 | 0.3221 | | 0.3221 | 0.3221 | | 5,086.3766 | 5,086.3766 | 0.0975 | 0.0933 | 5,116.6024 |
| NaturalGas Unmitigated | 0.4663 | 4.0015 | 1.8212 | 0.0254 | | 0.3221 | 0.3221 | | 0.3221 | 0.3221 | | 5,086.3766 | 5,086.3766 | 0.0975 | 0.0933 | 5,116.6024 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Regional Shopping Center | 2914.34 | 0.0314 | 0.2857 | 0.2400 | 1.7100e-003 | | 0.0217 | 0.0217 | | 0.0217 | 0.0217 | | 342.8639 | 342.8639 | 6.5700e-003 | 6.2900e-003 | 344.9014 |
| Single Family Housing | 40319.9 | 0.4348 | 3.7158 | 1.5812 | 0.0237 | | 0.3004 | 0.3004 | | 0.3004 | 0.3004 | | 4,743.5127 | 4,743.5127 | 0.0909 | 0.0870 | 4,771.7010 |
| **Total** | | **0.4663** | **4.0015** | **1.8212** | **0.0254** | | **0.3221** | **0.3221** | | **0.3221** | **0.3221** | | **5,086.3766** | **5,086.3766** | **0.0975** | **0.0933** | **5,116.6024** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Regional Shopping Center | 2.91434 | 0.0314 | 0.2857 | 0.2400 | 1.7100e-003 | | 0.0217 | 0.0217 | | 0.0217 | 0.0217 | | 342.8639 | 342.8639 | 6.5700e-003 | 6.2900e-003 | 344.9014 |
| Single Family Housing | 40.3199 | 0.4348 | 3.7158 | 1.5812 | 0.0237 | | 0.3004 | 0.3004 | | 0.3004 | 0.3004 | | 4,743.5127 | 4,743.5127 | 0.0909 | 0.0870 | 4,771.7010 |
| **Total** | | **0.4663** | **4.0015** | **1.8212** | **0.0254** | | **0.3221** | **0.3221** | | **0.3221** | **0.3221** | | **5,086.3766** | **5,086.3766** | **0.0975** | **0.0933** | **5,116.6024** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 161.6285 | 10.4367 | 284.2424 | 0.6261 | | 36.9630 | 36.9630 | | 36.9630 | 36.9630 | 4,505.4878 | 8,729.5629 | 13,235.0507 | 13.5046 | 0.3058 | 13,663.7941 |
| Unmitigated | 161.6285 | 10.4367 | 284.2424 | 0.6261 | | 36.9630 | 36.9630 | | 36.9630 | 36.9630 | 4,505.4878 | 8,729.5629 | 13,235.0507 | 13.5046 | 0.3058 | 13,663.7941 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 3.1416 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 31.2591 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 126.0393 | 9.9799 | 244.6134 | 0.6240 | | 36.7428 | 36.7428 | | 36.7428 | 36.7428 | 4,505.4878 | 8,658.0000 | 13,163.4878 | 13.4362 | 0.3058 | 13,590.5222 |
| Landscaping | 1.1885 | 0.4567 | 39.6290 | 2.1000e-003 | | 0.2203 | 0.2203 | | 0.2203 | 0.2203 | | 71.5629 | 71.5629 | 0.0684 | | 73.2719 |
| **Total** | **161.6285** | **10.4367** | **284.2424** | **0.6261** | | **36.9630** | **36.9630** | | **36.9630** | **36.9630** | **4,505.4878** | **8,729.5629** | **13,235.0507** | **13.5046** | **0.3058** | **13,663.7941** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 3.1416 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 31.2591 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 126.0393 | 9.9799 | 244.6134 | 0.6240 | | 36.7428 | 36.7428 | | 36.7428 | 36.7428 | 4,505.4878 | 8,658.0000 | 13,163.4878 | 13.4362 | 0.3058 | 13,590.5222 |
| Landscaping | 1.1885 | 0.4567 | 39.6290 | 2.1000e-003 | | 0.2203 | 0.2203 | | 0.2203 | 0.2203 | | 71.5629 | 71.5629 | 0.0684 | | 73.2719 |
| **Total** | **161.6285** | **10.4367** | **284.2424** | **0.6261** | | **36.9630** | **36.9630** | | **36.9630** | **36.9630** | **4,505.4878** | **8,729.5629** | **13,235.0507** | **13.5046** | **0.3058** | **13,663.7941** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

Phase VI Construction - South Coast Air Basin, Winter

# Phase VI Construction

**South Coast Air Basin, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 20.00 | Acre | 20.00 | 871,200.00 | 0 |
| Single Family Housing | 481.00 | Dwelling Unit | 73.00 | 1,083,997.00 | 1376 |
| Regional Shopping Center | 479.16 | 1000sqft | 11.00 | 479,160.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2032 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park, Utility Corridor/Bank Easement and Shops/Restaurants

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Trips and VMT -

Architectural Coating -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| tblConstEquipMitigation | Tier | No Change | Tier 3 |
|---|---|---|---|
| tblConstructionPhase | NumDays | 220.00 | 173.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 262.00 |
| tblConstructionPhase | NumDays | 220.00 | 44.00 |
| tblConstructionPhase | PhaseEndDate | 11/24/2044 | 7/22/2031 |
| tblConstructionPhase | PhaseEndDate | 3/19/2043 | 7/22/3031 |
| tblConstructionPhase | PhaseEndDate | 5/1/2031 | 5/2/2031 |
| tblConstructionPhase | PhaseEndDate | 1/21/2044 | 7/22/2031 |
| tblConstructionPhase | PhaseStartDate | 1/22/2044 | 11/22/2030 |
| tblConstructionPhase | PhaseStartDate | 5/2/2031 | 7/22/3030 |
| tblConstructionPhase | PhaseStartDate | 2/22/2030 | 2/23/2030 |
| tblConstructionPhase | PhaseStartDate | 3/20/2043 | 5/22/2031 |
| tblLandUse | LandUseSquareFeet | 865,800.00 | 1,083,997.00 |
| tblLandUse | LotAcreage | 156.17 | 73.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2030 | 70.1436 | 14.9164 | 27.6976 | 0.0851 | 10.4394 | 0.5170 | 10.9564 | 4.0649 | 0.5163 | 4.5812 | 0.0000 | 8,710.5157 | 8,710.5157 | 0.3224 | 0.0000 | 8,718.5762 |
| 2031 | 70.1104 | 14.8977 | 27.5217 | 0.0848 | 10.4394 | 0.5164 | 10.9558 | 4.0649 | 0.5158 | 4.5807 | 0.0000 | 8,684.6594 | 8,684.6594 | 0.3208 | 0.0000 | 8,692.6786 |
| 3030 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 7.9698 | 0.0000 | 7.9698 | 1.9562 | 0.0000 | 1.9562 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 3031 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 7.9698 | 0.0000 | 7.9698 | 1.9562 | 0.0000 | 1.9562 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **70.1436** | **14.9164** | **27.6976** | **0.0851** | **10.4394** | **0.5170** | **10.9564** | **4.0649** | **0.5163** | **4.5812** | **0.0000** | **8,710.5157** | **8,710.5157** | **0.3224** | **0.0000** | **8,718.5762** |

## Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2030 | 68.3147 | 25.2821 | 41.4310 | 0.0851 | 5.1487 | 0.2180 | 5.3666 | 1.8710 | 0.2172 | 2.0883 | 0.0000 | 8,710.5157 | 8,710.5157 | 0.3224 | 0.0000 | 8,718.5762 |
| 2031 | 68.2815 | 25.2634 | 41.2551 | 0.0848 | 5.1487 | 0.2174 | 5.3660 | 1.8710 | 0.2167 | 2.0877 | 0.0000 | 8,684.6594 | 8,684.6594 | 0.3208 | 0.0000 | 8,692.6785 |
| 3030 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 7.9698 | 0.0000 | 7.9698 | 1.9562 | 0.0000 | 1.9562 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 3031 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 7.9698 | 0.0000 | 7.9698 | 1.9562 | 0.0000 | 1.9562 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **68.3147** | **25.2821** | **41.4310** | **0.0851** | **7.9698** | **0.2180** | **7.9698** | **1.9562** | **0.2172** | **2.0883** | **0.0000** | **8,710.5157** | **8,710.5157** | **0.3224** | **0.0000** | **8,718.5762** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **2.61** | **-69.54** | **-49.74** | **0.00** | **28.74** | **57.88** | **29.54** | **36.44** | **57.95** | **38.13** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 161.6285 | 10.4367 | 284.2424 | 0.6261 | | 36.9630 | 36.9630 | | 36.9630 | 36.9630 | 4,505.4878 | 8,729.5629 | 13,235.0507 | 13.5046 | 0.3058 | 13,663.7941 |
| Energy | 0.4663 | 4.0015 | 1.8212 | 0.0254 | | 0.3221 | 0.3221 | | 0.3221 | 0.3221 | | 5,086.3766 | 5,086.3766 | 0.0975 | 0.0933 | 5,116.6024 |
| Mobile | 24.7953 | 139.0760 | 280.4186 | 1.3464 | 144.6443 | 0.7866 | 145.4309 | 38.6812 | 0.7305 | 39.4117 | | 138,265.7839 | 138,265.7839 | 5.7744 | | 138,410.1450 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **186.8900** | **153.5141** | **566.4821** | **1.9980** | **144.6443** | **38.0717** | **182.7161** | **38.6812** | **38.0156** | **76.6968** | **4,505.4878** | **152,081.7234** | **156,587.2111** | **19.3765** | **0.3991** | **157,190.5415** |

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 161.6285 | 10.4367 | 284.2424 | 0.6261 | | 36.9630 | 36.9630 | | 36.9630 | 36.9630 | 4,505.4878 | 8,729.5629 | 13,235.0507 | 13.5046 | 0.3058 | 13,663.7941 |
| Energy | 0.4663 | 4.0015 | 1.8212 | 0.0254 | | 0.3221 | 0.3221 | | 0.3221 | 0.3221 | | 5,086.3766 | 5,086.3766 | 0.0975 | 0.0933 | 5,116.6024 |
| Mobile | 24.7953 | 139.0760 | 280.4186 | 1.3464 | 144.6443 | 0.7866 | 145.4309 | 38.6812 | 0.7305 | 39.4117 | | 138,265.7839 | 138,265.7839 | 5.7744 | | 138,410.1450 |
| **Total** | **186.8900** | **153.5141** | **566.4821** | **1.9980** | **144.6443** | **38.0717** | **182.7161** | **38.6812** | **38.0156** | **76.6968** | **4,505.4878** | **152,081.7234** | **156,587.2111** | **19.3765** | **0.3991** | **157,190.5415** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 2/23/2030 | 5/2/2031 | 5 | 310 | |
| 2 | Architectural Coating | Architectural Coating | 11/22/2030 | 7/22/2031 | 5 | 173 | |
| 3 | Paving | Paving | 5/22/2031 | 7/22/2031 | 5 | 44 | |
| 4 | Building Construction | Building Construction | 7/22/3030 | 7/22/3031 | 5 | 262 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 20**

**Residential Indoor: 2,195,094; Residential Outdoor: 731,698; Non-Residential Indoor: 718,740; Non-Residential Outdoor: 239,580; Striped**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 692.00 | 273.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 138.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

### 3.2 Grading - 2030

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2807 | 13.8462 | 23.0239 | 0.0699 | | 0.4879 | 0.4879 | | 0.4879 | 0.4879 | | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **3.2807** | **13.8462** | **23.0239** | **0.0699** | **8.6733** | **0.4879** | **9.1613** | **3.5965** | **0.4879** | **4.0844** | | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0569 | 0.0271 | 0.3641 | 1.5400e-003 | 0.2236 | 1.1100e-003 | 0.2247 | 0.0593 | 1.0200e-003 | 0.0603 | | 153.9189 | 153.9189 | 2.4700e-003 | | 153.9807 |
| **Total** | **0.0569** | **0.0271** | **0.3641** | **1.5400e-003** | **0.2236** | **1.1100e-003** | **0.2247** | **0.0593** | **1.0200e-003** | **0.0603** | | **153.9189** | **153.9189** | **2.4700e-003** | | **153.9807** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0569 | 0.0271 | 0.3641 | 1.5400e-003 | 0.2236 | 1.1100e-003 | 0.2247 | 0.0593 | 1.0200e-003 | 0.0603 | | 153.9189 | 153.9189 | 2.4700e-003 | | 153.9807 |
| **Total** | **0.0569** | **0.0271** | **0.3641** | **1.5400e-003** | **0.2236** | **1.1100e-003** | **0.2247** | **0.0593** | **1.0200e-003** | **0.0603** | | **153.9189** | **153.9189** | **2.4700e-003** | | **153.9807** |

## 3.2 Grading - 2031

### Unmitigated Construction On-Site

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2807 | 13.8462 | 23.0239 | 0.0699 | | 0.4879 | 0.4879 | | 0.4879 | 0.4879 | | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **3.2807** | **13.8462** | **23.0239** | **0.0699** | **8.6733** | **0.4879** | **9.1613** | **3.5965** | **0.4879** | **4.0844** | | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0527 | 0.0247 | 0.3418 | 1.5100e-003 | 0.2236 | 1.0400e-003 | 0.2246 | 0.0593 | 9.5000e-004 | 0.0602 | | 150.6459 | 150.6459 | 2.2600e-003 | | 150.7025 |
| **Total** | **0.0527** | **0.0247** | **0.3418** | **1.5100e-003** | **0.2236** | **1.0400e-003** | **0.2246** | **0.0593** | **9.5000e-004** | **0.0602** | | **150.6459** | **150.6459** | **2.2600e-003** | | **150.7025** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0527 | 0.0247 | 0.3418 | 1.5100e-003 | 0.2236 | 1.0400e-003 | 0.2246 | 0.0593 | 9.5000e-004 | 0.0602 | | 150.6459 | 150.6459 | 2.2600e-003 | | 150.7025 |
| **Total** | **0.0527** | **0.0247** | **0.3418** | **1.5100e-003** | **0.2236** | **1.0400e-003** | **0.2246** | **0.0593** | **9.5000e-004** | **0.0602** | | **150.6459** | **150.6459** | **2.2600e-003** | | **150.7025** |

## 3.3 Architectural Coating - 2030

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 66.2829 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **66.4136** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3924 | 0.1869 | 2.5119 | 0.0106 | 1.5425 | 7.6600e-003 | 1.5502 | 0.4091 | 7.0500e-003 | 0.4161 | | 1,062.0403 | 1,062.0403 | 0.0171 | | 1,062.4665 |
| **Total** | **0.3924** | **0.1869** | **2.5119** | **0.0106** | **1.5425** | **7.6600e-003** | **1.5502** | **0.4091** | **7.0500e-003** | **0.4161** | | **1,062.0403** | **1,062.0403** | **0.0171** | | **1,062.4665** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 66.2829 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **66.3423** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3924 | 0.1869 | 2.5119 | 0.0106 | 1.5425 | 7.6600e-003 | 1.5502 | 0.4091 | 7.0500e-003 | 0.4161 | | 1,062.0403 | 1,062.0403 | 0.0171 | | 1,062.4665 |
| **Total** | **0.3924** | **0.1869** | **2.5119** | **0.0106** | **1.5425** | **7.6600e-003** | **1.5502** | **0.4091** | **7.0500e-003** | **0.4161** | | **1,062.0403** | **1,062.0403** | **0.0171** | | **1,062.4665** |

## 3.3 Architectural Coating - 2031

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 66.2829 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **66.4136** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3634 | 0.1706 | 2.3583 | 0.0104 | 1.5425 | 7.1600e-003 | 1.5497 | 0.4091 | 6.5800e-003 | 0.4157 | | 1,039.4569 | 1,039.4569 | 0.0156 | | 1,039.8470 |
| **Total** | **0.3634** | **0.1706** | **2.3583** | **0.0104** | **1.5425** | **7.1600e-003** | **1.5497** | **0.4091** | **6.5800e-003** | **0.4157** | | **1,039.4569** | **1,039.4569** | **0.0156** | | **1,039.8470** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 66.2829 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **66.3423** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3634 | 0.1706 | 2.3583 | 0.0104 | 1.5425 | 7.1600e-003 | 1.5497 | 0.4091 | 6.5800e-003 | 0.4157 | | 1,039.4569 | 1,039.4569 | 0.0156 | | 1,039.8470 |
| **Total** | **0.3634** | **0.1706** | **2.3583** | **0.0104** | **1.5425** | **7.1600e-003** | **1.5497** | **0.4091** | **6.5800e-003** | **0.4157** | | **1,039.4569** | **1,039.4569** | **0.0156** | | **1,039.8470** |

## 3.4 Paving - 2031

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3845 | 7.1202 | 15.8495 | 0.0281 | | 0.3306 | 0.3306 | | 0.3306 | 0.3306 | | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3845** | **7.1202** | **15.8495** | **0.0281** | | **0.3306** | **0.3306** | | **0.3306** | **0.3306** | | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0395 | 0.0185 | 0.2563 | 1.1300e-003 | 0.1677 | 7.8000e-004 | 0.1684 | 0.0445 | 7.2000e-004 | 0.0452 | | 112.9844 | 112.9844 | 1.7000e-003 | | 113.0268 |
| **Total** | **0.0395** | **0.0185** | **0.2563** | **1.1300e-003** | **0.1677** | **7.8000e-004** | **0.1684** | **0.0445** | **7.2000e-004** | **0.0452** | | **112.9844** | **112.9844** | **1.7000e-003** | | **113.0268** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0395 | 0.0185 | 0.2563 | 1.1300e-003 | 0.1677 | 7.8000e-004 | 0.1684 | 0.0445 | 7.2000e-004 | 0.0452 | | 112.9844 | 112.9844 | 1.7000e-003 | | 113.0268 |
| **Total** | **0.0395** | **0.0185** | **0.2563** | **1.1300e-003** | **0.1677** | **7.8000e-004** | **0.1684** | **0.0445** | **7.2000e-004** | **0.0452** | | **112.9844** | **112.9844** | **1.7000e-003** | | **113.0268** |

## 3.5 Building Construction - 3030

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Vendor | | | | | 1.2452 | 0.0000 | 1.2452 | 0.3057 | 0.0000 | 0.3057 | | | 0.0000 | | | 0.0000 |
| Worker | | | | | 6.7245 | 0.0000 | 6.7245 | 1.6506 | 0.0000 | 1.6506 | | | 0.0000 | | | 0.0000 |
| **Total** | | | | | **7.9698** | **0.0000** | **7.9698** | **1.9562** | **0.0000** | **1.9562** | | | **0.0000** | | | **0.0000** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Vendor | | | | | 1.2452 | 0.0000 | 1.2452 | 0.3057 | 0.0000 | 0.3057 | | | 0.0000 | | | 0.0000 |
| Worker | | | | | 6.7245 | 0.0000 | 6.7245 | 1.6506 | 0.0000 | 1.6506 | | | 0.0000 | | | 0.0000 |
| **Total** | | | | | **7.9698** | **0.0000** | **7.9698** | **1.9562** | **0.0000** | **1.9562** | | | **0.0000** | | | **0.0000** |

## 3.5 Building Construction - 3031

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Vendor | | | | | 1.2452 | 0.0000 | 1.2452 | 0.3057 | 0.0000 | 0.3057 | | | 0.0000 | | | 0.0000 |
| Worker | | | | | 6.7245 | 0.0000 | 6.7245 | 1.6506 | 0.0000 | 1.6506 | | | 0.0000 | | | 0.0000 |
| **Total** | | | | | **7.9698** | **0.0000** | **7.9698** | **1.9562** | **0.0000** | **1.9562** | | | **0.0000** | | | **0.0000** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Vendor | | | | | 1.2452 | 0.0000 | 1.2452 | 0.3057 | 0.0000 | 0.3057 | | | 0.0000 | | | 0.0000 |
| Worker | | | | | 6.7245 | 0.0000 | 6.7245 | 1.6506 | 0.0000 | 1.6506 | | | 0.0000 | | | 0.0000 |
| **Total** | | | | | **7.9698** | **0.0000** | **7.9698** | **1.9562** | **0.0000** | **1.9562** | | | **0.0000** | | | **0.0000** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 24.7953 | 139.0760 | 280.4186 | 1.3464 | 144.6443 | 0.7866 | 145.4309 | 38.6812 | 0.7305 | 39.4117 | | 138,265.7839 | 138,265.7839 | 5.7744 | | 138,410.1450 |
| Unmitigated | 24.7953 | 139.0760 | 280.4186 | 1.3464 | 144.6443 | 0.7866 | 145.4309 | 38.6812 | 0.7305 | 39.4117 | | 138,265.7839 | 138,265.7839 | 5.7744 | | 138,410.1450 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 4,579.12 | 4,766.71 | 4146.22 | 15,527,797 | 15,527,797 |
| Regional Shopping Center | 20,460.13 | 23,943.63 | 12094.00 | 42,743,446 | 42,743,446 |

| | | | | | |
|---|---|---|---|---|---|
| Total | 25,039.25 | 28,710.34 | 16,240.22 | 58,271,243 | 58,271,243 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554583 | 0.041470 | 0.206790 | 0.110892 | 0.012526 | 0.005776 | 0.022446 | 0.035556 | 0.002182 | 0.001462 | 0.004853 | 0.000717 | 0.000746 |
| Single Family Housing | 0.554583 | 0.041470 | 0.206790 | 0.110892 | 0.012526 | 0.005776 | 0.022446 | 0.035556 | 0.002182 | 0.001462 | 0.004853 | 0.000717 | 0.000746 |
| Regional Shopping Center | 0.554583 | 0.041470 | 0.206790 | 0.110892 | 0.012526 | 0.005776 | 0.022446 | 0.035556 | 0.002182 | 0.001462 | 0.004853 | 0.000717 | 0.000746 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.4663 | 4.0015 | 1.8212 | 0.0254 | | 0.3221 | 0.3221 | | 0.3221 | 0.3221 | | 5,086.3766 | 5,086.3766 | 0.0975 | 0.0933 | 5,116.6024 |
| NaturalGas Unmitigated | 0.4663 | 4.0015 | 1.8212 | 0.0254 | | 0.3221 | 0.3221 | | 0.3221 | 0.3221 | | 5,086.3766 | 5,086.3766 | 0.0975 | 0.0933 | 5,116.6024 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Regional Shopping Center | 2914.34 | 0.0314 | 0.2857 | 0.2400 | 1.7100e-003 | | 0.0217 | 0.0217 | | 0.0217 | 0.0217 | | 342.8639 | 342.8639 | 6.5700e-003 | 6.2900e-003 | 344.9014 |
| Single Family Housing | 40319.9 | 0.4348 | 3.7158 | 1.5812 | 0.0237 | | 0.3004 | 0.3004 | | 0.3004 | 0.3004 | | 4,743.5127 | 4,743.5127 | 0.0909 | 0.0870 | 4,771.7010 |
| **Total** | | **0.4663** | **4.0015** | **1.8212** | **0.0254** | | **0.3221** | **0.3221** | | **0.3221** | **0.3221** | | **5,086.3766** | **5,086.3766** | **0.0975** | **0.0933** | **5,116.6024** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Regional Shopping Center | 2.91434 | 0.0314 | 0.2857 | 0.2400 | 1.7100e-003 | | 0.0217 | 0.0217 | | 0.0217 | 0.0217 | | 342.8639 | 342.8639 | 6.5700e-003 | 6.2900e-003 | 344.9014 |
| Single Family Housing | 40.3199 | 0.4348 | 3.7158 | 1.5812 | 0.0237 | | 0.3004 | 0.3004 | | 0.3004 | 0.3004 | | 4,743.5127 | 4,743.5127 | 0.0909 | 0.0870 | 4,771.7010 |
| **Total** | | **0.4663** | **4.0015** | **1.8212** | **0.0254** | | **0.3221** | **0.3221** | | **0.3221** | **0.3221** | | **5,086.3766** | **5,086.3766** | **0.0975** | **0.0933** | **5,116.6024** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 161.6285 | 10.4367 | 284.2424 | 0.6261 | | 36.9630 | 36.9630 | | 36.9630 | 36.9630 | 4,505.4878 | 8,729.5629 | 13,235.0507 | 13.5046 | 0.3058 | 13,663.7941 |
| Unmitigated | 161.6285 | 10.4367 | 284.2424 | 0.6261 | | 36.9630 | 36.9630 | | 36.9630 | 36.9630 | 4,505.4878 | 8,729.5629 | 13,235.0507 | 13.5046 | 0.3058 | 13,663.7941 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 3.1416 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 31.2591 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 126.0393 | 9.9799 | 244.6134 | 0.6240 | | 36.7428 | 36.7428 | | 36.7428 | 36.7428 | 4,505.4878 | 8,658.0000 | 13,163.4878 | 13.4362 | 0.3058 | 13,590.5222 |
| Landscaping | 1.1885 | 0.4567 | 39.6290 | 2.1000e-003 | | 0.2203 | 0.2203 | | 0.2203 | 0.2203 | | 71.5629 | 71.5629 | 0.0684 | | 73.2719 |
| **Total** | **161.6285** | **10.4367** | **284.2424** | **0.6261** | | **36.9630** | **36.9630** | | **36.9630** | **36.9630** | **4,505.4878** | **8,729.5629** | **13,235.0507** | **13.5046** | **0.3058** | **13,663.7941** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 3.1416 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 31.2591 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 126.0393 | 9.9799 | 244.6134 | 0.6240 | | 36.7428 | 36.7428 | | 36.7428 | 36.7428 | 4,505.4878 | 8,658.0000 | 13,163.4878 | 13.4362 | 0.3058 | 13,590.5222 |
| Landscaping | 1.1885 | 0.4567 | 39.6290 | 2.1000e-003 | | 0.2203 | 0.2203 | | 0.2203 | 0.2203 | | 71.5629 | 71.5629 | 0.0684 | | 73.2719 |
| **Total** | **161.6285** | **10.4367** | **284.2424** | **0.6261** | | **36.9630** | **36.9630** | | **36.9630** | **36.9630** | **4,505.4878** | **8,729.5629** | **13,235.0507** | **13.5046** | **0.3058** | **13,663.7941** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

Phase VII Construction - South Coast Air Basin, Annual

# Phase VII Construction

**South Coast Air Basin, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Regional Shopping Center | 43.56 | 1000sqft | 1.00 | 43,560.00 | 0 |
| Single Family Housing | 280.00 | Dwelling Unit | 73.00 | 700,753.00 | 801 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2034 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 75.00 | 131.00 |
| tblConstructionPhase | NumDays | 1,110.00 | 283.00 |
| tblConstructionPhase | NumDays | 75.00 | 22.00 |
| tblConstructionPhase | PhaseEndDate | 10/21/2036 | 1/23/2033 |
| tblConstructionPhase | PhaseEndDate | 3/25/2036 | 1/23/2033 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 7/8/2036 | 1/23/2033 |
| tblConstructionPhase | PhaseStartDate | 7/9/2036 | 7/23/2032 |
| tblConstructionPhase | PhaseStartDate | 3/26/2036 | 12/23/2032 |
| tblLandUse | LandUseSquareFeet | 504,000.00 | 700,753.00 |
| tblLandUse | LotAcreage | 90.91 | 73.00 |

## 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 | | | | | |
| 2031 | 0.1879 | 0.7944 | 1.3422 | 4.0800e-003 | 0.4936 | 0.0274 | 0.5210 | 0.2022 | 0.0274 | 0.2296 | 0.0000 | 380.3224 | 380.3224 | 0.0151 | 0.0000 | 380.7010 |
| 2032 | 2.3481 | 1.4475 | 2.6368 | 6.6800e-003 | 0.2110 | 0.0229 | 0.2339 | 0.0568 | 0.0228 | 0.0795 | 0.0000 | 588.7410 | 588.7410 | 0.0221 | 0.0000 | 589.2936 |
| 2033 | 0.2981 | 0.1385 | 0.2765 | 6.1000e-004 | 0.0143 | 3.8100e-003 | 0.0182 | 3.8500e-003 | 3.8100e-003 | 7.6600e-003 | 0.0000 | 53.6135 | 53.6135 | 2.1400e-003 | 0.0000 | 53.6670 |
| **Maximum** | **2.3481** | **1.4475** | **2.6368** | **6.6800e-003** | **0.4936** | **0.0274** | **0.5210** | **0.2022** | **0.0274** | **0.2296** | **0.0000** | **588.7410** | **588.7410** | **0.0221** | **0.0000** | **589.2936** |

**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 | | | | | |
| 2031 | 0.0894 | 1.3623 | 2.1008 | 4.0800e-003 | 0.2026 | 0.0112 | 0.2138 | 0.0816 | 0.0112 | 0.0928 | 0.0000 | 380.3220 | 380.3220 | 0.0151 | 0.0000 | 380.7006 |
| 2032 | 2.2579 | 1.9189 | 2.8688 | 6.6800e-003 | 0.2110 | 0.0200 | 0.2311 | 0.0568 | 0.0200 | 0.0767 | 0.0000 | 588.7406 | 588.7406 | 0.0221 | 0.0000 | 589.2932 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2033 | 0.2867 | 0.1804 | 0.3005 | 6.1000e-004 | 0.0143 | 1.8800e-003 | 0.0162 | 3.8500e-003 | 1.8700e-003 | 5.7200e-003 | 0.0000 | 53.6134 | 53.6134 | 2.1400e-003 | 0.0000 | 53.6670 |
| **Maximum** | **2.2579** | **1.9189** | **2.8688** | **6.6800e-003** | **0.2110** | **0.0200** | **0.2311** | **0.0816** | **0.0200** | **0.0928** | **0.0000** | **588.7406** | **588.7406** | **0.0221** | **0.0000** | **589.2932** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **7.07** | **-45.42** | **-23.84** | **0.00** | **40.47** | **38.71** | **40.35** | **45.91** | **38.81** | **44.70** | **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** | **7-23-2031** | **10-22-2031** | 0.5651 | 0.8404 |
| **2** | **10-23-2031** | **1-22-2032** | 0.5106 | 0.7262 |
| **3** | **1-23-2032** | **4-22-2032** | 0.3925 | 0.4839 |
| **4** | **4-23-2032** | **7-22-2032** | 0.3917 | 0.4830 |
| **5** | **7-23-2032** | **10-22-2032** | 1.6322 | 1.7298 |
| **6** | **10-23-2032** | **1-22-2033** | 1.7276 | 1.8373 |
| **7** | **1-23-2033** | **4-22-2033** | 0.0208 | 0.0222 |
| | | **Highest** | 1.7276 | 1.8373 |

## 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 | 3.9323 | 0.1058 | 4.6604 | 4.6900e-003 | | 0.2834 | 0.2834 | | 0.2834 | 0.2834 | 29.7413 | 61.8705 | 91.6118 | 0.0932 | 2.0200e-003 | 94.5431 |
| Energy | 0.0467 | 0.3995 | 0.1720 | 2.5500e-003 | | 0.0323 | 0.0323 | | 0.0323 | 0.0323 | 0.0000 | 1,415.2497 | 1,415.2497 | 0.0482 | 0.0166 | 1,421.4062 |
| Mobile | 0.6871 | 4.2032 | 8.7997 | 0.0455 | 4.9076 | 0.0236 | 4.9312 | 1.3144 | 0.0219 | 1.3363 | 0.0000 | 4,239.0017 | 4,239.0017 | 0.1643 | 0.0000 | 4,243.1090 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 75.9491 | 0.0000 | 75.9491 | 4.4885 | 0.0000 | 188.1606 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 6.8114 | 136.7860 | 143.5973 | 0.7052 | 0.0177 | 166.4991 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **4.6661** | **4.7085** | **13.6320** | **0.0527** | **4.9076** | **0.3392** | **5.2468** | **1.3144** | **0.3375** | **1.6519** | **112.5018** | **5,852.9079** | **5,965.4097** | **5.4994** | **0.0363** | **6,113.7180** |

**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 | 3.9323 | 0.1058 | 4.6604 | 4.6900e-003 | | 0.2834 | 0.2834 | | 0.2834 | 0.2834 | 29.7413 | 61.8705 | 91.6118 | 0.0932 | 2.0200e-003 | 94.5431 |
| Energy | 0.0467 | 0.3995 | 0.1720 | 2.5500e-003 | | 0.0323 | 0.0323 | | 0.0323 | 0.0323 | 0.0000 | 1,415.2497 | 1,415.2497 | 0.0482 | 0.0166 | 1,421.4062 |
| Mobile | 0.6871 | 4.2032 | 8.7997 | 0.0455 | 4.9076 | 0.0236 | 4.9312 | 1.3144 | 0.0219 | 1.3363 | 0.0000 | 4,239.0017 | 4,239.0017 | 0.1643 | 0.0000 | 4,243.1090 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 75.9491 | 0.0000 | 75.9491 | 4.4885 | 0.0000 | 188.1606 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 5.4491 | 116.0609 | 121.5100 | 0.5645 | 0.0142 | 139.8551 |
| **Total** | **4.6661** | **4.7085** | **13.6320** | **0.0527** | **4.9076** | **0.3392** | **5.2468** | **1.3144** | **0.3375** | **1.6519** | **111.1395** | **5,832.1828** | **5,943.3223** | **5.3586** | **0.0329** | **6,087.0740** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **1.21** | **0.35** | **0.37** | **2.56** | **9.58** | **0.44** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 7/23/2031 | 12/23/2031 | 5 | 110 | |
| 2 | Building Construction | Building Construction | 12/24/2031 | 1/23/2033 | 5 | 283 | |
| 3 | Paving | Paving | 12/23/2032 | 1/23/2033 | 5 | 22 | |
| 4 | Architectural Coating | Architectural Coating | 7/23/2032 | 1/23/2033 | 5 | 131 | |

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

**Acres of Grading (Grading Phase): 275**

**Acres of Paving: 0**

**Residential Indoor: 1,419,025; Residential Outdoor: 473,008; Non-Residential Indoor: 65,340; Non-Residential Outdoor: 21,780; Striped**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 115.00 | 37.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 23.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

### 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

### 3.2 Grading - 2031

**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 | | | | | 0.4770 | 0.0000 | 0.4770 | 0.1978 | 0.0000 | 0.1978 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1804 | 0.7615 | 1.2663 | 3.8500e-003 | | 0.0268 | 0.0268 | | 0.0268 | 0.0268 | 0.0000 | 359.8992 | 359.8992 | 0.0145 | 0.0000 | 360.2628 |
| **Total** | **0.1804** | **0.7615** | **1.2663** | **3.8500e-003** | **0.4770** | **0.0268** | **0.5039** | **0.1978** | **0.0268** | **0.2247** | **0.0000** | **359.8992** | **359.8992** | **0.0145** | **0.0000** | **360.2628** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.5700e-003 | 1.4000e-003 | 0.0194 | 8.0000e-005 | 0.0121 | 6.0000e-005 | 0.0121 | 3.2100e-003 | 5.0000e-005 | 3.2600e-003 | 0.0000 | 7.6354 | 7.6354 | 1.1000e-004 | 0.0000 | 7.6383 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **2.5700e-003** | **1.4000e-003** | **0.0194** | **8.0000e-005** | **0.0121** | **6.0000e-005** | **0.0121** | **3.2100e-003** | **5.0000e-005** | **3.2600e-003** | **0.0000** | **7.6354** | **7.6354** | **1.1000e-004** | **0.0000** | **7.6383** |

**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 | | | | | 0.1860 | 0.0000 | 0.1860 | 0.0771 | 0.0000 | 0.0771 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0838 | 1.3190 | 2.0197 | 3.8500e-003 | | 0.0107 | 0.0107 | | 0.0107 | 0.0107 | 0.0000 | 359.8988 | 359.8988 | 0.0145 | 0.0000 | 360.2624 |
| **Total** | **0.0838** | **1.3190** | **2.0197** | **3.8500e-003** | **0.1860** | **0.0107** | **0.1968** | **0.0771** | **0.0107** | **0.0879** | **0.0000** | **359.8988** | **359.8988** | **0.0145** | **0.0000** | **360.2624** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.5700e-003 | 1.4000e-003 | 0.0194 | 8.0000e-005 | 0.0121 | 6.0000e-005 | 0.0121 | 3.2100e-003 | 5.0000e-005 | 3.2600e-003 | 0.0000 | 7.6354 | 7.6354 | 1.1000e-004 | 0.0000 | 7.6383 |
| **Total** | **2.5700e-003** | **1.4000e-003** | **0.0194** | **8.0000e-005** | **0.0121** | **6.0000e-005** | **0.0121** | **3.2100e-003** | **5.0000e-005** | **3.2600e-003** | **0.0000** | **7.6354** | **7.6354** | **1.1000e-004** | **0.0000** | **7.6383** |

## 3.3 Building Construction - 2031

**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 | 3.9300e-003 | 0.0238 | 0.0485 | 9.0000e-005 | | 4.4000e-004 | 4.4000e-004 | | 4.4000e-004 | 4.4000e-004 | 0.0000 | 7.8858 | 7.8858 | 3.2000e-004 | 0.0000 | 7.8937 |
| **Total** | **3.9300e-003** | **0.0238** | **0.0485** | **9.0000e-005** | | **4.4000e-004** | **4.4000e-004** | | **4.4000e-004** | **4.4000e-004** | **0.0000** | **7.8858** | **7.8858** | **3.2000e-004** | **0.0000** | **7.8937** |

## 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 | 1.9000e-004 | 7.2500e-003 | 2.0300e-003 | 3.0000e-005 | 7.0000e-004 | 1.0000e-005 | 7.1000e-004 | 2.0000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 2.5072 | 2.5072 | 1.3000e-004 | 0.0000 | 2.5105 |
| Worker | 8.1000e-004 | 4.4000e-004 | 6.0700e-003 | 3.0000e-005 | 3.7900e-003 | 2.0000e-005 | 3.8000e-003 | 1.0100e-003 | 2.0000e-005 | 1.0200e-003 | 0.0000 | 2.3948 | 2.3948 | 4.0000e-005 | 0.0000 | 2.3957 |
| **Total** | **1.0000e-003** | **7.6900e-003** | **8.1000e-003** | **6.0000e-005** | **4.4900e-003** | **3.0000e-005** | **4.5100e-003** | **1.2100e-003** | **3.0000e-005** | **1.2300e-003** | **0.0000** | **4.9020** | **4.9020** | **1.7000e-004** | **0.0000** | **4.9062** |

## 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 | 2.0200e-003 | 0.0341 | 0.0536 | 9.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 7.8858 | 7.8858 | 3.2000e-004 | 0.0000 | 7.8937 |
| **Total** | **2.0200e-003** | **0.0341** | **0.0536** | **9.0000e-005** | | **4.1000e-004** | **4.1000e-004** | | **4.1000e-004** | **4.1000e-004** | **0.0000** | **7.8858** | **7.8858** | **3.2000e-004** | **0.0000** | **7.8937** |

**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 | 1.9000e-004 | 7.2500e-003 | 2.0300e-003 | 3.0000e-005 | 7.0000e-004 | 1.0000e-005 | 7.1000e-004 | 2.0000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 2.5072 | 2.5072 | 1.3000e-004 | 0.0000 | 2.5105 |
| Worker | 8.1000e-004 | 4.4000e-004 | 6.0700e-003 | 3.0000e-005 | 3.7900e-003 | 2.0000e-005 | 3.8000e-003 | 1.0100e-003 | 2.0000e-005 | 1.0200e-003 | 0.0000 | 2.3948 | 2.3948 | 4.0000e-005 | 0.0000 | 2.3957 |
| **Total** | **1.0000e-003** | **7.6900e-003** | **8.1000e-003** | **6.0000e-005** | **4.4900e-003** | **3.0000e-005** | **4.5100e-003** | **1.2100e-003** | **3.0000e-005** | **1.2300e-003** | **0.0000** | **4.9020** | **4.9020** | **1.7000e-004** | **0.0000** | **4.9062** |

## 3.3 Building Construction - 2032

**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 | 0.1715 | 1.0394 | 2.1166 | 4.0600e-003 | | 0.0194 | 0.0194 | | 0.0194 | 0.0194 | 0.0000 | 344.3479 | 344.3479 | 0.0138 | 0.0000 | 344.6933 |
| **Total** | **0.1715** | **1.0394** | **2.1166** | **4.0600e-003** | | **0.0194** | **0.0194** | | **0.0194** | **0.0194** | **0.0000** | **344.3479** | **344.3479** | **0.0138** | **0.0000** | **344.6933** |

## 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 | 8.3200e-003 | 0.3142 | 0.0882 | 1.1200e-003 | 0.0306 | 3.3000e-004 | 0.0309 | 8.8100e-003 | 3.2000e-004 | 9.1300e-003 | 0.0000 | 109.2502 | 109.2502 | 5.7200e-003 | 0.0000 | 109.3932 |
| Worker | 0.0327 | 0.0176 | 0.2493 | 1.1300e-003 | 0.1653 | 7.3000e-004 | 0.1660 | 0.0439 | 6.7000e-004 | 0.0446 | 0.0000 | 102.4686 | 102.4686 | 1.4400e-003 | 0.0000 | 102.5046 |
| **Total** | **0.0410** | **0.3318** | **0.3375** | **2.2500e-003** | **0.1958** | **1.0600e-003** | **0.1969** | **0.0527** | **9.9000e-004** | **0.0537** | **0.0000** | **211.7187** | **211.7187** | **7.1600e-003** | **0.0000** | **211.8978** |

## 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 | 0.0883 | 1.4909 | 2.3415 | 4.0600e-003 | | 0.0178 | 0.0178 | | 0.0178 | 0.0178 | 0.0000 | 344.3475 | 344.3475 | 0.0138 | 0.0000 | 344.6929 |
| **Total** | **0.0883** | **1.4909** | **2.3415** | **4.0600e-003** | | **0.0178** | **0.0178** | | **0.0178** | **0.0178** | **0.0000** | **344.3475** | **344.3475** | **0.0138** | **0.0000** | **344.6929** |

## 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 | 8.3200e-003 | 0.3142 | 0.0882 | 1.1200e-003 | 0.0306 | 3.3000e-004 | 0.0309 | 8.8100e-003 | 3.2000e-004 | 9.1300e-003 | 0.0000 | 109.2502 | 109.2502 | 5.7200e-003 | 0.0000 | 109.3932 |
| Worker | 0.0327 | 0.0176 | 0.2493 | 1.1300e-003 | 0.1653 | 7.3000e-004 | 0.1660 | 0.0439 | 6.7000e-004 | 0.0446 | 0.0000 | 102.4686 | 102.4686 | 1.4400e-003 | 0.0000 | 102.5046 |
| **Total** | **0.0410** | **0.3318** | **0.3375** | **2.2500e-003** | **0.1958** | **1.0600e-003** | **0.1969** | **0.0527** | **9.9000e-004** | **0.0537** | **0.0000** | **211.7187** | **211.7187** | **7.1600e-003** | **0.0000** | **211.8978** |

## 3.3 Building Construction - 2033

### 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 | 9.8200e-003 | 0.0595 | 0.1212 | 2.3000e-004 | | 1.1100e-003 | 1.1100e-003 | | 1.1100e-003 | 1.1100e-003 | 0.0000 | 19.7146 | 19.7146 | 7.9000e-004 | 0.0000 | 19.7344 |
| **Total** | **9.8200e-003** | **0.0595** | **0.1212** | **2.3000e-004** | | **1.1100e-003** | **1.1100e-003** | | **1.1100e-003** | **1.1100e-003** | **0.0000** | **19.7146** | **19.7146** | **7.9000e-004** | **0.0000** | **19.7344** |

### 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 | 4.7000e-004 | 0.0179 | 5.0300e-003 | 6.0000e-005 | 1.7500e-003 | 2.0000e-005 | 1.7700e-003 | 5.0000e-004 | 2.0000e-005 | 5.2000e-004 | 0.0000 | 6.2441 | 6.2441 | 3.3000e-004 | 0.0000 | 6.2522 |
| Worker | 1.7500e-003 | 9.3000e-004 | 0.0135 | 6.0000e-005 | 9.4600e-003 | 4.0000e-005 | 9.5000e-003 | 2.5100e-003 | 4.0000e-005 | 2.5500e-003 | 0.0000 | 5.7614 | 5.7614 | 8.0000e-005 | 0.0000 | 5.7633 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **2.2200e-003** | **0.0188** | **0.0185** | **1.2000e-004** | **0.0112** | **6.0000e-005** | **0.0113** | **3.0100e-003** | **6.0000e-005** | **3.0700e-003** | **0.0000** | **12.0055** | **12.0055** | **4.1000e-004** | **0.0000** | **12.0156** |

**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 | 5.0500e-003 | 0.0854 | 0.1341 | 2.3000e-004 | | 1.0200e-003 | 1.0200e-003 | | 1.0200e-003 | 1.0200e-003 | 0.0000 | 19.7146 | 19.7146 | 7.9000e-004 | 0.0000 | 19.7343 |
| **Total** | **5.0500e-003** | **0.0854** | **0.1341** | **2.3000e-004** | | **1.0200e-003** | **1.0200e-003** | | **1.0200e-003** | **1.0200e-003** | **0.0000** | **19.7146** | **19.7146** | **7.9000e-004** | **0.0000** | **19.7343** |

**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 | 4.7000e-004 | 0.0179 | 5.0300e-003 | 6.0000e-005 | 1.7500e-003 | 2.0000e-005 | 1.7700e-003 | 5.0000e-004 | 2.0000e-005 | 5.2000e-004 | 0.0000 | 6.2441 | 6.2441 | 3.3000e-004 | 0.0000 | 6.2522 |
| Worker | 1.7500e-003 | 9.3000e-004 | 0.0135 | 6.0000e-005 | 9.4600e-003 | 4.0000e-005 | 9.5000e-003 | 2.5100e-003 | 4.0000e-005 | 2.5500e-003 | 0.0000 | 5.7614 | 5.7614 | 8.0000e-005 | 0.0000 | 5.7633 |
| **Total** | **2.2200e-003** | **0.0188** | **0.0185** | **1.2000e-004** | **0.0112** | **6.0000e-005** | **0.0113** | **3.0100e-003** | **6.0000e-005** | **3.0700e-003** | **0.0000** | **12.0055** | **12.0055** | **4.1000e-004** | **0.0000** | **12.0156** |

## 3.4 Paving - 2032

**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 | 4.8500e-003 | 0.0249 | 0.0555 | 1.0000e-004 | | 1.1600e-003 | 1.1600e-003 | | 1.1600e-003 | 1.1600e-003 | 0.0000 | 8.4348 | 8.4348 | 4.0000e-004 | 0.0000 | 8.4447 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **4.8500e-003** | **0.0249** | **0.0555** | **1.0000e-004** | | **1.1600e-003** | **1.1600e-003** | | **1.1600e-003** | **1.1600e-003** | **0.0000** | **8.4348** | **8.4348** | **4.0000e-004** | **0.0000** | **8.4447** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.1000e-004 | 6.0000e-005 | 8.7000e-004 | 0.0000 | 5.8000e-004 | 0.0000 | 5.8000e-004 | 1.5000e-004 | 0.0000 | 1.6000e-004 | 0.0000 | 0.3571 | 0.3571 | 1.0000e-005 | 0.0000 | 0.3572 |
| **Total** | **1.1000e-004** | **6.0000e-005** | **8.7000e-004** | **0.0000** | **5.8000e-004** | **0.0000** | **5.8000e-004** | **1.5000e-004** | **0.0000** | **1.6000e-004** | **0.0000** | **0.3571** | **0.3571** | **1.0000e-005** | **0.0000** | **0.3572** |

## 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 | 1.9600e-003 | 0.0316 | 0.0605 | 1.0000e-004 | | 3.2000e-004 | 3.2000e-004 | | 3.2000e-004 | 3.2000e-004 | 0.0000 | 8.4348 | 8.4348 | 4.0000e-004 | 0.0000 | 8.4447 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **1.9600e-003** | **0.0316** | **0.0605** | **1.0000e-004** | | **3.2000e-004** | **3.2000e-004** | | **3.2000e-004** | **3.2000e-004** | **0.0000** | **8.4348** | **8.4348** | **4.0000e-004** | **0.0000** | **8.4447** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.1000e-004 | 6.0000e-005 | 8.7000e-004 | 0.0000 | 5.8000e-004 | 0.0000 | 5.8000e-004 | 1.5000e-004 | 0.0000 | 1.6000e-004 | 0.0000 | 0.3571 | 0.3571 | 1.0000e-005 | 0.0000 | 0.3572 |
| **Total** | **1.1000e-004** | **6.0000e-005** | **8.7000e-004** | **0.0000** | **5.8000e-004** | **0.0000** | **5.8000e-004** | **1.5000e-004** | **0.0000** | **1.6000e-004** | **0.0000** | **0.3571** | **0.3571** | **1.0000e-005** | **0.0000** | **0.3572** |

## 3.4 Paving - 2033

**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 | 0.0104 | 0.0534 | 0.1189 | 2.1000e-004 | | 2.4800e-003 | 2.4800e-003 | | 2.4800e-003 | 2.4800e-003 | 0.0000 | 18.0746 | 18.0746 | 8.5000e-004 | 0.0000 | 18.0958 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0104** | **0.0534** | **0.1189** | **2.1000e-004** | | **2.4800e-003** | **2.4800e-003** | | **2.4800e-003** | **2.4800e-003** | **0.0000** | **18.0746** | **18.0746** | **8.5000e-004** | **0.0000** | **18.0958** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.3000e-004 | 1.2000e-004 | 1.7600e-003 | 1.0000e-005 | 1.2300e-003 | 1.0000e-005 | 1.2400e-003 | 3.3000e-004 | 0.0000 | 3.3000e-004 | 0.0000 | 0.7515 | 0.7515 | 1.0000e-005 | 0.0000 | 0.7517 |
| **Total** | **2.3000e-004** | **1.2000e-004** | **1.7600e-003** | **1.0000e-005** | **1.2300e-003** | **1.0000e-005** | **1.2400e-003** | **3.3000e-004** | **0.0000** | **3.3000e-004** | **0.0000** | **0.7515** | **0.7515** | **1.0000e-005** | **0.0000** | **0.7517** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 4.2100e-003 | 0.0678 | 0.1297 | 2.1000e-004 | | 6.9000e-004 | 6.9000e-004 | | 6.9000e-004 | 6.9000e-004 | 0.0000 | 18.0746 | 18.0746 | 8.5000e-004 | 0.0000 | 18.0958 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **4.2100e-003** | **0.0678** | **0.1297** | **2.1000e-004** | | **6.9000e-004** | **6.9000e-004** | | **6.9000e-004** | **6.9000e-004** | **0.0000** | **18.0746** | **18.0746** | **8.5000e-004** | **0.0000** | **18.0958** |

## Mitigated Construction Off-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.3000e-004 | 1.2000e-004 | 1.7600e-003 | 1.0000e-005 | 1.2300e-003 | 1.0000e-005 | 1.2400e-003 | 3.3000e-004 | 0.0000 | 3.3000e-004 | 0.0000 | 0.7515 | 0.7515 | 1.0000e-005 | 0.0000 | 0.7517 |
| **Total** | **2.3000e-004** | **1.2000e-004** | **1.7600e-003** | **1.0000e-005** | **1.2300e-003** | **1.0000e-005** | **1.2400e-003** | **3.3000e-004** | **0.0000** | **3.3000e-004** | **0.0000** | **0.7515** | **0.7515** | **1.0000e-005** | **0.0000** | **0.7517** |

## 3.5 Architectural Coating - 2032

### 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 | 2.1201 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.5800e-003 | 0.0497 | 0.1043 | 1.7000e-004 | | 1.1800e-003 | 1.1800e-003 | | 1.1800e-003 | 1.1800e-003 | 0.0000 | 14.8089 | 14.8089 | 6.0000e-004 | 0.0000 | 14.8239 |
| **Total** | **2.1277** | **0.0497** | **0.1043** | **1.7000e-004** | | **1.1800e-003** | **1.1800e-003** | | **1.1800e-003** | **1.1800e-003** | **0.0000** | **14.8089** | **14.8089** | **6.0000e-004** | **0.0000** | **14.8239** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.9000e-003 | 1.5600e-003 | 0.0221 | 1.0000e-004 | 0.0146 | 6.0000e-005 | 0.0147 | 3.8900e-003 | 6.0000e-005 | 3.9500e-003 | 0.0000 | 9.0736 | 9.0736 | 1.3000e-004 | 0.0000 | 9.0767 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **2.9000e-003** | **1.5600e-003** | **0.0221** | **1.0000e-004** | **0.0146** | **6.0000e-005** | **0.0147** | **3.8900e-003** | **6.0000e-005** | **3.9500e-003** | **0.0000** | **9.0736** | **9.0736** | **1.3000e-004** | **0.0000** | **9.0767** |

**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 | 2.1201 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.4500e-003 | 0.0630 | 0.1063 | 1.7000e-004 | | 8.3000e-004 | 8.3000e-004 | | 8.3000e-004 | 8.3000e-004 | 0.0000 | 14.8089 | 14.8089 | 6.0000e-004 | 0.0000 | 14.8238 |
| **Total** | **2.1236** | **0.0630** | **0.1063** | **1.7000e-004** | | **8.3000e-004** | **8.3000e-004** | | **8.3000e-004** | **8.3000e-004** | **0.0000** | **14.8089** | **14.8089** | **6.0000e-004** | **0.0000** | **14.8238** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.9000e-003 | 1.5600e-003 | 0.0221 | 1.0000e-004 | 0.0146 | 6.0000e-005 | 0.0147 | 3.8900e-003 | 6.0000e-005 | 3.9500e-003 | 0.0000 | 9.0736 | 9.0736 | 1.3000e-004 | 0.0000 | 9.0767 |
| **Total** | **2.9000e-003** | **1.5600e-003** | **0.0221** | **1.0000e-004** | **0.0146** | **6.0000e-005** | **0.0147** | **3.8900e-003** | **6.0000e-005** | **3.9500e-003** | **0.0000** | **9.0736** | **9.0736** | **1.3000e-004** | **0.0000** | **9.0767** |

## 3.5 Architectural Coating - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.2742 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 9.8000e-004 | 6.4200e-003 | 0.0135 | 2.0000e-005 | | 1.5000e-004 | 1.5000e-004 | | 1.5000e-004 | 1.5000e-004 | 0.0000 | 1.9149 | 1.9149 | 8.0000e-005 | 0.0000 | 1.9169 |
| **Total** | **0.2751** | **6.4200e-003** | **0.0135** | **2.0000e-005** | | **1.5000e-004** | **1.5000e-004** | | **1.5000e-004** | **1.5000e-004** | **0.0000** | **1.9149** | **1.9149** | **8.0000e-005** | **0.0000** | **1.9169** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.5000e-004 | 1.9000e-004 | 2.7000e-003 | 1.0000e-005 | 1.8900e-003 | 1.0000e-005 | 1.9000e-003 | 5.0000e-004 | 1.0000e-005 | 5.1000e-004 | 0.0000 | 1.1523 | 1.1523 | 2.0000e-005 | 0.0000 | 1.1527 |
| **Total** | **3.5000e-004** | **1.9000e-004** | **2.7000e-003** | **1.0000e-005** | **1.8900e-003** | **1.0000e-005** | **1.9000e-003** | **5.0000e-004** | **1.0000e-005** | **5.1000e-004** | **0.0000** | **1.1523** | **1.1523** | **2.0000e-005** | **0.0000** | **1.1527** |

## Mitigated Construction On-Site

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Archit. Coating | 0.2742 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.5000e-004 | 8.1400e-003 | 0.0137 | 2.0000e-005 | | 1.1000e-004 | 1.1000e-004 | | 1.1000e-004 | 1.1000e-004 | 0.0000 | 1.9149 | 1.9149 | 8.0000e-005 | 0.0000 | 1.9169 |
| **Total** | **0.2746** | **8.1400e-003** | **0.0137** | **2.0000e-005** | | **1.1000e-004** | **1.1000e-004** | | **1.1000e-004** | **1.1000e-004** | **0.0000** | **1.9149** | **1.9149** | **8.0000e-005** | **0.0000** | **1.9169** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.5000e-004 | 1.9000e-004 | 2.7000e-003 | 1.0000e-005 | 1.8900e-003 | 1.0000e-005 | 1.9000e-003 | 5.0000e-004 | 1.0000e-005 | 5.1000e-004 | 0.0000 | 1.1523 | 1.1523 | 2.0000e-005 | 0.0000 | 1.1527 |
| **Total** | **3.5000e-004** | **1.9000e-004** | **2.7000e-003** | **1.0000e-005** | **1.8900e-003** | **1.0000e-005** | **1.9000e-003** | **5.0000e-004** | **1.0000e-005** | **5.1000e-004** | **0.0000** | **1.1523** | **1.1523** | **2.0000e-005** | **0.0000** | **1.1527** |

## 4.0 Operational Detail - Mobile

### 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 | 0.6871 | 4.2032 | 8.7997 | 0.0455 | 4.9076 | 0.0236 | 4.9312 | 1.3144 | 0.0219 | 1.3363 | 0.0000 | 4,239.0017 | 4,239.0017 | 0.1643 | 0.0000 | 4,243.1090 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmitigated | 0.6871 | 4.2032 | 8.7997 | 0.0455 | 4.9076 | 0.0236 | 4.9312 | 1.3144 | 0.0219 | 1.3363 | 0.0000 | 4,239.0017 | 4,239.0017 | 0.1643 | 0.0000 | 4,243.1090 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Regional Shopping Center | 1,860.01 | 2,176.69 | 1099.45 | 3,885,768 | 3,885,768 |
| Single Family Housing | 2,665.60 | 2,774.80 | 2413.60 | 9,039,050 | 9,039,050 |
| Total | 4,525.61 | 4,951.49 | 3,513.05 | 12,924,818 | 12,924,818 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Regional Shopping Center | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |
| Single Family Housing | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 952.9257 | 952.9257 | 0.0393 | 8.1400e-003 | 956.3348 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 952.9257 | 952.9257 | 0.0393 | 8.1400e-003 | 956.3348 |
| NaturalGas Mitigated | 0.0467 | 0.3995 | 0.1720 | 2.5500e-003 | | 0.0323 | 0.0323 | | 0.0323 | 0.0323 | 0.0000 | 462.3240 | 462.3240 | 8.8600e-003 | 8.4800e-003 | 465.0714 |
| NaturalGas Unmitigated | 0.0467 | 0.3995 | 0.1720 | 2.5500e-003 | | 0.0323 | 0.0323 | | 0.0323 | 0.0323 | 0.0000 | 462.3240 | 462.3240 | 8.8600e-003 | 8.4800e-003 | 465.0714 |

## 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 | | | | | |
| Regional Shopping Center | 96703.2 | 5.2000e-004 | 4.7400e-003 | 3.9800e-003 | 3.0000e-005 | | 3.6000e-004 | 3.6000e-004 | | 3.6000e-004 | 3.6000e-004 | 0.0000 | 5.1605 | 5.1605 | 1.0000e-004 | 9.0000e-005 | 5.1911 |
| Single Family Housing | 8.56692e+006 | 0.0462 | 0.3948 | 0.1680 | 2.5200e-003 | | 0.0319 | 0.0319 | | 0.0319 | 0.0319 | 0.0000 | 457.1636 | 457.1636 | 8.7600e-003 | 8.3800e-003 | 459.8803 |
| **Total** | | **0.0467** | **0.3995** | **0.1720** | **2.5500e-003** | | **0.0323** | **0.0323** | | **0.0323** | **0.0323** | **0.0000** | **462.3240** | **462.3240** | **8.8600e-003** | **8.4700e-003** | **465.0714** |

### 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 | | | | | |
| Regional Shopping Center | 96703.2 | 5.2000e-004 | 4.7400e-003 | 3.9800e-003 | 3.0000e-005 | | 3.6000e-004 | 3.6000e-004 | | 3.6000e-004 | 3.6000e-004 | 0.0000 | 5.1605 | 5.1605 | 1.0000e-004 | 9.0000e-005 | 5.1911 |
| Single Family Housing | 8.56692e+006 | 0.0462 | 0.3948 | 0.1680 | 2.5200e-003 | | 0.0319 | 0.0319 | | 0.0319 | 0.0319 | 0.0000 | 457.1636 | 457.1636 | 8.7600e-003 | 8.3800e-003 | 459.8803 |
| **Total** | | **0.0467** | **0.3995** | **0.1720** | **2.5500e-003** | | **0.0323** | **0.0323** | | **0.0323** | **0.0323** | **0.0000** | **462.3240** | **462.3240** | **8.8600e-003** | **8.4700e-003** | **465.0714** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Regional Shopping Center | 550163 | 175.2937 | 7.2400e-003 | 1.5000e-003 | 175.9208 |
| Single Family Housing | 2.44061e+006 | 777.6320 | 0.0321 | 6.6400e-003 | 780.4140 |
| **Total** | | **952.9257** | **0.0393** | **8.1400e-003** | **956.3348** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Regional Shopping Center | 550163 | 175.2937 | 7.2400e-003 | 1.5000e-003 | 175.9208 |
| Single Family Housing | 2.44061e+006 | 777.6320 | 0.0321 | 6.6400e-003 | 780.4140 |
| **Total** | | **952.9257** | **0.0393** | **8.1400e-003** | **956.3348** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 3.9323 | 0.1058 | 4.6604 | 4.6900e-003 | | 0.2834 | 0.2834 | | 0.2834 | 0.2834 | 29.7413 | 61.8705 | 91.6118 | 0.0932 | 2.0200e-003 | 94.5431 |
| Unmitigated | 3.9323 | 0.1058 | 4.6604 | 4.6900e-003 | | 0.2834 | 0.2834 | | 0.2834 | 0.2834 | 29.7413 | 61.8705 | 91.6118 | 0.0932 | 2.0200e-003 | 94.5431 |

## 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 | 0.2394 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.6896 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.9171 | 0.0726 | 1.7799 | 4.5400e-003 | | 0.2674 | 0.2674 | | 0.2674 | 0.2674 | 29.7413 | 57.1526 | 86.8940 | 0.0887 | 2.0200e-003 | 89.7129 |
| Landscaping | 0.0862 | 0.0332 | 2.8805 | 1.5000e-004 | | 0.0160 | 0.0160 | | 0.0160 | 0.0160 | 0.0000 | 4.7178 | 4.7178 | 4.5000e-003 | 0.0000 | 4.8303 |
| **Total** | **3.9323** | **0.1058** | **4.6604** | **4.6900e-003** | | **0.2834** | **0.2834** | | **0.2834** | **0.2834** | **29.7413** | **61.8705** | **91.6118** | **0.0932** | **2.0200e-003** | **94.5431** |

**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 | 0.2394 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.6896 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.9171 | 0.0726 | 1.7799 | 4.5400e-003 | | 0.2674 | 0.2674 | | 0.2674 | 0.2674 | 29.7413 | 57.1526 | 86.8940 | 0.0887 | 2.0200e-003 | 89.7129 |
| Landscaping | 0.0862 | 0.0332 | 2.8805 | 1.5000e-004 | | 0.0160 | 0.0160 | | 0.0160 | 0.0160 | 0.0000 | 4.7178 | 4.7178 | 4.5000e-003 | 0.0000 | 4.8303 |
| **Total** | **3.9323** | **0.1058** | **4.6604** | **4.6900e-003** | | **0.2834** | **0.2834** | | **0.2834** | **0.2834** | **29.7413** | **61.8705** | **91.6118** | **0.0932** | **2.0200e-003** | **94.5431** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 121.5100 | 0.5645 | 0.0142 | 139.8551 |
| Unmitigated | 143.5973 | 0.7052 | 0.0177 | 166.4991 |

## 7.2 Water by Land Use

### Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Regional Shopping Center | 3.2266 / 1.97759 | 21.4105 | 0.1060 | 2.6600e-003 | 24.8517 |
| Single Family Housing | 18.2431 / 11.5011 | 122.1868 | 0.5993 | 0.0150 | 141.6474 |
| **Total** | | **143.5973** | **0.7052** | **0.0177** | **166.4991** |

### Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Regional Shopping Center | 2.58128 / 1.85696 | 18.1015 | 0.0848 | 2.1300e-003 | 20.8579 |
| Single Family Housing | 14.5945 / 10.7995 | 103.4085 | 0.4796 | 0.0121 | 118.9972 |
| **Total** | | **121.5100** | **0.5645** | **0.0142** | **139.8551** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 75.9491 | 4.4885 | 0.0000 | 188.1606 |
| Unmitigated | 75.9491 | 4.4885 | 0.0000 | 188.1606 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Regional Shopping Center | 45.74 | 9.2848 | 0.5487 | 0.0000 | 23.0027 |
| Single Family Housing | 328.41 | 66.6643 | 3.9398 | 0.0000 | 165.1579 |
| **Total** | | **75.9491** | **4.4885** | **0.0000** | **188.1606** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |

| | | | | | |
|---|---|---|---|---|---|
| Regional Shopping Center | 45.74 | 9.2848 | 0.5487 | 0.0000 | 23.0027 |
| Single Family Housing | 328.41 | 66.6643 | 3.9398 | 0.0000 | 165.1579 |
| **Total** | | **75.9491** | **4.4885** | **0.0000** | **188.1606** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase VII Construction - South Coast Air Basin, Summer

# Phase VII Construction

**South Coast Air Basin, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Regional Shopping Center | 43.56 | 1000sqft | 1.00 | 43,560.00 | 0 |
| Single Family Housing | 280.00 | Dwelling Unit | 73.00 | 700,753.00 | 801 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2034 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 75.00 | 131.00 |
| tblConstructionPhase | NumDays | 1,110.00 | 283.00 |
| tblConstructionPhase | NumDays | 75.00 | 22.00 |
| tblConstructionPhase | PhaseEndDate | 10/21/2036 | 1/23/2033 |
| tblConstructionPhase | PhaseEndDate | 3/25/2036 | 1/23/2033 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 7/8/2036 | 1/23/2033 |
| tblConstructionPhase | PhaseStartDate | 7/9/2036 | 7/23/2032 |
| tblConstructionPhase | PhaseStartDate | 3/26/2036 | 12/23/2032 |
| tblLandUse | LandUseSquareFeet | 504,000.00 | 700,753.00 |
| tblLandUse | LotAcreage | 90.91 | 73.00 |

# 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2031 | 3.3273 | 13.8688 | 23.4069 | 0.0716 | 8.8969 | 0.4890 | 9.3859 | 3.6558 | 0.4889 | 4.1447 | 0.0000 | 7,373.8442 | 7,373.8442 | 0.2940 | 0.0000 | 7,381.1929 |
| 2032 | 39.7716 | 18.4476 | 37.2064 | 0.0827 | 1.9470 | 0.5090 | 2.4560 | 0.5217 | 0.5083 | 1.0300 | 0.0000 | 7,970.0208 | 7,970.0208 | 0.3163 | 0.0000 | 7,977.9290 |
| 2033 | 39.7490 | 18.4213 | 37.0582 | 0.0824 | 1.9470 | 0.5085 | 2.4555 | 0.5217 | 0.5078 | 1.0295 | 0.0000 | 7,946.9970 | 7,946.9970 | 0.3147 | 0.0000 | 7,954.8632 |
| **Maximum** | **39.7716** | **18.4476** | **37.2064** | **0.0827** | **8.8969** | **0.5090** | **9.3859** | **3.6558** | **0.5083** | **4.1447** | **0.0000** | **7,970.0208** | **7,970.0208** | **0.3163** | **0.0000** | **7,977.9290** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2031 | 1.5697 | 24.0052 | 37.1056 | 0.0716 | 3.6062 | 0.1960 | 3.8021 | 1.4619 | 0.1959 | 1.6578 | 0.0000 | 7,373.8442 | 7,373.8442 | 0.2940 | 0.0000 | 7,381.1929 |
| 2032 | 38.2414 | 24.0391 | 40.4040 | 0.0827 | 1.9470 | 0.2511 | 2.1981 | 0.5217 | 0.2504 | 0.7721 | 0.0000 | 7,970.0208 | 7,970.0208 | 0.3163 | 0.0000 | 7,977.9290 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2033 | 38.2189 | 24.0128 | 40.2559 | 0.0824 | 1.9470 | 0.2506 | 2.1976 | 0.5217 | 0.2500 | 0.7717 | 0.0000 | 7,946.9970 | 7,946.9970 | 0.3147 | 0.0000 | 7,954.8632 |
| **Maximum** | **38.2414** | **24.0391** | **40.4040** | **0.0827** | **3.6062** | **0.2511** | **3.8021** | **1.4619** | **0.2504** | **1.6578** | **0.0000** | **7,970.0208** | **7,970.0208** | **0.3163** | **0.0000** | **7,977.9290** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **5.82** | **-42.02** | **-20.57** | **0.00** | **41.36** | **53.69** | **42.66** | **46.69** | **53.74** | **48.40** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 90.1090 | 6.0752 | 165.4383 | 0.3645 | | 21.5169 | 21.5169 | | 21.5169 | 21.5169 | 2,622.7372 | 5,081.6042 | 7,704.3413 | 7.8612 | 0.1780 | 7,953.9182 |
| Energy | 0.2560 | 2.1890 | 0.9423 | 0.0140 | | 0.1769 | 0.1769 | | 0.1769 | 0.1769 | | 2,792.4658 | 2,792.4658 | 0.0535 | 0.0512 | 2,809.0601 |
| Mobile | 4.4878 | 25.0407 | 55.6716 | 0.2851 | 30.1511 | 0.1423 | 30.2934 | 8.0630 | 0.1322 | 8.1952 | | 29,269.3583 | 29,269.3583 | 1.0947 | | 29,296.7258 |
| **Total** | **94.8527** | **33.3049** | **222.0521** | **0.6636** | **30.1511** | **21.8360** | **51.9871** | **8.0630** | **21.8260** | **29.8889** | **2,622.7372** | **37,143.4283** | **39,766.1655** | **9.0094** | **0.2292** | **40,059.7041** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 90.1090 | 6.0752 | 165.4383 | 0.3645 | | 21.5169 | 21.5169 | | 21.5169 | 21.5169 | 2,622.7372 | 5,081.6042 | 7,704.3413 | 7.8612 | 0.1780 | 7,953.9182 |
| Energy | 0.2560 | 2.1890 | 0.9423 | 0.0140 | | 0.1769 | 0.1769 | | 0.1769 | 0.1769 | | 2,792.4658 | 2,792.4658 | 0.0535 | 0.0512 | 2,809.0601 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 4.4878 | 25.0407 | 55.6716 | 0.2851 | 30.1511 | 0.1423 | 30.2934 | 8.0630 | 0.1322 | 8.1952 | | 29,269.3583 | 29,269.3583 | 1.0947 | | 29,296.7258 |
| **Total** | **94.8527** | **33.3049** | **222.0521** | **0.6636** | **30.1511** | **21.8360** | **51.9871** | **8.0630** | **21.8260** | **29.8889** | **2,622.7372** | **37,143.4283** | **39,766.1655** | **9.0094** | **0.2292** | **40,059.7041** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 7/23/2031 | 12/23/2031 | 5 | 110 | |
| 2 | Building Construction | Building Construction | 12/24/2031 | 1/23/2033 | 5 | 283 | |
| 3 | Paving | Paving | 12/23/2032 | 1/23/2033 | 5 | 22 | |
| 4 | Architectural Coating | Architectural Coating | 7/23/2032 | 1/23/2033 | 5 | 131 | |

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

**Acres of Grading (Grading Phase): 275**

**Acres of Paving: 0**

**Residential Indoor: 1,419,025; Residential Outdoor: 473,008; Non-Residential Indoor: 65,340; Non-Residential Outdoor: 21,780; Striped**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 115.00 | 37.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 23.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2031

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2807 | 13.8462 | 23.0239 | 0.0699 | | 0.4879 | 0.4879 | | 0.4879 | 0.4879 | | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **3.2807** | **13.8462** | **23.0239** | **0.0699** | **8.6733** | **0.4879** | **9.1613** | **3.5965** | **0.4879** | **4.0844** | | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0466 | 0.0226 | 0.3830 | 1.6100e-003 | 0.2236 | 1.0400e-003 | 0.2246 | 0.0593 | 9.5000e-004 | 0.0602 | | 160.7356 | 160.7356 | 2.4400e-003 | | 160.7966 |
| **Total** | **0.0466** | **0.0226** | **0.3830** | **1.6100e-003** | **0.2236** | **1.0400e-003** | **0.2246** | **0.0593** | **9.5000e-004** | **0.0602** | | **160.7356** | **160.7356** | **2.4400e-003** | | **160.7966** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0466 | 0.0226 | 0.3830 | 1.6100e-003 | 0.2236 | 1.0400e-003 | 0.2246 | 0.0593 | 9.5000e-004 | 0.0602 | | 160.7356 | 160.7356 | 2.4400e-003 | | 160.7966 |
| **Total** | **0.0466** | **0.0226** | **0.3830** | **1.6100e-003** | **0.2236** | **1.0400e-003** | **0.2246** | **0.0593** | **9.5000e-004** | **0.0602** | | **160.7356** | **160.7356** | **2.4400e-003** | | **160.7966** |

## 3.3 Building Construction - 2031

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0627 | 2.3938 | 0.6453 | 8.6500e-003 | 0.2368 | 2.5600e-003 | 0.2393 | 0.0682 | 2.4500e-003 | 0.0706 | | 931.4152 | 931.4152 | 0.0475 | | 932.6017 |
| Worker | 0.2682 | 0.1299 | 2.2025 | 9.2600e-003 | 1.2854 | 5.9600e-003 | 1.2914 | 0.3409 | 5.4900e-003 | 0.3464 | | 924.2299 | 924.2299 | 0.0140 | | 924.5803 |
| **Total** | **0.3309** | **2.5237** | **2.8478** | **0.0179** | **1.5222** | **8.5200e-003** | **1.5307** | **0.4091** | **7.9400e-003** | **0.4170** | | **1,855.6451** | **1,855.6451** | **0.0615** | | **1,857.1820** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0627 | 2.3938 | 0.6453 | 8.6500e-003 | 0.2368 | 2.5600e-003 | 0.2393 | 0.0682 | 2.4500e-003 | 0.0706 | | 931.4152 | 931.4152 | 0.0475 | | 932.6017 |
| Worker | 0.2682 | 0.1299 | 2.2025 | 9.2600e-003 | 1.2854 | 5.9600e-003 | 1.2914 | 0.3409 | 5.4900e-003 | 0.3464 | | 924.2299 | 924.2299 | 0.0140 | | 924.5803 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.3309** | **2.5237** | **2.8478** | **0.0179** | **1.5222** | **8.5200e-003** | **1.5307** | **0.4091** | **7.9400e-003** | **0.4170** | | **1,855.6451** | **1,855.6451** | **0.0615** | | **1,857.1820** |

## 3.3 Building Construction - 2032

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0622 | 2.3779 | 0.6425 | 8.6300e-003 | 0.2368 | 2.5300e-003 | 0.2393 | 0.0682 | 2.4200e-003 | 0.0706 | | 929.4562 | 929.4562 | 0.0471 | | 930.6326 |
| Worker | 0.2487 | 0.1192 | 2.0743 | 9.0700e-003 | 1.2854 | 5.5600e-003 | 1.2910 | 0.3409 | 5.1200e-003 | 0.3460 | | 905.7588 | 905.7588 | 0.0129 | | 906.0801 |
| **Total** | **0.3109** | **2.4971** | **2.7167** | **0.0177** | **1.5222** | **8.0900e-003** | **1.5303** | **0.4091** | **7.5400e-003** | **0.4166** | | **1,835.2150** | **1,835.2150** | **0.0599** | | **1,836.7127** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0622 | 2.3779 | 0.6425 | 8.6300e-003 | 0.2368 | 2.5300e-003 | 0.2393 | 0.0682 | 2.4200e-003 | 0.0706 | | 929.4562 | 929.4562 | 0.0471 | | 930.6326 |
| Worker | 0.2487 | 0.1192 | 2.0743 | 9.0700e-003 | 1.2854 | 5.5600e-003 | 1.2910 | 0.3409 | 5.1200e-003 | 0.3460 | | 905.7588 | 905.7588 | 0.0129 | | 906.0801 |
| **Total** | **0.3109** | **2.4971** | **2.7167** | **0.0177** | **1.5222** | **8.0900e-003** | **1.5303** | **0.4091** | **7.5400e-003** | **0.4166** | | **1,835.2150** | **1,835.2150** | **0.0599** | | **1,836.7127** |

## 3.3 Building Construction - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0617 | 2.3637 | 0.6404 | 8.6100e-003 | 0.2368 | 2.5000e-003 | 0.2393 | 0.0682 | 2.3900e-003 | 0.0706 | | 927.8840 | 927.8840 | 0.0467 | | 929.0515 |
| Worker | 0.2321 | 0.1101 | 1.9645 | 8.9100e-003 | 1.2854 | 5.2000e-003 | 1.2906 | 0.3409 | 4.7800e-003 | 0.3457 | | 889.6351 | 889.6351 | 0.0119 | | 889.9315 |
| **Total** | **0.2938** | **2.4738** | **2.6049** | **0.0175** | **1.5222** | **7.7000e-003** | **1.5299** | **0.4091** | **7.1700e-003** | **0.4162** | | **1,817.5191** | **1,817.5191** | **0.0586** | | **1,818.9831** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0617 | 2.3637 | 0.6404 | 8.6100e-003 | 0.2368 | 2.5000e-003 | 0.2393 | 0.0682 | 2.3900e-003 | 0.0706 | | 927.8840 | 927.8840 | 0.0467 | | 929.0515 |
| Worker | 0.2321 | 0.1101 | 1.9645 | 8.9100e-003 | 1.2854 | 5.2000e-003 | 1.2906 | 0.3409 | 4.7800e-003 | 0.3457 | | 889.6351 | 889.6351 | 0.0119 | | 889.9315 |
| **Total** | **0.2938** | **2.4738** | **2.6049** | **0.0175** | **1.5222** | **7.7000e-003** | **1.5299** | **0.4091** | **7.1700e-003** | **0.4162** | | **1,817.5191** | **1,817.5191** | **0.0586** | | **1,818.9831** |

## 3.4 Paving - 2032

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3845 | 7.1202 | 15.8495 | 0.0281 | | 0.3306 | 0.3306 | | 0.3306 | 0.3306 | | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3845** | **7.1202** | **15.8495** | **0.0281** | | **0.3306** | **0.3306** | | **0.3306** | **0.3306** | | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0324 | 0.0156 | 0.2706 | 1.1800e-003 | 0.1677 | 7.3000e-004 | 0.1684 | 0.0445 | 6.7000e-004 | 0.0451 | | 118.1425 | 118.1425 | 1.6800e-003 | | 118.1844 |
| **Total** | **0.0324** | **0.0156** | **0.2706** | **1.1800e-003** | **0.1677** | **7.3000e-004** | **0.1684** | **0.0445** | **6.7000e-004** | **0.0451** | | **118.1425** | **118.1425** | **1.6800e-003** | | **118.1844** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0324 | 0.0156 | 0.2706 | 1.1800e-003 | 0.1677 | 7.3000e-004 | 0.1684 | 0.0445 | 6.7000e-004 | 0.0451 | | 118.1425 | 118.1425 | 1.6800e-003 | | 118.1844 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0324** | **0.0156** | **0.2706** | **1.1800e-003** | **0.1677** | **7.3000e-004** | **0.1684** | **0.0445** | **6.7000e-004** | **0.0451** | | **118.1425** | **118.1425** | **1.6800e-003** | | **118.1844** |

## 3.4 Paving - 2033

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3845 | 7.1202 | 15.8495 | 0.0281 | | 0.3306 | 0.3306 | | 0.3306 | 0.3306 | | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3845** | **7.1202** | **15.8495** | **0.0281** | | **0.3306** | **0.3306** | | **0.3306** | **0.3306** | | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0303 | 0.0144 | 0.2562 | 1.1600e-003 | 0.1677 | 6.8000e-004 | 0.1683 | 0.0445 | 6.2000e-004 | 0.0451 | | 116.0394 | 116.0394 | 1.5500e-003 | | 116.0780 |
| **Total** | **0.0303** | **0.0144** | **0.2562** | **1.1600e-003** | **0.1677** | **6.8000e-004** | **0.1683** | **0.0445** | **6.2000e-004** | **0.0451** | | **116.0394** | **116.0394** | **1.5500e-003** | | **116.0780** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0303 | 0.0144 | 0.2562 | 1.1600e-003 | 0.1677 | 6.8000e-004 | 0.1683 | 0.0445 | 6.2000e-004 | 0.0451 | | 116.0394 | 116.0394 | 1.5500e-003 | | 116.0780 |
| **Total** | **0.0303** | **0.0144** | **0.2562** | **1.1600e-003** | **0.1677** | **6.8000e-004** | **0.1683** | **0.0445** | **6.2000e-004** | **0.0451** | | **116.0394** | **116.0394** | **1.5500e-003** | | **116.0780** |

## 3.5 Architectural Coating - 2032

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Archit. Coating | 36.5541 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **36.6849** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0498 | 0.0238 | 0.4149 | 1.8100e-003 | 0.2571 | 1.1100e-003 | 0.2582 | 0.0682 | 1.0200e-003 | 0.0692 | | 181.1518 | 181.1518 | 2.5700e-003 | | 181.2160 |
| **Total** | **0.0498** | **0.0238** | **0.4149** | **1.8100e-003** | **0.2571** | **1.1100e-003** | **0.2582** | **0.0682** | **1.0200e-003** | **0.0692** | | **181.1518** | **181.1518** | **2.5700e-003** | | **181.2160** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 36.5541 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **36.6135** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0498 | 0.0238 | 0.4149 | 1.8100e-003 | 0.2571 | 1.1100e-003 | 0.2582 | 0.0682 | 1.0200e-003 | 0.0692 | | 181.1518 | 181.1518 | 2.5700e-003 | | 181.2160 |
| **Total** | **0.0498** | **0.0238** | **0.4149** | **1.8100e-003** | **0.2571** | **1.1100e-003** | **0.2582** | **0.0682** | **1.0200e-003** | **0.0692** | | **181.1518** | **181.1518** | **2.5700e-003** | | **181.2160** |

## 3.5 Architectural Coating - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 36.5541 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **36.6849** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0464 | 0.0220 | 0.3929 | 1.7800e-003 | 0.2571 | 1.0400e-003 | 0.2581 | 0.0682 | 9.6000e-004 | 0.0691 | | 177.9270 | 177.9270 | 2.3700e-003 | | 177.9863 |
| **Total** | **0.0464** | **0.0220** | **0.3929** | **1.7800e-003** | **0.2571** | **1.0400e-003** | **0.2581** | **0.0682** | **9.6000e-004** | **0.0691** | | **177.9270** | **177.9270** | **2.3700e-003** | | **177.9863** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 36.5541 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **36.6135** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0464 | 0.0220 | 0.3929 | 1.7800e-003 | 0.2571 | 1.0400e-003 | 0.2581 | 0.0682 | 9.6000e-004 | 0.0691 | | 177.9270 | 177.9270 | 2.3700e-003 | | 177.9863 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0464** | **0.0220** | **0.3929** | **1.7800e-003** | **0.2571** | **1.0400e-003** | **0.2581** | **0.0682** | **9.6000e-004** | **0.0691** | | **177.9270** | **177.9270** | **2.3700e-003** | | **177.9863** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 4.4878 | 25.0407 | 55.6716 | 0.2851 | 30.1511 | 0.1423 | 30.2934 | 8.0630 | 0.1322 | 8.1952 | | 29,269.3583 | 29,269.3583 | 1.0947 | | 29,296.7258 |
| Unmitigated | 4.4878 | 25.0407 | 55.6716 | 0.2851 | 30.1511 | 0.1423 | 30.2934 | 8.0630 | 0.1322 | 8.1952 | | 29,269.3583 | 29,269.3583 | 1.0947 | | 29,296.7258 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Regional Shopping Center | 1,860.01 | 2,176.69 | 1099.45 | 3,885,768 | 3,885,768 |
| Single Family Housing | 2,665.60 | 2,774.80 | 2413.60 | 9,039,050 | 9,039,050 |
| Total | 4,525.61 | 4,951.49 | 3,513.05 | 12,924,818 | 12,924,818 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Regional Shopping Center | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |
| Single Family Housing | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.2560 | 2.1890 | 0.9423 | 0.0140 | | 0.1769 | 0.1769 | | 0.1769 | 0.1769 | | 2,792.4658 | 2,792.4658 | 0.0535 | 0.0512 | 2,809.0601 |
| NaturalGas Unmitigated | 0.2560 | 2.1890 | 0.9423 | 0.0140 | | 0.1769 | 0.1769 | | 0.1769 | 0.1769 | | 2,792.4658 | 2,792.4658 | 0.0535 | 0.0512 | 2,809.0601 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Regional Shopping Center | 264.94 | 2.8600e-003 | 0.0260 | 0.0218 | 1.6000e-004 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | | 31.1694 | 31.1694 | 6.0000e-004 | 5.7000e-004 | 31.3547 |
| Single Family Housing | 23471 | 0.2531 | 2.1630 | 0.9204 | 0.0138 | | 0.1749 | 0.1749 | | 0.1749 | 0.1749 | | 2,761.2964 | 2,761.2964 | 0.0529 | 0.0506 | 2,777.7054 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | | **0.2560** | **2.1890** | **0.9423** | **0.0140** | | **0.1769** | **0.1769** | | **0.1769** | **0.1769** | | **2,792.4658** | **2,792.4658** | **0.0535** | **0.0512** | **2,809.0601** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Regional Shopping Center | 0.26494 | 2.8600e-003 | 0.0260 | 0.0218 | 1.6000e-004 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | | 31.1694 | 31.1694 | 6.0000e-004 | 5.7000e-004 | 31.3547 |
| Single Family Housing | 23.471 | 0.2531 | 2.1630 | 0.9204 | 0.0138 | | 0.1749 | 0.1749 | | 0.1749 | 0.1749 | | 2,761.2964 | 2,761.2964 | 0.0529 | 0.0506 | 2,777.7054 |
| **Total** | | **0.2560** | **2.1890** | **0.9423** | **0.0140** | | **0.1769** | **0.1769** | | **0.1769** | **0.1769** | | **2,792.4658** | **2,792.4658** | **0.0535** | **0.0512** | **2,809.0601** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mitigated | 90.1090 | 6.0752 | 165.4383 | 0.3645 | | 21.5169 | 21.5169 | | 21.5169 | 21.5169 | 2,622.7372 | 5,081.6042 | 7,704.3413 | 7.8612 | 0.1780 | 7,953.9182 |
| Unmitigated | 90.1090 | 6.0752 | 165.4383 | 0.3645 | | 21.5169 | 21.5169 | | 21.5169 | 21.5169 | 2,622.7372 | 5,081.6042 | 7,704.3413 | 7.8612 | 0.1780 | 7,953.9182 |

## 6.2 Area by SubCategory

### Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.3119 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 14.7374 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 73.3701 | 5.8095 | 142.3945 | 0.3633 | | 21.3887 | 21.3887 | | 21.3887 | 21.3887 | 2,622.7372 | 5,040.0000 | 7,662.7372 | 7.8215 | 0.1780 | 7,911.3227 |
| Landscaping | 0.6895 | 0.2656 | 23.0437 | 1.2200e-003 | | 0.1281 | 0.1281 | | 0.1281 | 0.1281 | | 41.6042 | 41.6042 | 0.0397 | | 42.5955 |
| **Total** | **90.1090** | **6.0752** | **165.4383** | **0.3645** | | **21.5169** | **21.5169** | | **21.5169** | **21.5169** | **2,622.7372** | **5,081.6042** | **7,704.3413** | **7.8612** | **0.1780** | **7,953.9182** |

### Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.3119 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 14.7374 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 73.3701 | 5.8095 | 142.3945 | 0.3633 | | 21.3887 | 21.3887 | | 21.3887 | 21.3887 | 2,622.7372 | 5,040.0000 | 7,662.7372 | 7.8215 | 0.1780 | 7,911.3227 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landscaping | 0.6895 | 0.2656 | 23.0437 | 1.2200e-003 | | 0.1281 | 0.1281 | | 0.1281 | 0.1281 | | 41.6042 | 41.6042 | 0.0397 | | 42.5955 |
| **Total** | **90.1090** | **6.0752** | **165.4383** | **0.3645** | | **21.5169** | **21.5169** | | **21.5169** | **21.5169** | **2,622.7372** | **5,081.6042** | **7,704.3413** | **7.8612** | **0.1780** | **7,953.9182** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase VII Construction - South Coast Air Basin, Winter

# Phase VII Construction

**South Coast Air Basin, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Regional Shopping Center | 43.56 | 1000sqft | 1.00 | 43,560.00 | 0 |
| Single Family Housing | 280.00 | Dwelling Unit | 73.00 | 700,753.00 | 801 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2034 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 75.00 | 131.00 |
| tblConstructionPhase | NumDays | 1,110.00 | 283.00 |
| tblConstructionPhase | NumDays | 75.00 | 22.00 |
| tblConstructionPhase | PhaseEndDate | 10/21/2036 | 1/23/2033 |
| tblConstructionPhase | PhaseEndDate | 3/25/2036 | 1/23/2033 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 7/8/2036 | 1/23/2033 |
| tblConstructionPhase | PhaseStartDate | 7/9/2036 | 7/23/2032 |
| tblConstructionPhase | PhaseStartDate | 3/26/2036 | 12/23/2032 |
| tblLandUse | LandUseSquareFeet | 504,000.00 | 700,753.00 |
| tblLandUse | LotAcreage | 90.91 | 73.00 |

# 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2031 | 3.3333 | 13.8709 | 23.3657 | 0.0715 | 8.8969 | 0.4890 | 9.3859 | 3.6558 | 0.4889 | 4.1447 | 0.0000 | 7,363.7545 | 7,363.7545 | 0.2938 | 0.0000 | 7,371.0988 |
| 2032 | 39.8179 | 18.4498 | 36.9639 | 0.0817 | 1.9470 | 0.5091 | 2.4560 | 0.5217 | 0.5084 | 1.0301 | 0.0000 | 7,870.0292 | 7,870.0292 | 0.3175 | 0.0000 | 7,877.9680 |
| 2033 | 39.7930 | 18.4221 | 36.8279 | 0.0815 | 1.9470 | 0.5085 | 2.4555 | 0.5217 | 0.5079 | 1.0296 | 0.0000 | 7,848.2174 | 7,848.2174 | 0.3159 | 0.0000 | 7,856.1151 |
| **Maximum** | **39.8179** | **18.4498** | **36.9639** | **0.0817** | **8.8969** | **0.5091** | **9.3859** | **3.6558** | **0.5084** | **4.1447** | **0.0000** | **7,870.0292** | **7,870.0292** | **0.3175** | **0.0000** | **7,877.9680** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2031 | 1.5758 | 24.0073 | 37.0644 | 0.0715 | 3.6062 | 0.1960 | 3.8021 | 1.4619 | 0.1959 | 1.6578 | 0.0000 | 7,363.7545 | 7,363.7545 | 0.2938 | 0.0000 | 7,371.0988 |
| 2032 | 38.2878 | 24.0413 | 40.1615 | 0.0817 | 1.9470 | 0.2512 | 2.1981 | 0.5217 | 0.2505 | 0.7722 | 0.0000 | 7,870.0292 | 7,870.0292 | 0.3175 | 0.0000 | 7,877.9680 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2033 | 38.2628 | 24.0135 | 40.0255 | 0.0815 | 1.9470 | 0.2507 | 2.1976 | 0.5217 | 0.2500 | 0.7717 | 0.0000 | 7,848.2173 | 7,848.2173 | 0.3159 | 0.0000 | 7,856.1151 |
| **Maximum** | **38.2878** | **24.0413** | **40.1615** | **0.0817** | **3.6062** | **0.2512** | **3.8021** | **1.4619** | **0.2505** | **1.6578** | **0.0000** | **7,870.0292** | **7,870.0292** | **0.3175** | **0.0000** | **7,877.9680** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **5.81** | **-42.01** | **-20.68** | **0.00** | **41.36** | **53.68** | **42.66** | **46.69** | **53.74** | **48.40** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 90.1090 | 6.0752 | 165.4383 | 0.3645 | | 21.5169 | 21.5169 | | 21.5169 | 21.5169 | 2,622.7372 | 5,081.6042 | 7,704.3413 | 7.8612 | 0.1780 | 7,953.9182 |
| Energy | 0.2560 | 2.1890 | 0.9423 | 0.0140 | | 0.1769 | 0.1769 | | 0.1769 | 0.1769 | | 2,792.4658 | 2,792.4658 | 0.0535 | 0.0512 | 2,809.0601 |
| Mobile | 4.2894 | 25.2101 | 52.5729 | 0.2709 | 30.1511 | 0.1427 | 30.2938 | 8.0630 | 0.1326 | 8.1956 | | 27,837.0612 | 27,837.0612 | 1.1067 | | 27,864.7291 |
| **Total** | **94.6543** | **33.4742** | **218.9534** | **0.6494** | **30.1511** | **21.8364** | **51.9875** | **8.0630** | **21.8263** | **29.8893** | **2,622.7372** | **35,711.1312** | **38,333.8683** | **9.0214** | **0.2292** | **38,627.7073** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 90.1090 | 6.0752 | 165.4383 | 0.3645 | | 21.5169 | 21.5169 | | 21.5169 | 21.5169 | 2,622.7372 | 5,081.6042 | 7,704.3413 | 7.8612 | 0.1780 | 7,953.9182 |
| Energy | 0.2560 | 2.1890 | 0.9423 | 0.0140 | | 0.1769 | 0.1769 | | 0.1769 | 0.1769 | | 2,792.4658 | 2,792.4658 | 0.0535 | 0.0512 | 2,809.0601 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 4.2894 | 25.2101 | 52.5729 | 0.2709 | 30.1511 | 0.1427 | 30.2938 | 8.0630 | 0.1326 | 8.1956 | | 27,837.0612 | 27,837.0612 | 1.1067 | | 27,864.7291 |
| **Total** | **94.6543** | **33.4742** | **218.9534** | **0.6494** | **30.1511** | **21.8364** | **51.9875** | **8.0630** | **21.8263** | **29.8893** | **2,622.7372** | **35,711.1312** | **38,333.8683** | **9.0214** | **0.2292** | **38,627.7073** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 7/23/2031 | 12/23/2031 | 5 | 110 | |
| 2 | Building Construction | Building Construction | 12/24/2031 | 1/23/2033 | 5 | 283 | |
| 3 | Paving | Paving | 12/23/2032 | 1/23/2033 | 5 | 22 | |
| 4 | Architectural Coating | Architectural Coating | 7/23/2032 | 1/23/2033 | 5 | 131 | |

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

**Acres of Grading (Grading Phase): 275**

**Acres of Paving: 0**

**Residential Indoor: 1,419,025; Residential Outdoor: 473,008; Non-Residential Indoor: 65,340; Non-Residential Outdoor: 21,780; Striped**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 115.00 | 37.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 23.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2031

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2807 | 13.8462 | 23.0239 | 0.0699 | | 0.4879 | 0.4879 | | 0.4879 | 0.4879 | | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **3.2807** | **13.8462** | **23.0239** | **0.0699** | **8.6733** | **0.4879** | **9.1613** | **3.5965** | **0.4879** | **4.0844** | | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0527 | 0.0247 | 0.3418 | 1.5100e-003 | 0.2236 | 1.0400e-003 | 0.2246 | 0.0593 | 9.5000e-004 | 0.0602 | | 150.6459 | 150.6459 | 2.2600e-003 | | 150.7025 |
| **Total** | **0.0527** | **0.0247** | **0.3418** | **1.5100e-003** | **0.2236** | **1.0400e-003** | **0.2246** | **0.0593** | **9.5000e-004** | **0.0602** | | **150.6459** | **150.6459** | **2.2600e-003** | | **150.7025** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0527 | 0.0247 | 0.3418 | 1.5100e-003 | 0.2236 | 1.0400e-003 | 0.2246 | 0.0593 | 9.5000e-004 | 0.0602 | | 150.6459 | 150.6459 | 2.2600e-003 | | 150.7025 |
| **Total** | **0.0527** | **0.0247** | **0.3418** | **1.5100e-003** | **0.2236** | **1.0400e-003** | **0.2246** | **0.0593** | **9.5000e-004** | **0.0602** | | **150.6459** | **150.6459** | **2.2600e-003** | | **150.7025** |

## 3.3 Building Construction - 2031

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0658 | 2.3812 | 0.7045 | 8.4300e-003 | 0.2368 | 2.6200e-003 | 0.2394 | 0.0682 | 2.5000e-003 | 0.0707 | | 907.1823 | 907.1823 | 0.0500 | | 908.4319 |
| Worker | 0.3029 | 0.1421 | 1.9652 | 8.6800e-003 | 1.2854 | 5.9600e-003 | 1.2914 | 0.3409 | 5.4900e-003 | 0.3464 | | 866.2141 | 866.2141 | 0.0130 | | 866.5391 |
| **Total** | **0.3687** | **2.5234** | **2.6698** | **0.0171** | **1.5222** | **8.5800e-003** | **1.5308** | **0.4091** | **7.9900e-003** | **0.4171** | | **1,773.3963** | **1,773.3963** | **0.0630** | | **1,774.9711** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0658 | 2.3812 | 0.7045 | 8.4300e-003 | 0.2368 | 2.6200e-003 | 0.2394 | 0.0682 | 2.5000e-003 | 0.0707 | | 907.1823 | 907.1823 | 0.0500 | | 908.4319 |
| Worker | 0.3029 | 0.1421 | 1.9652 | 8.6800e-003 | 1.2854 | 5.9600e-003 | 1.2914 | 0.3409 | 5.4900e-003 | 0.3464 | | 866.2141 | 866.2141 | 0.0130 | | 866.5391 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.3687** | **2.5234** | **2.6698** | **0.0171** | **1.5222** | **8.5800e-003** | **1.5308** | **0.4091** | **7.9900e-003** | **0.4171** | | **1,773.3963** | **1,773.3963** | **0.0630** | | **1,774.9711** |

## 3.3 Building Construction - 2032

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0652 | 2.3653 | 0.7014 | 8.4100e-003 | 0.2368 | 2.5800e-003 | 0.2394 | 0.0682 | 2.4700e-003 | 0.0706 | | 905.2629 | 905.2629 | 0.0495 | | 906.5012 |
| Worker | 0.2813 | 0.1303 | 1.8477 | 8.5000e-003 | 1.2854 | 5.5600e-003 | 1.2910 | 0.3409 | 5.1200e-003 | 0.3460 | | 848.7863 | 848.7863 | 0.0119 | | 849.0840 |
| **Total** | **0.3465** | **2.4956** | **2.5491** | **0.0169** | **1.5222** | **8.1400e-003** | **1.5303** | **0.4091** | **7.5900e-003** | **0.4167** | | **1,754.0492** | **1,754.0492** | **0.0614** | | **1,755.5852** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0652 | 2.3653 | 0.7014 | 8.4100e-003 | 0.2368 | 2.5800e-003 | 0.2394 | 0.0682 | 2.4700e-003 | 0.0706 | | 905.2629 | 905.2629 | 0.0495 | | 906.5012 |
| Worker | 0.2813 | 0.1303 | 1.8477 | 8.5000e-003 | 1.2854 | 5.5600e-003 | 1.2910 | 0.3409 | 5.1200e-003 | 0.3460 | | 848.7863 | 848.7863 | 0.0119 | | 849.0840 |
| **Total** | **0.3465** | **2.4956** | **2.5491** | **0.0169** | **1.5222** | **8.1400e-003** | **1.5303** | **0.4091** | **7.5900e-003** | **0.4167** | | **1,754.0492** | **1,754.0492** | **0.0614** | | **1,755.5852** |

## 3.3 Building Construction - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0648 | 2.3509 | 0.6992 | 8.3900e-003 | 0.2368 | 2.5500e-003 | 0.2393 | 0.0682 | 2.4300e-003 | 0.0706 | | 903.6954 | 903.6954 | 0.0491 | | 904.9237 |
| Worker | 0.2628 | 0.1203 | 1.7472 | 8.3500e-003 | 1.2854 | 5.2000e-003 | 1.2906 | 0.3409 | 4.7800e-003 | 0.3457 | | 833.5699 | 833.5699 | 0.0110 | | 833.8444 |
| **Total** | **0.3276** | **2.4712** | **2.4464** | **0.0167** | **1.5222** | **7.7500e-003** | **1.5300** | **0.4091** | **7.2100e-003** | **0.4163** | | **1,737.2653** | **1,737.2653** | **0.0601** | | **1,738.7681** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0648 | 2.3509 | 0.6992 | 8.3900e-003 | 0.2368 | 2.5500e-003 | 0.2393 | 0.0682 | 2.4300e-003 | 0.0706 | | 903.6954 | 903.6954 | 0.0491 | | 904.9237 |
| Worker | 0.2628 | 0.1203 | 1.7472 | 8.3500e-003 | 1.2854 | 5.2000e-003 | 1.2906 | 0.3409 | 4.7800e-003 | 0.3457 | | 833.5699 | 833.5699 | 0.0110 | | 833.8444 |
| **Total** | **0.3276** | **2.4712** | **2.4464** | **0.0167** | **1.5222** | **7.7500e-003** | **1.5300** | **0.4091** | **7.2100e-003** | **0.4163** | | **1,737.2653** | **1,737.2653** | **0.0601** | | **1,738.7681** |

## 3.4 Paving - 2032

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3845 | 7.1202 | 15.8495 | 0.0281 | | 0.3306 | 0.3306 | | 0.3306 | 0.3306 | | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3845** | **7.1202** | **15.8495** | **0.0281** | | **0.3306** | **0.3306** | | **0.3306** | **0.3306** | | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0367 | 0.0170 | 0.2410 | 1.1100e-003 | 0.1677 | 7.3000e-004 | 0.1684 | 0.0445 | 6.7000e-004 | 0.0451 | | 110.7113 | 110.7113 | 1.5500e-003 | | 110.7501 |
| **Total** | **0.0367** | **0.0170** | **0.2410** | **1.1100e-003** | **0.1677** | **7.3000e-004** | **0.1684** | **0.0445** | **6.7000e-004** | **0.0451** | | **110.7113** | **110.7113** | **1.5500e-003** | | **110.7501** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0367 | 0.0170 | 0.2410 | 1.1100e-003 | 0.1677 | 7.3000e-004 | 0.1684 | 0.0445 | 6.7000e-004 | 0.0451 | | 110.7113 | 110.7113 | 1.5500e-003 | | 110.7501 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0367** | **0.0170** | **0.2410** | **1.1100e-003** | **0.1677** | **7.3000e-004** | **0.1684** | **0.0445** | **6.7000e-004** | **0.0451** | | **110.7113** | **110.7113** | **1.5500e-003** | | **110.7501** |

## 3.4 Paving - 2033

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3845 | 7.1202 | 15.8495 | 0.0281 | | 0.3306 | 0.3306 | | 0.3306 | 0.3306 | | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3845** | **7.1202** | **15.8495** | **0.0281** | | **0.3306** | **0.3306** | | **0.3306** | **0.3306** | | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0343 | 0.0157 | 0.2279 | 1.0900e-003 | 0.1677 | 6.8000e-004 | 0.1683 | 0.0445 | 6.2000e-004 | 0.0451 | | 108.7265 | 108.7265 | 1.4300e-003 | | 108.7623 |
| **Total** | **0.0343** | **0.0157** | **0.2279** | **1.0900e-003** | **0.1677** | **6.8000e-004** | **0.1683** | **0.0445** | **6.2000e-004** | **0.0451** | | **108.7265** | **108.7265** | **1.4300e-003** | | **108.7623** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0343 | 0.0157 | 0.2279 | 1.0900e-003 | 0.1677 | 6.8000e-004 | 0.1683 | 0.0445 | 6.2000e-004 | 0.0451 | | 108.7265 | 108.7265 | 1.4300e-003 | | 108.7623 |
| **Total** | **0.0343** | **0.0157** | **0.2279** | **1.0900e-003** | **0.1677** | **6.8000e-004** | **0.1683** | **0.0445** | **6.2000e-004** | **0.0451** | | **108.7265** | **108.7265** | **1.4300e-003** | | **108.7623** |

## 3.5 Architectural Coating - 2032

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Archit. Coating | 36.5541 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **36.6849** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0563 | 0.0261 | 0.3695 | 1.7000e-003 | 0.2571 | 1.1100e-003 | 0.2582 | 0.0682 | 1.0200e-003 | 0.0692 | | 169.7573 | 169.7573 | 2.3800e-003 | | 169.8168 |
| **Total** | **0.0563** | **0.0261** | **0.3695** | **1.7000e-003** | **0.2571** | **1.1100e-003** | **0.2582** | **0.0682** | **1.0200e-003** | **0.0692** | | **169.7573** | **169.7573** | **2.3800e-003** | | **169.8168** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 36.5541 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **36.6135** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0563 | 0.0261 | 0.3695 | 1.7000e-003 | 0.2571 | 1.1100e-003 | 0.2582 | 0.0682 | 1.0200e-003 | 0.0692 | | 169.7573 | 169.7573 | 2.3800e-003 | | 169.8168 |
| **Total** | **0.0563** | **0.0261** | **0.3695** | **1.7000e-003** | **0.2571** | **1.1100e-003** | **0.2582** | **0.0682** | **1.0200e-003** | **0.0692** | | **169.7573** | **169.7573** | **2.3800e-003** | | **169.8168** |

## 3.5 Architectural Coating - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 36.5541 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **36.6849** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0526 | 0.0241 | 0.3494 | 1.6700e-003 | 0.2571 | 1.0400e-003 | 0.2581 | 0.0682 | 9.6000e-004 | 0.0691 | | 166.7140 | 166.7140 | 2.2000e-003 | | 166.7689 |
| **Total** | **0.0526** | **0.0241** | **0.3494** | **1.6700e-003** | **0.2571** | **1.0400e-003** | **0.2581** | **0.0682** | **9.6000e-004** | **0.0691** | | **166.7140** | **166.7140** | **2.2000e-003** | | **166.7689** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 36.5541 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **36.6135** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0526 | 0.0241 | 0.3494 | 1.6700e-003 | 0.2571 | 1.0400e-003 | 0.2581 | 0.0682 | 9.6000e-004 | 0.0691 | | 166.7140 | 166.7140 | 2.2000e-003 | | 166.7689 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0526** | **0.0241** | **0.3494** | **1.6700e-003** | **0.2571** | **1.0400e-003** | **0.2581** | **0.0682** | **9.6000e-004** | **0.0691** | | **166.7140** | **166.7140** | **2.2000e-003** | | **166.7689** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 4.2894 | 25.2101 | 52.5729 | 0.2709 | 30.1511 | 0.1427 | 30.2938 | 8.0630 | 0.1326 | 8.1956 | | 27,837.06 12 | 27,837.061 2 | 1.1067 | | 27,864.72 91 |
| Unmitigated | 4.2894 | 25.2101 | 52.5729 | 0.2709 | 30.1511 | 0.1427 | 30.2938 | 8.0630 | 0.1326 | 8.1956 | | 27,837.06 12 | 27,837.061 2 | 1.1067 | | 27,864.72 91 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Regional Shopping Center | 1,860.01 | 2,176.69 | 1099.45 | 3,885,768 | 3,885,768 |
| Single Family Housing | 2,665.60 | 2,774.80 | 2413.60 | 9,039,050 | 9,039,050 |
| Total | 4,525.61 | 4,951.49 | 3,513.05 | 12,924,818 | 12,924,818 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Regional Shopping Center | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |
| Single Family Housing | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.2560 | 2.1890 | 0.9423 | 0.0140 | | 0.1769 | 0.1769 | | 0.1769 | 0.1769 | | 2,792.4658 | 2,792.4658 | 0.0535 | 0.0512 | 2,809.0601 |
| NaturalGas Unmitigated | 0.2560 | 2.1890 | 0.9423 | 0.0140 | | 0.1769 | 0.1769 | | 0.1769 | 0.1769 | | 2,792.4658 | 2,792.4658 | 0.0535 | 0.0512 | 2,809.0601 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Regional Shopping Center | 264.94 | 2.8600e-003 | 0.0260 | 0.0218 | 1.6000e-004 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | | 31.1694 | 31.1694 | 6.0000e-004 | 5.7000e-004 | 31.3547 |
| Single Family Housing | 23471 | 0.2531 | 2.1630 | 0.9204 | 0.0138 | | 0.1749 | 0.1749 | | 0.1749 | 0.1749 | | 2,761.2964 | 2,761.2964 | 0.0529 | 0.0506 | 2,777.7054 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | | **0.2560** | **2.1890** | **0.9423** | **0.0140** | | **0.1769** | **0.1769** | | **0.1769** | **0.1769** | | **2,792.4658** | **2,792.4658** | **0.0535** | **0.0512** | **2,809.0601** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Regional Shopping Center | 0.26494 | 2.8600e-003 | 0.0260 | 0.0218 | 1.6000e-004 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | | 31.1694 | 31.1694 | 6.0000e-004 | 5.7000e-004 | 31.3547 |
| Single Family Housing | 23.471 | 0.2531 | 2.1630 | 0.9204 | 0.0138 | | 0.1749 | 0.1749 | | 0.1749 | 0.1749 | | 2,761.2964 | 2,761.2964 | 0.0529 | 0.0506 | 2,777.7054 |
| **Total** | | **0.2560** | **2.1890** | **0.9423** | **0.0140** | | **0.1769** | **0.1769** | | **0.1769** | **0.1769** | | **2,792.4658** | **2,792.4658** | **0.0535** | **0.0512** | **2,809.0601** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mitigated | 90.1090 | 6.0752 | 165.4383 | 0.3645 | | 21.5169 | 21.5169 | | 21.5169 | 21.5169 | 2,622.7372 | 5,081.6042 | 7,704.3413 | 7.8612 | 0.1780 | 7,953.9182 |
| Unmitigated | 90.1090 | 6.0752 | 165.4383 | 0.3645 | | 21.5169 | 21.5169 | | 21.5169 | 21.5169 | 2,622.7372 | 5,081.6042 | 7,704.3413 | 7.8612 | 0.1780 | 7,953.9182 |

## 6.2 Area by SubCategory

### Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.3119 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 14.7374 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 73.3701 | 5.8095 | 142.3945 | 0.3633 | | 21.3887 | 21.3887 | | 21.3887 | 21.3887 | 2,622.7372 | 5,040.0000 | 7,662.7372 | 7.8215 | 0.1780 | 7,911.3227 |
| Landscaping | 0.6895 | 0.2656 | 23.0437 | 1.2200e-003 | | 0.1281 | 0.1281 | | 0.1281 | 0.1281 | | 41.6042 | 41.6042 | 0.0397 | | 42.5955 |
| **Total** | **90.1090** | **6.0752** | **165.4383** | **0.3645** | | **21.5169** | **21.5169** | | **21.5169** | **21.5169** | **2,622.7372** | **5,081.6042** | **7,704.3413** | **7.8612** | **0.1780** | **7,953.9182** |

### Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.3119 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 14.7374 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 73.3701 | 5.8095 | 142.3945 | 0.3633 | | 21.3887 | 21.3887 | | 21.3887 | 21.3887 | 2,622.7372 | 5,040.0000 | 7,662.7372 | 7.8215 | 0.1780 | 7,911.3227 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landscaping | 0.6895 | 0.2656 | 23.0437 | 1.2200e-003 | | 0.1281 | 0.1281 | | 0.1281 | 0.1281 | | 41.6042 | 41.6042 | 0.0397 | | 42.5955 |
| **Total** | **90.1090** | **6.0752** | **165.4383** | **0.3645** | | **21.5169** | **21.5169** | | **21.5169** | **21.5169** | **2,622.7372** | **5,081.6042** | **7,704.3413** | **7.8612** | **0.1780** | **7,953.9182** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase VIII Construction - South Coast Air Basin, Annual

# Phase VIII Construction

**South Coast Air Basin, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 8.00 | Dwelling Unit | 2.00 | 45,362.00 | 23 |
| Other Non-Asphalt Surfaces | 46.00 | Acre | 46.00 | 2,003,760.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2035 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary
Other Non-Asphalt includes Community Parks (External) and Utility Corridor/Bank Easement
Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4
Area Mitigation -

Water Mitigation -

Vehicle Trips -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 55.00 | 98.00 |
| tblConstructionPhase | NumDays | 740.00 | 295.00 |
| tblConstructionPhase | NumDays | 55.00 | 45.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 8/8/2036 | 6/24/2034 |
| tblConstructionPhase | PhaseEndDate | 3/7/2036 | 6/24/2034 |
| tblConstructionPhase | PhaseEndDate | 5/23/2036 | 6/24/2034 |
| tblConstructionPhase | PhaseStartDate | 5/24/2036 | 2/8/2034 |
| tblConstructionPhase | PhaseStartDate | 3/8/2036 | 4/24/2034 |
| tblLandUse | LandUseSquareFeet | 14,400.00 | 45,362.00 |
| tblLandUse | LotAcreage | 2.60 | 2.00 |

# 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 | | | | | |
| 2033 | 0.4289 | 3.0737 | 3.8788 | 0.0170 | 1.2968 | 0.0361 | 1.3329 | 0.3969 | 0.0357 | 0.4327 | 0.0000 | 1,582.2926 | 1,582.2926 | 0.0580 | 0.0000 | 1,583.7435 |
| 2034 | 0.6917 | 2.0772 | 2.7339 | 0.0119 | 0.8029 | 0.0217 | 0.8246 | 0.2162 | 0.0214 | 0.2376 | 0.0000 | 1,096.4829 | 1,096.4829 | 0.0385 | 0.0000 | 1,097.4465 |
| **Maximum** | **0.6917** | **3.0737** | **3.8788** | **0.0170** | **1.2968** | **0.0361** | **1.3329** | **0.3969** | **0.0357** | **0.4327** | **0.0000** | **1,582.2926** | **1,582.2926** | **0.0580** | **0.0000** | **1,583.7435** |

### 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 | | | | | |
| 2033 | 0.3090 | 3.7468 | 4.5384 | 0.0170 | 1.0984 | 0.0240 | 1.1224 | 0.3147 | 0.0237 | 0.3383 | 0.0000 | 1,582.2921 | 1,582.2921 | 0.0580 | 0.0000 | 1,583.7430 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2034 | 0.6300 | 2.3469 | 2.8755 | 0.0119 | 0.8029 | 0.0152 | 0.8181 | 0.2162 | 0.0149 | 0.2311 | 0.0000 | 1,096.4826 | 1,096.4826 | 0.0385 | 0.0000 | 1,097.4462 |
| **Maximum** | **0.6300** | **3.7468** | **4.5384** | **0.0170** | **1.0984** | **0.0240** | **1.1224** | **0.3147** | **0.0237** | **0.3383** | **0.0000** | **1,582.2921** | **1,582.2921** | **0.0580** | **0.0000** | **1,583.7430** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **16.21** | **-18.30** | **-12.12** | **0.00** | **9.45** | **32.09** | **10.06** | **13.42** | **32.44** | **15.04** | **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** | **1-24-2033** | **4-23-2033** | 0.5526 | 0.8219 |
| **2** | **4-24-2033** | **7-23-2033** | 1.0080 | 1.1253 |
| **3** | **7-24-2033** | **10-23-2033** | 1.0966 | 1.1890 |
| **4** | **10-24-2033** | **1-23-2034** | 1.0995 | 1.1918 |
| **5** | **1-24-2034** | **4-23-2034** | 1.3368 | 1.4314 |
| **6** | **4-24-2034** | **7-23-2034** | 1.1433 | 1.2332 |
| | | **Highest** | 1.3368 | 1.4314 |

## 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 | 0.3642 | 3.0300e-003 | 0.1337 | 1.3000e-004 | | 8.1000e-003 | 8.1000e-003 | | 8.1000e-003 | 8.1000e-003 | 0.8498 | 1.7688 | 2.6186 | 2.6700e-003 | 6.0000e-005 | 2.7024 |
| Energy | 1.3200e-003 | 0.0113 | 4.8000e-003 | 7.0000e-005 | | 9.1000e-004 | 9.1000e-004 | | 9.1000e-004 | 9.1000e-004 | 0.0000 | 35.2799 | 35.2799 | 1.1700e-003 | 4.3000e-004 | 35.4370 |
| Mobile | 0.0122 | 0.0757 | 0.1661 | 8.9000e-004 | 0.0981 | 4.4000e-004 | 0.0985 | 0.0263 | 4.1000e-004 | 0.0267 | 0.0000 | 83.1177 | 83.1177 | 3.1300e-003 | 0.0000 | 83.1961 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.9142 | 0.0000 | 1.9142 | 0.1131 | 0.0000 | 4.7424 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.1654 | 3.3257 | 3.4911 | 0.0171 | 4.3000e-004 | 4.0471 |
| **Total** | **0.3778** | **0.0901** | **0.3046** | **1.0900e-003** | **0.0981** | **9.4500e-003** | **0.1075** | **0.0263** | **9.4200e-003** | **0.0357** | **2.9293** | **123.4921** | **126.4214** | **0.1372** | **9.2000e-004** | **130.1249** |

**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 | 0.3642 | 3.0300e-003 | 0.1337 | 1.3000e-004 | | 8.1000e-003 | 8.1000e-003 | | 8.1000e-003 | 8.1000e-003 | 0.8498 | 1.7688 | 2.6186 | 2.6700e-003 | 6.0000e-005 | 2.7024 |
| Energy | 1.3200e-003 | 0.0113 | 4.8000e-003 | 7.0000e-005 | | 9.1000e-004 | 9.1000e-004 | | 9.1000e-004 | 9.1000e-004 | 0.0000 | 35.2799 | 35.2799 | 1.1700e-003 | 4.3000e-004 | 35.4370 |
| Mobile | 0.0122 | 0.0757 | 0.1661 | 8.9000e-004 | 0.0981 | 4.4000e-004 | 0.0985 | 0.0263 | 4.1000e-004 | 0.0267 | 0.0000 | 83.1177 | 83.1177 | 3.1300e-003 | 0.0000 | 83.1961 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.9142 | 0.0000 | 1.9142 | 0.1131 | 0.0000 | 4.7424 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.1323 | 2.8222 | 2.9545 | 0.0137 | 3.4000e-004 | 3.3999 |
| **Total** | **0.3778** | **0.0901** | **0.3046** | **1.0900e-003** | **0.0981** | **9.4500e-003** | **0.1075** | **0.0263** | **9.4200e-003** | **0.0357** | **2.8962** | **122.9887** | **125.8849** | **0.1338** | **8.3000e-004** | **129.4778** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **1.13** | **0.41** | **0.42** | **2.49** | **9.78** | **0.50** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/24/2033 | 5/6/2033 | 5 | 75 | |
| 2 | Building Construction | Building Construction | 5/7/2033 | 6/24/2034 | 5 | 295 | |
| 3 | Paving | Paving | 4/24/2034 | 6/24/2034 | 5 | 45 | |
| 4 | Architectural Coating | Architectural Coating | 2/8/2034 | 6/24/2034 | 5 | 98 | |

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

**Acres of Grading (Grading Phase): 187.5**

**Acres of Paving: 46**

**Residential Indoor: 91,858; Residential Outdoor: 30,619; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 844.00 | 329.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 169.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

### 3.2 Grading - 2033

**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 | | | | | 0.3253 | 0.0000 | 0.3253 | 0.1349 | 0.0000 | 0.1349 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1230 | 0.5192 | 0.8634 | 2.6200e-003 | | 0.0183 | 0.0183 | | 0.0183 | 0.0183 | 0.0000 | 245.3858 | 245.3858 | 9.9200e-003 | 0.0000 | 245.6338 |
| **Total** | **0.1230** | **0.5192** | **0.8634** | **2.6200e-003** | **0.3253** | **0.0183** | **0.3436** | **0.1349** | **0.0183** | **0.1532** | **0.0000** | **245.3858** | **245.3858** | **9.9200e-003** | **0.0000** | **245.6338** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.5200e-003 | 8.1000e-004 | 0.0117 | 6.0000e-005 | 8.2300e-003 | 3.0000e-005 | 8.2600e-003 | 2.1900e-003 | 3.0000e-005 | 2.2200e-003 | 0.0000 | 5.0099 | 5.0099 | 7.0000e-005 | 0.0000 | 5.0116 |
| **Total** | **1.5200e-003** | **8.1000e-004** | **0.0117** | **6.0000e-005** | **8.2300e-003** | **3.0000e-005** | **8.2600e-003** | **2.1900e-003** | **3.0000e-005** | **2.2200e-003** | **0.0000** | **5.0099** | **5.0099** | **7.0000e-005** | **0.0000** | **5.0116** |

## 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 | | | | | 0.1269 | 0.0000 | 0.1269 | 0.0526 | 0.0000 | 0.0526 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0571 | 0.8994 | 1.3771 | 2.6200e-003 | | 7.3100e-003 | 7.3100e-003 | | 7.3100e-003 | 7.3100e-003 | 0.0000 | 245.3855 | 245.3855 | 9.9200e-003 | 0.0000 | 245.6335 |
| **Total** | **0.0571** | **0.8994** | **1.3771** | **2.6200e-003** | **0.1269** | **7.3100e-003** | **0.1342** | **0.0526** | **7.3100e-003** | **0.0599** | **0.0000** | **245.3855** | **245.3855** | **9.9200e-003** | **0.0000** | **245.6335** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.5200e-003 | 8.1000e-004 | 0.0117 | 6.0000e-005 | 8.2300e-003 | 3.0000e-005 | 8.2600e-003 | 2.1900e-003 | 3.0000e-005 | 2.2200e-003 | 0.0000 | 5.0099 | 5.0099 | 7.0000e-005 | 0.0000 | 5.0116 |
| **Total** | **1.5200e-003** | **8.1000e-004** | **0.0117** | **6.0000e-005** | **8.2300e-003** | **3.0000e-005** | **8.2600e-003** | **2.1900e-003** | **3.0000e-005** | **2.2200e-003** | **0.0000** | **5.0099** | **5.0099** | **7.0000e-005** | **0.0000** | **5.0116** |

## 3.3 Building Construction - 2033

### 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 | 0.1113 | 0.6744 | 1.3733 | 2.6300e-003 | | 0.0126 | 0.0126 | | 0.0126 | 0.0126 | 0.0000 | 223.4319 | 223.4319 | 8.9600e-003 | 0.0000 | 223.6560 |
| **Total** | **0.1113** | **0.6744** | **1.3733** | **2.6300e-003** | | **0.0126** | **0.0126** | | **0.0126** | **0.0126** | **0.0000** | **223.4319** | **223.4319** | **8.9600e-003** | **0.0000** | **223.6560** |

## 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 | 0.0477 | 1.8019 | 0.5073 | 6.4400e-003 | 0.1762 | 1.9000e-003 | 0.1782 | 0.0509 | 1.8200e-003 | 0.0527 | 0.0000 | 629.2474 | 629.2474 | 0.0328 | 0.0000 | 630.0665 |
| Worker | 0.1454 | 0.0774 | 1.1231 | 5.2900e-003 | 0.7871 | 3.2400e-003 | 0.7903 | 0.2090 | 2.9800e-003 | 0.2120 | 0.0000 | 479.2176 | 479.2176 | 6.3200e-003 | 0.0000 | 479.3758 |
| **Total** | **0.1931** | **1.8792** | **1.6303** | **0.0117** | **0.9633** | **5.1400e-003** | **0.9685** | **0.2599** | **4.8000e-003** | **0.2647** | **0.0000** | **1,108.4650** | **1,108.4650** | **0.0391** | **0.0000** | **1,109.4422** |

## 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 | 0.0573 | 0.9674 | 1.5193 | 2.6300e-003 | | 0.0115 | 0.0115 | | 0.0115 | 0.0115 | 0.0000 | 223.4316 | 223.4316 | 8.9600e-003 | 0.0000 | 223.6557 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0573** | **0.9674** | **1.5193** | **2.6300e-003** | | **0.0115** | **0.0115** | | **0.0115** | **0.0115** | **0.0000** | **223.4316** | **223.4316** | **8.9600e-003** | **0.0000** | **223.6557** |

**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 | 0.0477 | 1.8019 | 0.5073 | 6.4400e-003 | 0.1762 | 1.9000e-003 | 0.1782 | 0.0509 | 1.8200e-003 | 0.0527 | 0.0000 | 629.2474 | 629.2474 | 0.0328 | 0.0000 | 630.0665 |
| Worker | 0.1454 | 0.0774 | 1.1231 | 5.2900e-003 | 0.7871 | 3.2400e-003 | 0.7903 | 0.2090 | 2.9800e-003 | 0.2120 | 0.0000 | 479.2176 | 479.2176 | 6.3200e-003 | 0.0000 | 479.3758 |
| **Total** | **0.1931** | **1.8792** | **1.6303** | **0.0117** | **0.9633** | **5.1400e-003** | **0.9685** | **0.2599** | **4.8000e-003** | **0.2647** | **0.0000** | **1,108.4650** | **1,108.4650** | **0.0391** | **0.0000** | **1,109.4422** |

## 3.3 Building Construction - 2034

**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 | 0.0818 | 0.4959 | 1.0098 | 1.9300e-003 | | 9.2600e-003 | 9.2600e-003 | | 9.2600e-003 | 9.2600e-003 | 0.0000 | 164.2881 | 164.2881 | 6.5900e-003 | 0.0000 | 164.4529 |
| **Total** | **0.0818** | **0.4959** | **1.0098** | **1.9300e-003** | | **9.2600e-003** | **9.2600e-003** | | **9.2600e-003** | **9.2600e-003** | **0.0000** | **164.2881** | **164.2881** | **6.5900e-003** | **0.0000** | **164.4529** |

**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 | 0.0348 | 1.3175 | 0.3717 | 4.7300e-003 | 0.1296 | 1.3800e-003 | 0.1310 | 0.0374 | 1.3200e-003 | 0.0387 | 0.0000 | 462.0711 | 462.0711 | 0.0239 | 0.0000 | 462.6694 |
| Worker | 0.1005 | 0.0529 | 0.7802 | 3.8300e-003 | 0.5787 | 2.2300e-003 | 0.5810 | 0.1537 | 2.0500e-003 | 0.1558 | 0.0000 | 346.7375 | 346.7375 | 4.2700e-003 | 0.0000 | 346.8444 |
| **Total** | **0.1354** | **1.3705** | **1.1519** | **8.5600e-003** | **0.7083** | **3.6100e-003** | **0.7119** | **0.1911** | **3.3700e-003** | **0.1945** | **0.0000** | **808.8086** | **808.8086** | **0.0282** | **0.0000** | **809.5137** |

## 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 | 0.0421 | 0.7113 | 1.1171 | 1.9300e-003 | | 8.4700e-003 | 8.4700e-003 | | 8.4700e-003 | 8.4700e-003 | 0.0000 | 164.2879 | 164.2879 | 6.5900e-003 | 0.0000 | 164.4527 |
| **Total** | **0.0421** | **0.7113** | **1.1171** | **1.9300e-003** | | **8.4700e-003** | **8.4700e-003** | | **8.4700e-003** | **8.4700e-003** | **0.0000** | **164.2879** | **164.2879** | **6.5900e-003** | **0.0000** | **164.4527** |

## 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 | 0.0348 | 1.3175 | 0.3717 | 4.7300e-003 | 0.1296 | 1.3800e-003 | 0.1310 | 0.0374 | 1.3200e-003 | 0.0387 | 0.0000 | 462.0711 | 462.0711 | 0.0239 | 0.0000 | 462.6694 |
| Worker | 0.1005 | 0.0529 | 0.7802 | 3.8300e-003 | 0.5787 | 2.2300e-003 | 0.5810 | 0.1537 | 2.0500e-003 | 0.1558 | 0.0000 | 346.7375 | 346.7375 | 4.2700e-003 | 0.0000 | 346.8444 |
| **Total** | **0.1354** | **1.3705** | **1.1519** | **8.5600e-003** | **0.7083** | **3.6100e-003** | **0.7119** | **0.1911** | **3.3700e-003** | **0.1945** | **0.0000** | **808.8086** | **808.8086** | **0.0282** | **0.0000** | **809.5137** |

## 3.4 Paving - 2034

### 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 | 0.0312 | 0.1602 | 0.3566 | 6.3000e-004 | | 7.4400e-003 | 7.4400e-003 | | 7.4400e-003 | 7.4400e-003 | 0.0000 | 54.2239 | 54.2239 | 2.5400e-003 | 0.0000 | 54.2875 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0312** | **0.1602** | **0.3566** | **6.3000e-004** | | **7.4400e-003** | **7.4400e-003** | | **7.4400e-003** | **7.4400e-003** | **0.0000** | **54.2239** | **54.2239** | **2.5400e-003** | **0.0000** | **54.2875** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4000e-004 | 3.4000e-004 | 4.9900e-003 | 2.0000e-005 | 3.7000e-003 | 1.0000e-005 | 3.7200e-003 | 9.8000e-004 | 1.0000e-005 | 1.0000e-003 | 0.0000 | 2.2185 | 2.2185 | 3.0000e-005 | 0.0000 | 2.2192 |
| **Total** | **6.4000e-004** | **3.4000e-004** | **4.9900e-003** | **2.0000e-005** | **3.7000e-003** | **1.0000e-005** | **3.7200e-003** | **9.8000e-004** | **1.0000e-005** | **1.0000e-003** | **0.0000** | **2.2185** | **2.2185** | **3.0000e-005** | **0.0000** | **2.2192** |

## 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 | 0.0126 | 0.2033 | 0.3892 | 6.3000e-004 | | 2.0600e-003 | 2.0600e-003 | | 2.0600e-003 | 2.0600e-003 | 0.0000 | 54.2238 | 54.2238 | 2.5400e-003 | 0.0000 | 54.2874 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0126** | **0.2033** | **0.3892** | **6.3000e-004** | | **2.0600e-003** | **2.0600e-003** | | **2.0600e-003** | **2.0600e-003** | **0.0000** | **54.2238** | **54.2238** | **2.5400e-003** | **0.0000** | **54.2874** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4000e-004 | 3.4000e-004 | 4.9900e-003 | 2.0000e-005 | 3.7000e-003 | 1.0000e-005 | 3.7200e-003 | 9.8000e-004 | 1.0000e-005 | 1.0000e-003 | 0.0000 | 2.2185 | 2.2185 | 3.0000e-005 | 0.0000 | 2.2192 |
| **Total** | **6.4000e-004** | **3.4000e-004** | **4.9900e-003** | **2.0000e-005** | **3.7000e-003** | **1.0000e-005** | **3.7200e-003** | **9.8000e-004** | **1.0000e-005** | **1.0000e-003** | **0.0000** | **2.2185** | **2.2185** | **3.0000e-005** | **0.0000** | **2.2192** |

# 3.5 Architectural Coating - 2034

## Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4205 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 6.4100e-003 | 0.0420 | 0.0881 | 1.5000e-004 | | 9.9000e-004 | 9.9000e-004 | | 9.9000e-004 | 9.9000e-004 | 0.0000 | 12.5109 | 12.5109 | 5.1000e-004 | 0.0000 | 12.5236 |
| **Total** | **0.4270** | **0.0420** | **0.0881** | **1.5000e-004** | | **9.9000e-004** | **9.9000e-004** | | **9.9000e-004** | **9.9000e-004** | **0.0000** | **12.5109** | **12.5109** | **5.1000e-004** | **0.0000** | **12.5236** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0158 | 8.3100e-003 | 0.1225 | 6.0000e-004 | 0.0909 | 3.5000e-004 | 0.0912 | 0.0241 | 3.2000e-004 | 0.0245 | 0.0000 | 54.4329 | 54.4329 | 6.7000e-004 | 0.0000 | 54.4496 |
| **Total** | **0.0158** | **8.3100e-003** | **0.1225** | **6.0000e-004** | **0.0909** | **3.5000e-004** | **0.0912** | **0.0241** | **3.2000e-004** | **0.0245** | **0.0000** | **54.4329** | **54.4329** | **6.7000e-004** | **0.0000** | **54.4496** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4205 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 2.9100e-003 | 0.0532 | 0.0898 | 1.5000e-004 | | 7.0000e-004 | 7.0000e-004 | | 7.0000e-004 | 7.0000e-004 | 0.0000 | 12.5109 | 12.5109 | 5.1000e-004 | 0.0000 | 12.5236 |
| **Total** | **0.4235** | **0.0532** | **0.0898** | **1.5000e-004** | | **7.0000e-004** | **7.0000e-004** | | **7.0000e-004** | **7.0000e-004** | **0.0000** | **12.5109** | **12.5109** | **5.1000e-004** | **0.0000** | **12.5236** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0158 | 8.3100e-003 | 0.1225 | 6.0000e-004 | 0.0909 | 3.5000e-004 | 0.0912 | 0.0241 | 3.2000e-004 | 0.0245 | 0.0000 | 54.4329 | 54.4329 | 6.7000e-004 | 0.0000 | 54.4496 |
| **Total** | **0.0158** | **8.3100e-003** | **0.1225** | **6.0000e-004** | **0.0909** | **3.5000e-004** | **0.0912** | **0.0241** | **3.2000e-004** | **0.0245** | **0.0000** | **54.4329** | **54.4329** | **6.7000e-004** | **0.0000** | **54.4496** |

## 4.0 Operational Detail - Mobile

### 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 | 0.0122 | 0.0757 | 0.1661 | 8.9000e-004 | 0.0981 | 4.4000e-004 | 0.0985 | 0.0263 | 4.1000e-004 | 0.0267 | 0.0000 | 83.1177 | 83.1177 | 3.1300e-003 | 0.0000 | 83.1961 |
| Unmitigated | 0.0122 | 0.0757 | 0.1661 | 8.9000e-004 | 0.0981 | 4.4000e-004 | 0.0985 | 0.0263 | 4.1000e-004 | 0.0267 | 0.0000 | 83.1177 | 83.1177 | 3.1300e-003 | 0.0000 | 83.1961 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Single Family Housing | 76.16 | 79.28 | 68.96 | 258,259 | 258,259 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Total | 76.16 | 79.28 | 68.96 | 258,259 | 258,259 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-[illegible] | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 0.554218 | 0.041286 | 0.206644 | 0.110669 | 0.012238 | 0.005777 | 0.022663 | 0.036578 | 0.002204 | 0.001416 | 0.004855 | 0.000716 | 0.000735 |
| Other Non-Asphalt Surfaces | 0.554218 | 0.041286 | 0.206644 | 0.110669 | 0.012238 | 0.005777 | 0.022663 | 0.036578 | 0.002204 | 0.001416 | 0.004855 | 0.000716 | 0.000735 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 22.2181 | 22.2181 | 9.2000e-004 | 1.9000e-004 | 22.2975 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 22.2181 | 22.2181 | 9.2000e-004 | 1.9000e-004 | 22.2975 |
| NaturalGas Mitigated | 1.3200e-003 | 0.0113 | 4.8000e-003 | 7.0000e-005 | | 9.1000e-004 | 9.1000e-004 | | 9.1000e-004 | 9.1000e-004 | 0.0000 | 13.0618 | 13.0618 | 2.5000e-004 | 2.4000e-004 | 13.1394 |
| NaturalGas Unmitigated | 1.3200e-003 | 0.0113 | 4.8000e-003 | 7.0000e-005 | | 9.1000e-004 | 9.1000e-004 | | 9.1000e-004 | 9.1000e-004 | 0.0000 | 13.0618 | 13.0618 | 2.5000e-004 | 2.4000e-004 | 13.1394 |

## 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 | | | | | |
| 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 |
| Single Family Housing | 244769 | 1.3200e-003 | 0.0113 | 4.8000e-003 | 7.0000e-005 | | 9.1000e-004 | 9.1000e-004 | | 9.1000e-004 | 9.1000e-004 | 0.0000 | 13.0618 | 13.0618 | 2.5000e-004 | 2.4000e-004 | 13.1394 |
| **Total** | | **1.3200e-003** | **0.0113** | **4.8000e-003** | **7.0000e-005** | | **9.1000e-004** | **9.1000e-004** | | **9.1000e-004** | **9.1000e-004** | **0.0000** | **13.0618** | **13.0618** | **2.5000e-004** | **2.4000e-004** | **13.1394** |

### 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 | | | | | |
| 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 |
| Single Family Housing | 244769 | 1.3200e-003 | 0.0113 | 4.8000e-003 | 7.0000e-005 | | 9.1000e-004 | 9.1000e-004 | | 9.1000e-004 | 9.1000e-004 | 0.0000 | 13.0618 | 13.0618 | 2.5000e-004 | 2.4000e-004 | 13.1394 |
| **Total** | | **1.3200e-003** | **0.0113** | **4.8000e-003** | **7.0000e-005** | | **9.1000e-004** | **9.1000e-004** | | **9.1000e-004** | **9.1000e-004** | **0.0000** | **13.0618** | **13.0618** | **2.5000e-004** | **2.4000e-004** | **13.1394** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 69731.8 | 22.2181 | 9.2000e-004 | 1.9000e-004 | 22.2975 |
| **Total** | | **22.2181** | **9.2000e-004** | **1.9000e-004** | **22.2975** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 69731.8 | 22.2181 | 9.2000e-004 | 1.9000e-004 | 22.2975 |
| **Total** | | **22.2181** | **9.2000e-004** | **1.9000e-004** | **22.2975** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.3642 | 3.0300e-003 | 0.1337 | 1.3000e-004 | | 8.1000e-003 | 8.1000e-003 | | 8.1000e-003 | 8.1000e-003 | 0.8498 | 1.7688 | 2.6186 | 2.6700e-003 | 6.0000e-005 | 2.7024 |
| Unmitigated | 0.3642 | 3.0300e-003 | 0.1337 | 1.3000e-004 | | 8.1000e-003 | 8.1000e-003 | | 8.1000e-003 | 8.1000e-003 | 0.8498 | 1.7688 | 2.6186 | 2.6700e-003 | 6.0000e-005 | 2.7024 |

## 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 | 0.0421 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.2934 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0262 | 2.0700e-003 | 0.0509 | 1.3000e-004 | | 7.6400e-003 | 7.6400e-003 | | 7.6400e-003 | 7.6400e-003 | 0.8498 | 1.6329 | 2.4827 | 2.5300e-003 | 6.0000e-005 | 2.5632 |
| Landscaping | 2.5100e-003 | 9.5000e-004 | 0.0828 | 0.0000 | | 4.6000e-004 | 4.6000e-004 | | 4.6000e-004 | 4.6000e-004 | 0.0000 | 0.1359 | 0.1359 | 1.3000e-004 | 0.0000 | 0.1392 |
| **Total** | **0.3642** | **3.0200e-003** | **0.1337** | **1.3000e-004** | | **8.1000e-003** | **8.1000e-003** | | **8.1000e-003** | **8.1000e-003** | **0.8498** | **1.7688** | **2.6186** | **2.6600e-003** | **6.0000e-005** | **2.7024** |

**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 | 0.0421 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.2934 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0262 | 2.0700e-003 | 0.0509 | 1.3000e-004 | | 7.6400e-003 | 7.6400e-003 | | 7.6400e-003 | 7.6400e-003 | 0.8498 | 1.6329 | 2.4827 | 2.5300e-003 | 6.0000e-005 | 2.5632 |
| Landscaping | 2.5100e-003 | 9.5000e-004 | 0.0828 | 0.0000 | | 4.6000e-004 | 4.6000e-004 | | 4.6000e-004 | 4.6000e-004 | 0.0000 | 0.1359 | 0.1359 | 1.3000e-004 | 0.0000 | 0.1392 |
| **Total** | **0.3642** | **3.0200e-003** | **0.1337** | **1.3000e-004** | | **8.1000e-003** | **8.1000e-003** | | **8.1000e-003** | **8.1000e-003** | **0.8498** | **1.7688** | **2.6186** | **2.6600e-003** | **6.0000e-005** | **2.7024** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 2.9545 | 0.0137 | 3.4000e-004 | 3.3999 |
| Unmitigated | 3.4911 | 0.0171 | 4.3000e-004 | 4.0471 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 0.521232 / 0.328603 | 3.4911 | 0.0171 | 4.3000e-004 | 4.0471 |
| **Total** | | **3.4911** | **0.0171** | **4.3000e-004** | **4.0471** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 0.416986 / 0.308558 | 2.9545 | 0.0137 | 3.4000e-004 | 3.3999 |
| **Total** | | **2.9545** | **0.0137** | **3.4000e-004** | **3.3999** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 1.9142 | 0.1131 | 0.0000 | 4.7424 |
| Unmitigated | 1.9142 | 0.1131 | 0.0000 | 4.7424 |

## 8.2 Waste by Land Use

### Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 9.43 | 1.9142 | 0.1131 | 0.0000 | 4.7424 |
| **Total** | | **1.9142** | **0.1131** | **0.0000** | **4.7424** |

### Mitigated

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

| | | | | | |
|---|---|---|---|---|---|
| Single Family Housing | 9.43 | 1.9142 | 0.1131 | 0.0000 | 4.7424 |
| **Total** | | **1.9142** | **0.1131** | **0.0000** | **4.7424** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

Phase VIII Construction - South Coast Air Basin, Summer

# Phase VIII Construction

**South Coast Air Basin, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 8.00 | Dwelling Unit | 2.00 | 45,362.00 | 23 |
| Other Non-Asphalt Surfaces | 46.00 | Acre | 46.00 | 2,003,760.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2035 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary
Other Non-Asphalt includes Community Parks (External) and Utility Corridor/Bank Easement
Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Vehicle Trips -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
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| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 55.00 | 98.00 |
| tblConstructionPhase | NumDays | 740.00 | 295.00 |
| tblConstructionPhase | NumDays | 55.00 | 45.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 8/8/2036 | 6/24/2034 |
| tblConstructionPhase | PhaseEndDate | 3/7/2036 | 6/24/2034 |
| tblConstructionPhase | PhaseEndDate | 5/23/2036 | 6/24/2034 |
| tblConstructionPhase | PhaseStartDate | 5/24/2036 | 2/8/2034 |
| tblConstructionPhase | PhaseStartDate | 3/8/2036 | 4/24/2034 |
| tblLandUse | LandUseSquareFeet | 14,400.00 | 45,362.00 |
| tblLandUse | LotAcreage | 2.60 | 2.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2033 | 3.5615 | 29.7603 | 36.2690 | 0.1729 | 11.5393 | 0.4888 | 11.7478 | 3.6558 | 0.4888 | 4.1446 | 0.0000 | 17,677.3387 | 17,677.3387 | 0.6185 | 0.0000 | 17,692.8022 |
| 2034 | 13.9012 | 37.7305 | 56.0912 | 0.2168 | 13.5960 | 0.5644 | 14.1604 | 3.6535 | 0.5600 | 4.2134 | 0.0000 | 21,901.8640 | 21,901.8640 | 0.7623 | 0.0000 | 21,920.9207 |
| **Maximum** | **13.9012** | **37.7305** | **56.0912** | **0.2168** | **13.5960** | **0.5644** | **14.1604** | **3.6558** | **0.5600** | **4.2134** | **0.0000** | **21,901.8640** | **21,901.8640** | **0.7623** | **0.0000** | **21,920.9207** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2033 | 2.9263 | 33.2065 | 37.9858 | 0.1729 | 11.5393 | 0.1959 | 11.7352 | 3.1080 | 0.1958 | 3.2999 | 0.0000 | 17,677.3387 | 17,677.3387 | 0.6185 | 0.0000 | 17,692.8022 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2034 | 12.3710 | 43.3219 | 59.2888 | 0.2168 | 13.5960 | 0.3065 | 13.9025 | 3.6535 | 0.3021 | 3.9555 | 0.0000 | 21,901.8640 | 21,901.8640 | 0.7623 | 0.0000 | 21,920.9207 |
| **Maximum** | **12.3710** | **43.3219** | **59.2888** | **0.2168** | **13.5960** | **0.3065** | **13.9025** | **3.6535** | **0.3021** | **3.9555** | **0.0000** | **21,901.8640** | **21,901.8640** | **0.7623** | **0.0000** | **21,920.9207** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **12.40** | **-13.39** | **-5.32** | **0.00** | **0.00** | **52.30** | **1.04** | **7.49** | **52.53** | **13.19** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 3.9547 | 0.1736 | 4.7308 | 0.0104 | | 0.6148 | 0.6148 | | 0.6148 | 0.6148 | 74.9354 | 145.1985 | 220.1338 | 0.2246 | 5.0900e-003 | 227.2652 |
| Energy | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |
| Mobile | 0.0753 | 0.4259 | 1.0061 | 5.3300e-003 | 0.5757 | 2.5300e-003 | 0.5782 | 0.1540 | 2.3500e-003 | 0.1563 | | 547.6126 | 547.6126 | 0.0199 | | 548.1106 |
| **Total** | **4.0372** | **0.6613** | **5.7632** | **0.0161** | **0.5757** | **0.6223** | **1.1980** | **0.1540** | **0.6221** | **0.7761** | **74.9354** | **771.7053** | **846.6406** | **0.2461** | **6.5400e-003** | **854.7389** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 3.9547 | 0.1736 | 4.7308 | 0.0104 | | 0.6148 | 0.6148 | | 0.6148 | 0.6148 | 74.9354 | 145.1985 | 220.1338 | 0.2246 | 5.0900e-003 | 227.2652 |
| Energy | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 0.0753 | 0.4259 | 1.0061 | 5.3300e-003 | 0.5757 | 2.5300e-003 | 0.5782 | 0.1540 | 2.3500e-003 | 0.1563 | | 547.6126 | 547.6126 | 0.0199 | | 548.1106 |
| **Total** | **4.0372** | **0.6613** | **5.7632** | **0.0161** | **0.5757** | **0.6223** | **1.1980** | **0.1540** | **0.6221** | **0.7761** | **74.9354** | **771.7053** | **846.6406** | **0.2461** | **6.5400e-003** | **854.7389** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/24/2033 | 5/6/2033 | 5 | 75 | |
| 2 | Building Construction | Building Construction | 5/7/2033 | 6/24/2034 | 5 | 295 | |
| 3 | Paving | Paving | 4/24/2034 | 6/24/2034 | 5 | 45 | |
| 4 | Architectural Coating | Architectural Coating | 2/8/2034 | 6/24/2034 | 5 | 98 | |

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

**Acres of Grading (Grading Phase): 187.5**

**Acres of Paving: 46**

**Residential Indoor: 91,858; Residential Outdoor: 30,619; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 844.00 | 329.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 169.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2807 | 13.8462 | 23.0239 | 0.0699 | | 0.4879 | 0.4879 | | 0.4879 | 0.4879 | | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **3.2807** | **13.8462** | **23.0239** | **0.0699** | **8.6733** | **0.4879** | **9.1613** | **3.5965** | **0.4879** | **4.0844** | | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0404 | 0.0192 | 0.3416 | 1.5500e-003 | 0.2236 | 9.0000e-004 | 0.2245 | 0.0593 | 8.3000e-004 | 0.0601 | | 154.7191 | 154.7191 | 2.0600e-003 | | 154.7707 |
| **Total** | **0.0404** | **0.0192** | **0.3416** | **1.5500e-003** | **0.2236** | **9.0000e-004** | **0.2245** | **0.0593** | **8.3000e-004** | **0.0601** | | **154.7191** | **154.7191** | **2.0600e-003** | | **154.7707** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0404 | 0.0192 | 0.3416 | 1.5500e-003 | 0.2236 | 9.0000e-004 | 0.2245 | 0.0593 | 8.3000e-004 | 0.0601 | | 154.7191 | 154.7191 | 2.0600e-003 | | 154.7707 |
| **Total** | **0.0404** | **0.0192** | **0.3416** | **1.5500e-003** | **0.2236** | **9.0000e-004** | **0.2245** | **0.0593** | **8.3000e-004** | **0.0601** | | **154.7191** | **154.7191** | **2.0600e-003** | | **154.7707** |

## 3.3 Building Construction - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.5490 | 21.0176 | 5.6947 | 0.0766 | 2.1053 | 0.0222 | 2.1276 | 0.6061 | 0.0213 | 0.6273 | | 8,250.6441 | 8,250.6441 | 0.4153 | | 8,261.0258 |
| Worker | 1.7034 | 0.8080 | 14.4174 | 0.0654 | 9.4339 | 0.0382 | 9.4721 | 2.5019 | 0.0351 | 2.5370 | | 6,529.1478 | 6,529.1478 | 0.0870 | | 6,531.3236 |
| **Total** | **2.2524** | **21.8256** | **20.1120** | **0.1420** | **11.5393** | **0.0604** | **11.5996** | **3.1080** | **0.0563** | **3.1643** | | **14,779.7919** | **14,779.7919** | **0.5023** | | **14,792.3494** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.5490 | 21.0176 | 5.6947 | 0.0766 | 2.1053 | 0.0222 | 2.1276 | 0.6061 | 0.0213 | 0.6273 | | 8,250.6441 | 8,250.6441 | 0.4153 | | 8,261.0258 |
| Worker | 1.7034 | 0.8080 | 14.4174 | 0.0654 | 9.4339 | 0.0382 | 9.4721 | 2.5019 | 0.0351 | 2.5370 | | 6,529.1478 | 6,529.1478 | 0.0870 | | 6,531.3236 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **2.2524** | **21.8256** | **20.1120** | **0.1420** | **11.5393** | **0.0604** | **11.5996** | **3.1080** | **0.0563** | **3.1643** | | **14,779.7919** | **14,779.7919** | **0.5023** | | **14,792.3494** |

## 3.3 Building Construction - 2034

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.5457 | 20.9033 | 5.6751 | 0.0765 | 2.1053 | 0.0220 | 2.1273 | 0.6061 | 0.0210 | 0.6271 | | 8,239.9547 | 8,239.9547 | 0.4126 | | 8,250.2691 |
| Worker | 1.5998 | 0.7521 | 13.6385 | 0.0644 | 9.4339 | 0.0356 | 9.4696 | 2.5019 | 0.0328 | 2.5347 | | 6,425.5638 | 6,425.5638 | 0.0801 | | 6,427.5656 |
| **Total** | **2.1455** | **21.6554** | **19.3136** | **0.1408** | **11.5393** | **0.0576** | **11.5969** | **3.1080** | **0.0538** | **3.1618** | | **14,665.5186** | **14,665.5186** | **0.4926** | | **14,677.8347** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.5457 | 20.9033 | 5.6751 | 0.0765 | 2.1053 | 0.0220 | 2.1273 | 0.6061 | 0.0210 | 0.6271 | | 8,239.9547 | 8,239.9547 | 0.4126 | | 8,250.2691 |
| Worker | 1.5998 | 0.7521 | 13.6385 | 0.0644 | 9.4339 | 0.0356 | 9.4696 | 2.5019 | 0.0328 | 2.5347 | | 6,425.5638 | 6,425.5638 | 0.0801 | | 6,427.5656 |
| **Total** | **2.1455** | **21.6554** | **19.3136** | **0.1408** | **11.5393** | **0.0576** | **11.5969** | **3.1080** | **0.0538** | **3.1618** | | **14,665.5186** | **14,665.5186** | **0.4926** | | **14,677.8347** |

## 3.4 Paving - 2034

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 1.3845 | 7.1202 | 15.8495 | 0.0281 | | 0.3306 | 0.3306 | | 0.3306 | 0.3306 | | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3845** | **7.1202** | **15.8495** | **0.0281** | | **0.3306** | **0.3306** | | **0.3306** | **0.3306** | | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0284 | 0.0134 | 0.2424 | 1.1400e-003 | 0.1677 | 6.3000e-004 | 0.1683 | 0.0445 | 5.8000e-004 | 0.0451 | | 114.1984 | 114.1984 | 1.4200e-003 | | 114.2340 |
| **Total** | **0.0284** | **0.0134** | **0.2424** | **1.1400e-003** | **0.1677** | **6.3000e-004** | **0.1683** | **0.0445** | **5.8000e-004** | **0.0451** | | **114.1984** | **114.1984** | **1.4200e-003** | | **114.2340** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0284 | 0.0134 | 0.2424 | 1.1400e-003 | 0.1677 | 6.3000e-004 | 0.1683 | 0.0445 | 5.8000e-004 | 0.0451 | | 114.1984 | 114.1984 | 1.4200e-003 | | 114.2340 |
| **Total** | **0.0284** | **0.0134** | **0.2424** | **1.1400e-003** | **0.1677** | **6.3000e-004** | **0.1683** | **0.0445** | **5.8000e-004** | **0.0451** | | **114.1984** | **114.1984** | **1.4200e-003** | | **114.2340** |

## 3.5 Architectural Coating - 2034

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 8.5825 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **8.7133** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3203 | 0.1506 | 2.7309 | 0.0129 | 1.8890 | 7.1300e-003 | 1.8962 | 0.5010 | 6.5600e-003 | 0.5075 | | 1,286.6354 | 1,286.6354 | 0.0160 | | 1,287.0362 |
| **Total** | **0.3203** | **0.1506** | **2.7309** | **0.0129** | **1.8890** | **7.1300e-003** | **1.8962** | **0.5010** | **6.5600e-003** | **0.5075** | | **1,286.6354** | **1,286.6354** | **0.0160** | | **1,287.0362** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 8.5825 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **8.6420** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3203 | 0.1506 | 2.7309 | 0.0129 | 1.8890 | 7.1300e-003 | 1.8962 | 0.5010 | 6.5600e-003 | 0.5075 | | 1,286.6354 | 1,286.6354 | 0.0160 | | 1,287.0362 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.3203** | **0.1506** | **2.7309** | **0.0129** | **1.8890** | **7.1300e-003** | **1.8962** | **0.5010** | **6.5600e-003** | **0.5075** | | **1,286.6354** | **1,286.6354** | **0.0160** | | **1,287.0362** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.0753 | 0.4259 | 1.0061 | 5.3300e-003 | 0.5757 | 2.5300e-003 | 0.5782 | 0.1540 | 2.3500e-003 | 0.1563 | | 547.6126 | 547.6126 | 0.0199 | | 548.1106 |
| Unmitigated | 0.0753 | 0.4259 | 1.0061 | 5.3300e-003 | 0.5757 | 2.5300e-003 | 0.5782 | 0.1540 | 2.3500e-003 | 0.1563 | | 547.6126 | 547.6126 | 0.0199 | | 548.1106 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Single Family Housing | 76.16 | 79.28 | 68.96 | 258,259 | 258,259 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Total | 76.16 | 79.28 | 68.96 | 258,259 | 258,259 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 0.554218 | 0.041286 | 0.206644 | 0.110669 | 0.012238 | 0.005777 | 0.022663 | 0.036578 | 0.002204 | 0.001416 | 0.004855 | 0.000716 | 0.000735 |
| Other Non-Asphalt Surfaces | 0.554218 | 0.041286 | 0.206644 | 0.110669 | 0.012238 | 0.005777 | 0.022663 | 0.036578 | 0.002204 | 0.001416 | 0.004855 | 0.000716 | 0.000735 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |
| NaturalGas Unmitigated | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 670.601 | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | | **7.2300e-003** | **0.0618** | **0.0263** | **3.9000e-004** | | **5.0000e-003** | **5.0000e-003** | | **5.0000e-003** | **5.0000e-003** | | **78.8942** | **78.8942** | **1.5100e-003** | **1.4500e-003** | **79.3630** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 0.670601 | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |
| **Total** | | **7.2300e-003** | **0.0618** | **0.0263** | **3.9000e-004** | | **5.0000e-003** | **5.0000e-003** | | **5.0000e-003** | **5.0000e-003** | | **78.8942** | **78.8942** | **1.5100e-003** | **1.4500e-003** | **79.3630** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mitigated | 3.9547 | 0.1736 | 4.7308 | 0.0104 | | 0.6148 | 0.6148 | | 0.6148 | 0.6148 | 74.9354 | 145.1985 | 220.1338 | 0.2246 | 5.0900e-003 | 227.2652 |
| Unmitigated | 3.9547 | 0.1736 | 4.7308 | 0.0104 | | 0.6148 | 0.6148 | | 0.6148 | 0.6148 | 74.9354 | 145.1985 | 220.1338 | 0.2246 | 5.0900e-003 | 227.2652 |

## 6.2 Area by SubCategory

### Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2304 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1.6079 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 2.0963 | 0.1660 | 4.0684 | 0.0104 | | 0.6111 | 0.6111 | | 0.6111 | 0.6111 | 74.9354 | 144.0000 | 218.9354 | 0.2235 | 5.0900e-003 | 226.0378 |
| Landscaping | 0.0201 | 7.6300e-003 | 0.6624 | 4.0000e-005 | | 3.6800e-003 | 3.6800e-003 | | 3.6800e-003 | 3.6800e-003 | | 1.1985 | 1.1985 | 1.1600e-003 | | 1.2274 |
| **Total** | **3.9547** | **0.1736** | **4.7308** | **0.0104** | | **0.6148** | **0.6148** | | **0.6148** | **0.6148** | **74.9354** | **145.1985** | **220.1338** | **0.2246** | **5.0900e-003** | **227.2652** |

### Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2304 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1.6079 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 2.0963 | 0.1660 | 4.0684 | 0.0104 | | 0.6111 | 0.6111 | | 0.6111 | 0.6111 | 74.9354 | 144.0000 | 218.9354 | 0.2235 | 5.0900e-003 | 226.0378 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landscaping | 0.0201 | 7.6300e-003 | 0.6624 | 4.0000e-005 | | 3.6800e-003 | 3.6800e-003 | | 3.6800e-003 | 3.6800e-003 | | 1.1985 | 1.1985 | 1.1600e-003 | | 1.2274 |
| **Total** | **3.9547** | **0.1736** | **4.7308** | **0.0104** | | **0.6148** | **0.6148** | | **0.6148** | **0.6148** | **74.9354** | **145.1985** | **220.1338** | **0.2246** | **5.0900e-003** | **227.2652** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase VIII Construction - South Coast Air Basin, Winter

# Phase VIII Construction

**South Coast Air Basin, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 8.00 | Dwelling Unit | 2.00 | 45,362.00 | 23 |
| Other Non-Asphalt Surfaces | 46.00 | Acre | 46.00 | 2,003,760.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2035 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary
Other Non-Asphalt includes Community Parks (External) and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4
Area Mitigation -

Water Mitigation -

Vehicle Trips -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 55.00 | 98.00 |
| tblConstructionPhase | NumDays | 740.00 | 295.00 |
| tblConstructionPhase | NumDays | 55.00 | 45.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 8/8/2036 | 6/24/2034 |
| tblConstructionPhase | PhaseEndDate | 3/7/2036 | 6/24/2034 |
| tblConstructionPhase | PhaseEndDate | 5/23/2036 | 6/24/2034 |
| tblConstructionPhase | PhaseStartDate | 5/24/2036 | 2/8/2034 |
| tblConstructionPhase | PhaseStartDate | 3/8/2036 | 4/24/2034 |
| tblLandUse | LandUseSquareFeet | 14,400.00 | 45,362.00 |
| tblLandUse | LotAcreage | 2.60 | 2.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2033 | 3.8140 | 29.7214 | 35.1970 | 0.1668 | 11.5393 | 0.4888 | 11.7482 | 3.6558 | 0.4888 | 4.1446 | 0.0000 | 17,050.7867 | 17,050.7867 | 0.6337 | 0.0000 | 17,066.6294 |
| 2034 | 14.1896 | 37.6996 | 54.7522 | 0.2099 | 13.5960 | 0.5648 | 14.1608 | 3.6535 | 0.5603 | 4.2138 | 0.0000 | 21,192.4613 | 21,192.4613 | 0.7763 | 0.0000 | 21,211.8673 |
| **Maximum** | **14.1896** | **37.6996** | **54.7522** | **0.2099** | **13.5960** | **0.5648** | **14.1608** | **3.6558** | **0.5603** | **4.2138** | **0.0000** | **21,192.4613** | **21,192.4613** | **0.7763** | **0.0000** | **21,211.8673** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2033 | 3.1788 | 33.1676 | 37.0264 | 0.1668 | 11.5393 | 0.1963 | 11.7356 | 3.1080 | 0.1958 | 3.3003 | 0.0000 | 17,050.7867 | 17,050.7867 | 0.6337 | 0.0000 | 17,066.6294 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2034 | 12.6595 | 43.2911 | 57.9498 | 0.2099 | 13.5960 | 0.3069 | 13.9029 | 3.6535 | 0.3024 | 3.9559 | 0.0000 | 21,192.4613 | 21,192.4613 | 0.7763 | 0.0000 | 21,211.8673 |
| **Maximum** | **12.6595** | **43.2911** | **57.9498** | **0.2099** | **13.5960** | **0.3069** | **13.9029** | **3.6535** | **0.3024** | **3.9559** | **0.0000** | **21,192.4613** | **21,192.4613** | **0.7763** | **0.0000** | **21,211.8673** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **12.03** | **-13.40** | **-5.59** | **0.00** | **0.00** | **52.24** | **1.04** | **7.49** | **52.51** | **13.19** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 3.9547 | 0.1736 | 4.7308 | 0.0104 | | 0.6148 | 0.6148 | | 0.6148 | 0.6148 | 74.9354 | 145.1985 | 220.1338 | 0.2246 | 5.0900e-003 | 227.2652 |
| Energy | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |
| Mobile | 0.0722 | 0.4299 | 0.9444 | 5.0700e-003 | 0.5757 | 2.5400e-003 | 0.5782 | 0.1540 | 2.3600e-003 | 0.1563 | | 521.2347 | 521.2347 | 0.0201 | | 521.7368 |
| **Total** | **4.0341** | **0.6653** | **5.7015** | **0.0159** | **0.5757** | **0.6223** | **1.1980** | **0.1540** | **0.6221** | **0.7761** | **74.9354** | **745.3273** | **820.2627** | **0.2462** | **6.5400e-003** | **828.3650** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 3.9547 | 0.1736 | 4.7308 | 0.0104 | | 0.6148 | 0.6148 | | 0.6148 | 0.6148 | 74.9354 | 145.1985 | 220.1338 | 0.2246 | 5.0900e-003 | 227.2652 |
| Energy | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 0.0722 | 0.4299 | 0.9444 | 5.0700e-003 | 0.5757 | 2.5400e-003 | 0.5782 | 0.1540 | 2.3600e-003 | 0.1563 | | 521.2347 | 521.2347 | 0.0201 | | 521.7368 |
| **Total** | **4.0341** | **0.6653** | **5.7015** | **0.0159** | **0.5757** | **0.6223** | **1.1980** | **0.1540** | **0.6221** | **0.7761** | **74.9354** | **745.3273** | **820.2627** | **0.2462** | **6.5400e-003** | **828.3650** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/24/2033 | 5/6/2033 | 5 | 75 | |
| 2 | Building Construction | Building Construction | 5/7/2033 | 6/24/2034 | 5 | 295 | |
| 3 | Paving | Paving | 4/24/2034 | 6/24/2034 | 5 | 45 | |
| 4 | Architectural Coating | Architectural Coating | 2/8/2034 | 6/24/2034 | 5 | 98 | |

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

**Acres of Grading (Grading Phase): 187.5**

**Acres of Paving: 46**

**Residential Indoor: 91,858; Residential Outdoor: 30,619; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 844.00 | 329.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 169.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2807 | 13.8462 | 23.0239 | 0.0699 | | 0.4879 | 0.4879 | | 0.4879 | 0.4879 | | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **3.2807** | **13.8462** | **23.0239** | **0.0699** | **8.6733** | **0.4879** | **9.1613** | **3.5965** | **0.4879** | **4.0844** | | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0457 | 0.0209 | 0.3039 | 1.4500e-003 | 0.2236 | 9.0000e-004 | 0.2245 | 0.0593 | 8.3000e-004 | 0.0601 | | 144.9687 | 144.9687 | 1.9100e-003 | | 145.0164 |
| **Total** | **0.0457** | **0.0209** | **0.3039** | **1.4500e-003** | **0.2236** | **9.0000e-004** | **0.2245** | **0.0593** | **8.3000e-004** | **0.0601** | | **144.9687** | **144.9687** | **1.9100e-003** | | **145.0164** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0457 | 0.0209 | 0.3039 | 1.4500e-003 | 0.2236 | 9.0000e-004 | 0.2245 | 0.0593 | 8.3000e-004 | 0.0601 | | 144.9687 | 144.9687 | 1.9100e-003 | | 145.0164 |
| **Total** | **0.0457** | **0.0209** | **0.3039** | **1.4500e-003** | **0.2236** | **9.0000e-004** | **0.2245** | **0.0593** | **8.3000e-004** | **0.0601** | | **144.9687** | **144.9687** | **1.9100e-003** | | **145.0164** |

## 3.3 Building Construction - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.5760 | 20.9041 | 6.2173 | 0.0746 | 2.1053 | 0.0226 | 2.1280 | 0.6061 | 0.0216 | 0.6277 | | 8,035.5616 | 8,035.5616 | 0.4369 | | 8,046.4841 |
| Worker | 1.9289 | 0.8827 | 12.8226 | 0.0613 | 9.4339 | 0.0382 | 9.4721 | 2.5019 | 0.0351 | 2.5370 | | 6,117.6784 | 6,117.6784 | 0.0806 | | 6,119.6925 |
| **Total** | **2.5049** | **21.7867** | **19.0400** | **0.1359** | **11.5393** | **0.0608** | **11.6001** | **3.1080** | **0.0567** | **3.1647** | | **14,153.2399** | **14,153.2399** | **0.5175** | | **14,166.1766** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.5760 | 20.9041 | 6.2173 | 0.0746 | 2.1053 | 0.0226 | 2.1280 | 0.6061 | 0.0216 | 0.6277 | | 8,035.5616 | 8,035.5616 | 0.4369 | | 8,046.4841 |
| Worker | 1.9289 | 0.8827 | 12.8226 | 0.0613 | 9.4339 | 0.0382 | 9.4721 | 2.5019 | 0.0351 | 2.5370 | | 6,117.6784 | 6,117.6784 | 0.0806 | | 6,119.6925 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **2.5049** | **21.7867** | **19.0400** | **0.1359** | **11.5393** | **0.0608** | **11.6001** | **3.1080** | **0.0567** | **3.1647** | | **14,153.2399** | **14,153.2399** | **0.5175** | | **14,166.1766** |

## 3.3 Building Construction - 2034

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.5725 | 20.7884 | 6.1967 | 0.0745 | 2.1053 | 0.0223 | 2.1277 | 0.6061 | 0.0213 | 0.6274 | | 8,024.6745 | 8,024.6745 | 0.4339 | | 8,035.5216 |
| Worker | 1.8146 | 0.8210 | 12.1109 | 0.0603 | 9.4339 | 0.0356 | 9.4696 | 2.5019 | 0.0328 | 2.5347 | | 6,019.8836 | 6,019.8836 | 0.0740 | | 6,021.7347 |
| **Total** | **2.3871** | **21.6095** | **18.3077** | **0.1348** | **11.5393** | **0.0580** | **11.5972** | **3.1080** | **0.0541** | **3.1621** | | **14,044.5580** | **14,044.5580** | **0.5079** | | **14,057.2563** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.5725 | 20.7884 | 6.1967 | 0.0745 | 2.1053 | 0.0223 | 2.1277 | 0.6061 | 0.0213 | 0.6274 | | 8,024.6745 | 8,024.6745 | 0.4339 | | 8,035.5216 |
| Worker | 1.8146 | 0.8210 | 12.1109 | 0.0603 | 9.4339 | 0.0356 | 9.4696 | 2.5019 | 0.0328 | 2.5347 | | 6,019.8836 | 6,019.8836 | 0.0740 | | 6,021.7347 |
| **Total** | **2.3871** | **21.6095** | **18.3077** | **0.1348** | **11.5393** | **0.0580** | **11.5972** | **3.1080** | **0.0541** | **3.1621** | | **14,044.5580** | **14,044.5580** | **0.5079** | | **14,057.2563** |

## 3.4 Paving - 2034

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 1.3845 | 7.1202 | 15.8495 | 0.0281 | | 0.3306 | 0.3306 | | 0.3306 | 0.3306 | | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.3845** | **7.1202** | **15.8495** | **0.0281** | | **0.3306** | **0.3306** | | **0.3306** | **0.3306** | | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0323 | 0.0146 | 0.2152 | 1.0700e-003 | 0.1677 | 6.3000e-004 | 0.1683 | 0.0445 | 5.8000e-004 | 0.0451 | | 106.9885 | 106.9885 | 1.3200e-003 | | 107.0214 |
| **Total** | **0.0323** | **0.0146** | **0.2152** | **1.0700e-003** | **0.1677** | **6.3000e-004** | **0.1683** | **0.0445** | **5.8000e-004** | **0.0451** | | **106.9885** | **106.9885** | **1.3200e-003** | | **107.0214** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1245 | | 2,659.6302 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1245** | | **2,659.6302** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0323 | 0.0146 | 0.2152 | 1.0700e-003 | 0.1677 | 6.3000e-004 | 0.1683 | 0.0445 | 5.8000e-004 | 0.0451 | | 106.9885 | 106.9885 | 1.3200e-003 | | 107.0214 |
| **Total** | **0.0323** | **0.0146** | **0.2152** | **1.0700e-003** | **0.1677** | **6.3000e-004** | **0.1683** | **0.0445** | **5.8000e-004** | **0.0451** | | **106.9885** | **106.9885** | **1.3200e-003** | | **107.0214** |

## 3.5 Architectural Coating - 2034

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 8.5825 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **8.7133** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3634 | 0.1644 | 2.4251 | 0.0121 | 1.8890 | 7.1300e-003 | 1.8962 | 0.5010 | 6.5600e-003 | 0.5075 | | 1,205.4032 | 1,205.4032 | 0.0148 | | 1,205.7739 |
| **Total** | **0.3634** | **0.1644** | **2.4251** | **0.0121** | **1.8890** | **7.1300e-003** | **1.8962** | **0.5010** | **6.5600e-003** | **0.5075** | | **1,205.4032** | **1,205.4032** | **0.0148** | | **1,205.7739** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 8.5825 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **8.6420** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.3634 | 0.1644 | 2.4251 | 0.0121 | 1.8890 | 7.1300e-003 | 1.8962 | 0.5010 | 6.5600e-003 | 0.5075 | | 1,205.4032 | 1,205.4032 | 0.0148 | | 1,205.7739 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.3634** | **0.1644** | **2.4251** | **0.0121** | **1.8890** | **7.1300e-003** | **1.8962** | **0.5010** | **6.5600e-003** | **0.5075** | | **1,205.4032** | **1,205.4032** | **0.0148** | | **1,205.7739** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.0722 | 0.4299 | 0.9444 | 5.0700e-003 | 0.5757 | 2.5400e-003 | 0.5782 | 0.1540 | 2.3600e-003 | 0.1563 | | 521.2347 | 521.2347 | 0.0201 | | 521.7368 |
| Unmitigated | 0.0722 | 0.4299 | 0.9444 | 5.0700e-003 | 0.5757 | 2.5400e-003 | 0.5782 | 0.1540 | 2.3600e-003 | 0.1563 | | 521.2347 | 521.2347 | 0.0201 | | 521.7368 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Single Family Housing | 76.16 | 79.28 | 68.96 | 258,259 | 258,259 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Total | 76.16 | 79.28 | 68.96 | 258,259 | 258,259 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 0.554218 | 0.041286 | 0.206644 | 0.110669 | 0.012238 | 0.005777 | 0.022663 | 0.036578 | 0.002204 | 0.001416 | 0.004855 | 0.000716 | 0.000735 |
| Other Non-Asphalt Surfaces | 0.554218 | 0.041286 | 0.206644 | 0.110669 | 0.012238 | 0.005777 | 0.022663 | 0.036578 | 0.002204 | 0.001416 | 0.004855 | 0.000716 | 0.000735 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |
| NaturalGas Unmitigated | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 670.601 | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | | **7.2300e-003** | **0.0618** | **0.0263** | **3.9000e-004** | | **5.0000e-003** | **5.0000e-003** | | **5.0000e-003** | **5.0000e-003** | | **78.8942** | **78.8942** | **1.5100e-003** | **1.4500e-003** | **79.3630** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 0.670601 | 7.2300e-003 | 0.0618 | 0.0263 | 3.9000e-004 | | 5.0000e-003 | 5.0000e-003 | | 5.0000e-003 | 5.0000e-003 | | 78.8942 | 78.8942 | 1.5100e-003 | 1.4500e-003 | 79.3630 |
| **Total** | | **7.2300e-003** | **0.0618** | **0.0263** | **3.9000e-004** | | **5.0000e-003** | **5.0000e-003** | | **5.0000e-003** | **5.0000e-003** | | **78.8942** | **78.8942** | **1.5100e-003** | **1.4500e-003** | **79.3630** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mitigated | 3.9547 | 0.1736 | 4.7308 | 0.0104 | | 0.6148 | 0.6148 | | 0.6148 | 0.6148 | 74.9354 | 145.1985 | 220.1338 | 0.2246 | 5.0900e-003 | 227.2652 |
| Unmitigated | 3.9547 | 0.1736 | 4.7308 | 0.0104 | | 0.6148 | 0.6148 | | 0.6148 | 0.6148 | 74.9354 | 145.1985 | 220.1338 | 0.2246 | 5.0900e-003 | 227.2652 |

## 6.2 Area by SubCategory

### Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2304 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1.6079 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 2.0963 | 0.1660 | 4.0684 | 0.0104 | | 0.6111 | 0.6111 | | 0.6111 | 0.6111 | 74.9354 | 144.0000 | 218.9354 | 0.2235 | 5.0900e-003 | 226.0378 |
| Landscaping | 0.0201 | 7.6300e-003 | 0.6624 | 4.0000e-005 | | 3.6800e-003 | 3.6800e-003 | | 3.6800e-003 | 3.6800e-003 | | 1.1985 | 1.1985 | 1.1600e-003 | | 1.2274 |
| **Total** | **3.9547** | **0.1736** | **4.7308** | **0.0104** | | **0.6148** | **0.6148** | | **0.6148** | **0.6148** | **74.9354** | **145.1985** | **220.1338** | **0.2246** | **5.0900e-003** | **227.2652** |

### Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2304 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 1.6079 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 2.0963 | 0.1660 | 4.0684 | 0.0104 | | 0.6111 | 0.6111 | | 0.6111 | 0.6111 | 74.9354 | 144.0000 | 218.9354 | 0.2235 | 5.0900e-003 | 226.0378 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landscaping | 0.0201 | 7.6300e-003 | 0.6624 | 4.0000e-005 | | 3.6800e-003 | 3.6800e-003 | | 3.6800e-003 | 3.6800e-003 | | 1.1985 | 1.1985 | 1.1600e-003 | | 1.2274 |
| **Total** | **3.9547** | **0.1736** | **4.7308** | **0.0104** | | **0.6148** | **0.6148** | | **0.6148** | **0.6148** | **74.9354** | **145.1985** | **220.1338** | **0.2246** | **5.0900e-003** | **227.2652** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase IX Construction - South Coast Air Basin, Annual

# Phase IX Construction

**South Coast Air Basin, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| High School | 653.40 | 1000sqft | 15.00 | 653,400.00 | 0 |
| Single Family Housing | 613.00 | Dwelling Unit | 106.00 | 1,799,657.00 | 1753 |
| Other Non-Asphalt Surfaces | 39.00 | Acre | 39.00 | 1,698,840.00 | 0 |
| Regional Shopping Center | 43.56 | 1000sqft | 1.00 | 43,560.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2040 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics - Construction to be complete end of 2035

Land Use - Based on Phasing Summary
Other Non-Asphalt includes Community Parks (External) and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Vehicle Trips -

Energy Use -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| tblConstEquipMitigation | Tier | No Change | Tier 3 |
|---|---|---|---|
| tblConstructionPhase | NumDays | 220.00 | 282.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 348.00 |
| tblConstructionPhase | NumDays | 220.00 | 44.00 |
| tblConstructionPhase | PhaseEndDate | 3/26/2049 | 12/25/2035 |
| tblConstructionPhase | PhaseEndDate | 7/19/2047 | 12/25/2035 |
| tblConstructionPhase | PhaseEndDate | 5/22/2048 | 12/25/2035 |
| tblConstructionPhase | PhaseStartDate | 5/23/2048 | 11/25/2034 |
| tblConstructionPhase | PhaseStartDate | 9/1/2035 | 8/25/2034 |
| tblConstructionPhase | PhaseStartDate | 7/20/2047 | 10/25/2035 |
| tblLandUse | LandUseSquareFeet | 1,103,400.00 | 1,799,657.00 |
| tblLandUse | LotAcreage | 199.03 | 106.00 |

## 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 | | | | | |
| 2034 | 1.2389 | 2.7019 | 3.5768 | 0.0153 | 1.6077 | 0.0439 | 1.6516 | 0.4807 | 0.0436 | 0.5243 | 0.0000 | 1,427.5535 | 1,427.5535 | 0.0519 | 0.0000 | 1,428.8509 |
| 2035 | 9.1854 | 5.8992 | 8.3660 | 0.0383 | 3.4012 | 0.0560 | 3.4572 | 0.9967 | 0.0552 | 1.0519 | 0.0000 | 3,553.5566 | 3,553.5566 | 0.1186 | 0.0000 | 3,556.5212 |
| **Maximum** | **9.1854** | **5.8992** | **8.3660** | **0.0383** | **3.4012** | **0.0560** | **3.4572** | **0.9967** | **0.0552** | **1.0519** | **0.0000** | **3,553.5566** | **3,553.5566** | **0.1186** | **0.0000** | **3,556.5212** |

**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 | | | | | |
| 2034 | 1.0905 | 3.5457 | 4.5800 | 0.0153 | 1.1091 | 0.0234 | 1.1325 | 0.3173 | 0.0232 | 0.3405 | 0.0000 | 1,427.5528 | 1,427.5528 | 0.0519 | 0.0000 | 1,428.8502 |
| 2035 | 8.9739 | 7.8340 | 9.8713 | 0.0383 | 2.8291 | 0.0498 | 2.8789 | 0.7930 | 0.0490 | 0.8420 | 0.0000 | 3,553.5554 | 3,553.5554 | 0.1186 | 0.0000 | 3,556.5200 |
| **Maximum** | **8.9739** | **7.8340** | **9.8713** | **0.0383** | **2.8291** | **0.0498** | **2.8789** | **0.7930** | **0.0490** | **0.8420** | **0.0000** | **3,553.5554** | **3,553.5554** | **0.1186** | **0.0000** | **3,556.5200** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.45** | **-32.31** | **-21.00** | **0.00** | **21.38** | **26.67** | **21.48** | **24.85** | **26.96** | **24.98** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **6-25-2034** | **9-24-2034** | 1.0352 | 1.3417 |
| **2** | **9-25-2034** | **12-24-2034** | 2.6590 | 3.0244 |
| **3** | **12-25-2034** | **3-24-2035** | 3.8811 | 4.4118 |
| **4** | **3-25-2035** | **6-24-2035** | 3.9413 | 4.4981 |
| **5** | **6-25-2035** | **9-24-2035** | 3.8328 | 4.2782 |
| **6** | **9-25-2035** | **9-30-2035** | 0.2301 | 0.2385 |
| | | **Highest** | 3.9413 | 4.4981 |

## 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 | 12.2380 | 0.2317 | 10.2000 | 0.0103 | | 0.6204 | 0.6204 | | 0.6204 | 0.6204 | 65.1123 | 135.4680 | 200.5803 | 0.2041 | 4.4200e-003 | 206.9986 |
| Energy | 0.1325 | 1.1495 | 0.6074 | 7.2300e-003 | | 0.0916 | 0.0916 | | 0.0916 | 0.0916 | 0.0000 | 4,708.9843 | 4,708.9843 | 0.1654 | 0.0531 | 4,728.9324 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 2.1261 | 14.6059 | 29.7562 | 0.1749 | 19.6854 | 0.0720 | 19.7574 | 5.2728 | 0.0670 | 5.3398 | 0.0000 | 16,325.3542 | 16,325.3542 | 0.5920 | 0.0000 | 16,340.1534 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 327.6051 | 0.0000 | 327.6051 | 19.3609 | 0.0000 | 811.6277 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 20.5777 | 562.7174 | 583.2951 | 2.1368 | 0.0547 | 653.0181 |
| **Total** | **14.4966** | **15.9871** | **40.5637** | **0.1924** | **19.6854** | **0.7839** | **20.4693** | **5.2728** | **0.7790** | **6.0518** | **413.2951** | **21,732.5239** | **22,145.8190** | **22.4591** | **0.1122** | **22,740.7302** |

## 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 | 12.2380 | 0.2317 | 10.2000 | 0.0103 | | 0.6204 | 0.6204 | | 0.6204 | 0.6204 | 65.1123 | 135.4680 | 200.5803 | 0.2041 | 4.4200e-003 | 206.9986 |
| Energy | 0.1325 | 1.1495 | 0.6074 | 7.2300e-003 | | 0.0916 | 0.0916 | | 0.0916 | 0.0916 | 0.0000 | 4,708.9843 | 4,708.9843 | 0.1654 | 0.0531 | 4,728.9324 |
| Mobile | 2.1261 | 14.6059 | 29.7562 | 0.1749 | 19.6854 | 0.0720 | 19.7574 | 5.2728 | 0.0670 | 5.3398 | 0.0000 | 16,325.3542 | 16,325.3542 | 0.5920 | 0.0000 | 16,340.1534 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 327.6051 | 0.0000 | 327.6051 | 19.3609 | 0.0000 | 811.6277 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 16.4622 | 490.9871 | 507.4493 | 1.7111 | 0.0441 | 563.3737 |
| **Total** | **14.4966** | **15.9871** | **40.5637** | **0.1924** | **19.6854** | **0.7839** | **20.4693** | **5.2728** | **0.7790** | **6.0518** | **409.1795** | **21,660.7937** | **22,069.9732** | **22.0334** | **0.1016** | **22,651.0858** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **1.00** | **0.33** | **0.34** | **1.90** | **9.44** | **0.39** |

# 3.0 Construction Detail

## Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 6/25/2034 | 8/31/2035 | 5 | 310 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2 | Building Construction | Building Construction | 8/25/2034 | 12/25/2035 | 5 | 348 | |
| 3 | Architectural Coating | Architectural Coating | 11/25/2034 | 12/25/2035 | 5 | 282 | |
| 4 | Paving | Paving | 10/25/2035 | 12/25/2035 | 5 | 44 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 39**

**Residential Indoor: 3,644,305; Residential Outdoor: 1,214,768; Non-Residential Indoor: 1,045,440; Non-Residential Outdoor: 348,480;**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Building Construction | 9 | 1,223.00 | 458.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 245.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2034

**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 | | | | | 0.8174 | 0.0000 | 0.8174 | 0.2678 | 0.0000 | 0.2678 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2215 | 0.9346 | 1.5541 | 4.7200e-003 | | 0.0329 | 0.0329 | | 0.0329 | 0.0329 | 0.0000 | 441.6945 | 441.6945 | 0.0179 | 0.0000 | 442.1408 |
| **Total** | **0.2215** | **0.9346** | **1.5541** | **4.7200e-003** | **0.8174** | **0.0329** | **0.8504** | **0.2678** | **0.0329** | **0.3008** | **0.0000** | **441.6945** | **441.6945** | **0.0179** | **0.0000** | **442.1408** |

**Unmitigated Construction Off-Site**

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.5700e-003 | 1.3500e-003 | 0.0200 | 1.0000e-004 | 0.0148 | 6.0000e-005 | 0.0149 | 3.9300e-003 | 5.0000e-005 | 3.9900e-003 | 0.0000 | 8.8739 | 8.8739 | 1.1000e-004 | 0.0000 | 8.8766 |
| **Total** | **2.5700e-003** | **1.3500e-003** | **0.0200** | **1.0000e-004** | **0.0148** | **6.0000e-005** | **0.0149** | **3.9300e-003** | **5.0000e-005** | **3.9900e-003** | **0.0000** | **8.8739** | **8.8739** | **1.1000e-004** | **0.0000** | **8.8766** |

## 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 | | | | | 0.3188 | 0.0000 | 0.3188 | 0.1045 | 0.0000 | 0.1045 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1028 | 1.6188 | 2.4788 | 4.7200e-003 | | 0.0132 | 0.0132 | | 0.0132 | 0.0132 | 0.0000 | 441.6940 | 441.6940 | 0.0179 | 0.0000 | 442.1402 |
| **Total** | **0.1028** | **1.6188** | **2.4788** | **4.7200e-003** | **0.3188** | **0.0132** | **0.3320** | **0.1045** | **0.0132** | **0.1176** | **0.0000** | **441.6940** | **441.6940** | **0.0179** | **0.0000** | **442.1402** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.5700e-003 | 1.3500e-003 | 0.0200 | 1.0000e-004 | 0.0148 | 6.0000e-005 | 0.0149 | 3.9300e-003 | 5.0000e-005 | 3.9900e-003 | 0.0000 | 8.8739 | 8.8739 | 1.1000e-004 | 0.0000 | 8.8766 |
| **Total** | **2.5700e-003** | **1.3500e-003** | **0.0200** | **1.0000e-004** | **0.0148** | **6.0000e-005** | **0.0149** | **3.9300e-003** | **5.0000e-005** | **3.9900e-003** | **0.0000** | **8.8739** | **8.8739** | **1.1000e-004** | **0.0000** | **8.8766** |

## 3.2 Grading - 2035

### 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 | | | | | 0.9379 | 0.0000 | 0.9379 | 0.3340 | 0.0000 | 0.3340 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2548 | 0.8395 | 1.9709 | 6.1200e-003 | | 0.0275 | 0.0275 | | 0.0275 | 0.0275 | 0.0000 | 572.5674 | 572.5674 | 0.0203 | 0.0000 | 573.0753 |
| **Total** | **0.2548** | **0.8395** | **1.9709** | **6.1200e-003** | **0.9379** | **0.0275** | **0.9654** | **0.3340** | **0.0275** | **0.3615** | **0.0000** | **572.5674** | **572.5674** | **0.0203** | **0.0000** | **573.0753** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.1600e-003 | 1.6600e-003 | 0.0246 | 1.3000e-004 | 0.0192 | 7.0000e-005 | 0.0193 | 5.1000e-003 | 6.0000e-005 | 5.1600e-003 | 0.0000 | 11.3432 | 11.3432 | 1.3000e-004 | 0.0000 | 11.3465 |
| **Total** | **3.1600e-003** | **1.6600e-003** | **0.0246** | **1.3000e-004** | **0.0192** | **7.0000e-005** | **0.0193** | **5.1000e-003** | **6.0000e-005** | **5.1600e-003** | **0.0000** | **11.3432** | **11.3432** | **1.3000e-004** | **0.0000** | **11.3465** |

### 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 | | | | | 0.3658 | 0.0000 | 0.3658 | 0.1303 | 0.0000 | 0.1303 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1333 | 2.0985 | 3.2132 | 6.1200e-003 | | 0.0171 | 0.0171 | | 0.0171 | 0.0171 | 0.0000 | 572.5667 | 572.5667 | 0.0203 | 0.0000 | 573.0747 |
| **Total** | **0.1333** | **2.0985** | **3.2132** | **6.1200e-003** | **0.3658** | **0.0171** | **0.3828** | **0.1303** | **0.0171** | **0.1473** | **0.0000** | **572.5667** | **572.5667** | **0.0203** | **0.0000** | **573.0747** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.1600e-003 | 1.6600e-003 | 0.0246 | 1.3000e-004 | 0.0192 | 7.0000e-005 | 0.0193 | 5.1000e-003 | 6.0000e-005 | 5.1600e-003 | 0.0000 | 11.3432 | 11.3432 | 1.3000e-004 | 0.0000 | 11.3465 |
| **Total** | **3.1600e-003** | **1.6600e-003** | **0.0246** | **1.3000e-004** | **0.0192** | **7.0000e-005** | **0.0193** | **5.1000e-003** | **6.0000e-005** | **5.1600e-003** | **0.0000** | **11.3432** | **11.3432** | **1.3000e-004** | **0.0000** | **11.3465** |

## 3.3 Building Construction - 2034

**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 | 0.0596 | 0.3610 | 0.7351 | 1.4100e-003 | | 6.7400e-003 | 6.7400e-003 | | 6.7400e-003 | 6.7400e-003 | 0.0000 | 119.6018 | 119.6018 | 4.8000e-003 | 0.0000 | 119.7217 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0596** | **0.3610** | **0.7351** | **1.4100e-003** | | **6.7400e-003** | **6.7400e-003** | | **6.7400e-003** | **6.7400e-003** | **0.0000** | **119.6018** | **119.6018** | **4.8000e-003** | **0.0000** | **119.7217** |

## 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 | 0.0353 | 1.3352 | 0.3767 | 4.7900e-003 | 0.1313 | 1.4000e-003 | 0.1327 | 0.0379 | 1.3400e-003 | 0.0392 | 0.0000 | 468.2845 | 468.2845 | 0.0243 | 0.0000 | 468.8908 |
| Worker | 0.1061 | 0.0558 | 0.8230 | 4.0400e-003 | 0.6105 | 2.3500e-003 | 0.6129 | 0.1621 | 2.1600e-003 | 0.1643 | 0.0000 | 365.7768 | 365.7768 | 4.5100e-003 | 0.0000 | 365.8896 |
| **Total** | **0.1414** | **1.3911** | **1.1998** | **8.8300e-003** | **0.7419** | **3.7500e-003** | **0.7456** | **0.2000** | **3.5000e-003** | **0.2035** | **0.0000** | **834.0613** | **834.0613** | **0.0288** | **0.0000** | **834.7804** |

## 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 | 0.0307 | 0.5178 | 0.8133 | 1.4100e-003 | | 6.1700e-003 | 6.1700e-003 | | 6.1700e-003 | 6.1700e-003 | 0.0000 | 119.6016 | 119.6016 | 4.8000e-003 | 0.0000 | 119.7216 |
| **Total** | **0.0307** | **0.5178** | **0.8133** | **1.4100e-003** | | **6.1700e-003** | **6.1700e-003** | | **6.1700e-003** | **6.1700e-003** | **0.0000** | **119.6016** | **119.6016** | **4.8000e-003** | **0.0000** | **119.7216** |

## 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 | 0.0353 | 1.3352 | 0.3767 | 4.7900e-003 | 0.1313 | 1.4000e-003 | 0.1327 | 0.0379 | 1.3400e-003 | 0.0392 | 0.0000 | 468.2845 | 468.2845 | 0.0243 | 0.0000 | 468.8908 |
| Worker | 0.1061 | 0.0558 | 0.8230 | 4.0400e-003 | 0.6105 | 2.3500e-003 | 0.6129 | 0.1621 | 2.1600e-003 | 0.1643 | 0.0000 | 365.7768 | 365.7768 | 4.5100e-003 | 0.0000 | 365.8896 |
| **Total** | **0.1414** | **1.3911** | **1.1998** | **8.8300e-003** | **0.7419** | **3.7500e-003** | **0.7456** | **0.2000** | **3.5000e-003** | **0.2035** | **0.0000** | **834.0613** | **834.0613** | **0.0288** | **0.0000** | **834.7804** |

## 3.3 Building Construction - 2035

### 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 | 0.1564 | 0.9202 | 2.0711 | 3.9800e-003 | | 0.0116 | 0.0116 | | 0.0116 | 0.0116 | 0.0000 | 337.7764 | 337.7764 | 0.0126 | 0.0000 | 338.0909 |
| **Total** | **0.1564** | **0.9202** | **2.0711** | **3.9800e-003** | | **0.0116** | **0.0116** | | **0.0116** | **0.0116** | **0.0000** | **337.7764** | **337.7764** | **0.0126** | **0.0000** | **338.0909** |

### 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 | 0.0992 | 3.7539 | 1.0605 | 0.0135 | 0.3709 | 3.9200e-003 | 0.3748 | 0.1070 | 3.7400e-003 | 0.1108 | 0.0000 | 1,321.1808 | 1,321.1808 | 0.0681 | 0.0000 | 1,322.8830 |
| Worker | 0.2837 | 0.1491 | 2.2123 | 0.0112 | 1.7242 | 6.2100e-003 | 1.7304 | 0.4579 | 5.7200e-003 | 0.4636 | 0.0000 | 1,018.6569 | 1,018.6569 | 0.0118 | 0.0000 | 1,018.9525 |
| **Total** | **0.3829** | **3.9030** | **3.2728** | **0.0248** | **2.0951** | **0.0101** | **2.1053** | **0.5649** | **9.4600e-003** | **0.5744** | **0.0000** | **2,339.8378** | **2,339.8378** | **0.0799** | **0.0000** | **2,341.8354** |

## 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 | 0.0866 | 1.4624 | 2.2968 | 3.9800e-003 | | 0.0174 | 0.0174 | | 0.0174 | 0.0174 | 0.0000 | 337.7760 | 337.7760 | 0.0126 | 0.0000 | 338.0905 |
| **Total** | **0.0866** | **1.4624** | **2.2968** | **3.9800e-003** | | **0.0174** | **0.0174** | | **0.0174** | **0.0174** | **0.0000** | **337.7760** | **337.7760** | **0.0126** | **0.0000** | **338.0905** |

## 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 | 0.0992 | 3.7539 | 1.0605 | 0.0135 | 0.3709 | 3.9200e-003 | 0.3748 | 0.1070 | 3.7400e-003 | 0.1108 | 0.0000 | 1,321.1808 | 1,321.1808 | 0.0681 | 0.0000 | 1,322.8830 |
| Worker | 0.2837 | 0.1491 | 2.2123 | 0.0112 | 1.7242 | 6.2100e-003 | 1.7304 | 0.4579 | 5.7200e-003 | 0.4636 | 0.0000 | 1,018.6569 | 1,018.6569 | 0.0118 | 0.0000 | 1,018.9525 |
| **Total** | **0.3829** | **3.9030** | **3.2728** | **0.0248** | **2.0951** | **0.0101** | **2.1053** | **0.5649** | **9.4600e-003** | **0.5744** | **0.0000** | **2,339.8378** | **2,339.8378** | **0.0799** | **0.0000** | **2,341.8354** |

## 3.4 Architectural Coating - 2034

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.8065 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.6300e-003 | 0.0107 | 0.0225 | 4.0000e-005 | | 2.5000e-004 | 2.5000e-004 | | 2.5000e-004 | 2.5000e-004 | 0.0000 | 3.1916 | 3.1916 | 1.3000e-004 | 0.0000 | 3.1948 |
| **Total** | **0.8081** | **0.0107** | **0.0225** | **4.0000e-005** | | **2.5000e-004** | **2.5000e-004** | | **2.5000e-004** | **2.5000e-004** | **0.0000** | **3.1916** | **3.1916** | **1.3000e-004** | **0.0000** | **3.1948** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.8400e-003 | 3.0700e-003 | 0.0453 | 2.2000e-004 | 0.0336 | 1.3000e-004 | 0.0337 | 8.9200e-003 | 1.2000e-004 | 9.0400e-003 | 0.0000 | 20.1305 | 20.1305 | 2.5000e-004 | 0.0000 | 20.1367 |
| **Total** | **5.8400e-003** | **3.0700e-003** | **0.0453** | **2.2000e-004** | **0.0336** | **1.3000e-004** | **0.0337** | **8.9200e-003** | **1.2000e-004** | **9.0400e-003** | **0.0000** | **20.1305** | **20.1305** | **2.5000e-004** | **0.0000** | **20.1367** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.8065 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.4000e-004 | 0.0136 | 0.0229 | 4.0000e-005 | | 1.8000e-004 | 1.8000e-004 | | 1.8000e-004 | 1.8000e-004 | 0.0000 | 3.1916 | 3.1916 | 1.3000e-004 | 0.0000 | 3.1948 |
| **Total** | **0.8072** | **0.0136** | **0.0229** | **4.0000e-005** | | **1.8000e-004** | **1.8000e-004** | | **1.8000e-004** | **1.8000e-004** | **0.0000** | **3.1916** | **3.1916** | **1.3000e-004** | **0.0000** | **3.1948** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.8400e-003 | 3.0700e-003 | 0.0453 | 2.2000e-004 | 0.0336 | 1.3000e-004 | 0.0337 | 8.9200e-003 | 1.2000e-004 | 9.0400e-003 | 0.0000 | 20.1305 | 20.1305 | 2.5000e-004 | 0.0000 | 20.1367 |
| **Total** | **5.8400e-003** | **3.0700e-003** | **0.0453** | **2.2000e-004** | **0.0336** | **1.3000e-004** | **0.0337** | **8.9200e-003** | **1.2000e-004** | **9.0400e-003** | **0.0000** | **20.1305** | **20.1305** | **2.5000e-004** | **0.0000** | **20.1367** |

## 3.4 Architectural Coating - 2035

**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 | 8.2906 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.0152 | 0.0974 | 0.2306 | 3.8000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 32.8093 | 32.8093 | 1.2100e-003 | 0.0000 | 32.8396 |
| **Total** | **8.3058** | **0.0974** | **0.2306** | **3.8000e-004** | | **1.2700e-003** | **1.2700e-003** | | **1.2700e-003** | **1.2700e-003** | **0.0000** | **32.8093** | **32.8093** | **1.2100e-003** | **0.0000** | **32.8396** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0568 | 0.0299 | 0.4432 | 2.2500e-003 | 0.3454 | 1.2400e-003 | 0.3467 | 0.0917 | 1.1400e-003 | 0.0929 | 0.0000 | 204.0646 | 204.0646 | 2.3700e-003 | 0.0000 | 204.1238 |
| **Total** | **0.0568** | **0.0299** | **0.4432** | **2.2500e-003** | **0.3454** | **1.2400e-003** | **0.3467** | **0.0917** | **1.1400e-003** | **0.0929** | **0.0000** | **204.0646** | **204.0646** | **2.3700e-003** | **0.0000** | **204.1238** |

## 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 | 8.2906 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.6400e-003 | 0.1395 | 0.2355 | 3.8000e-004 | | 1.8300e-003 | 1.8300e-003 | | 1.8300e-003 | 1.8300e-003 | 0.0000 | 32.8093 | 32.8093 | 1.2100e-003 | 0.0000 | 32.8396 |
| **Total** | **8.2982** | **0.1395** | **0.2355** | **3.8000e-004** | | **1.8300e-003** | **1.8300e-003** | | **1.8300e-003** | **1.8300e-003** | **0.0000** | **32.8093** | **32.8093** | **1.2100e-003** | **0.0000** | **32.8396** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0568 | 0.0299 | 0.4432 | 2.2500e-003 | 0.3454 | 1.2400e-003 | 0.3467 | 0.0917 | 1.1400e-003 | 0.0929 | 0.0000 | 204.0646 | 204.0646 | 2.3700e-003 | 0.0000 | 204.1238 |
| **Total** | **0.0568** | **0.0299** | **0.4432** | **2.2500e-003** | **0.3454** | **1.2400e-003** | **0.3467** | **0.0917** | **1.1400e-003** | **0.0929** | **0.0000** | **204.0646** | **204.0646** | **2.3700e-003** | **0.0000** | **204.1238** |

## 3.5 Paving - 2035

### 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 | 0.0251 | 0.1073 | 0.3481 | 6.2000e-004 | | 4.1200e-003 | 4.1200e-003 | | 4.1200e-003 | 4.1200e-003 | 0.0000 | 53.0189 | 53.0189 | 2.0400e-003 | 0.0000 | 53.0699 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0251** | **0.1073** | **0.3481** | **6.2000e-004** | | **4.1200e-003** | **4.1200e-003** | | **4.1200e-003** | **4.1200e-003** | **0.0000** | **53.0189** | **53.0189** | **2.0400e-003** | **0.0000** | **53.0699** |

### Unmitigated Construction Off-Site

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.0000e-004 | 3.1000e-004 | 4.6500e-003 | 2.0000e-005 | 3.6200e-003 | 1.0000e-005 | 3.6300e-003 | 9.6000e-004 | 1.0000e-005 | 9.7000e-004 | 0.0000 | 2.1390 | 2.1390 | 2.0000e-005 | 0.0000 | 2.1396 |
| **Total** | **6.0000e-004** | **3.1000e-004** | **4.6500e-003** | **2.0000e-005** | **3.6200e-003** | **1.0000e-005** | **3.6300e-003** | **9.6000e-004** | **1.0000e-005** | **9.7000e-004** | **0.0000** | **2.1390** | **2.1390** | **2.0000e-005** | **0.0000** | **2.1396** |

## 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 | 0.0123 | 0.1988 | 0.3805 | 6.2000e-004 | | 2.0100e-003 | 2.0100e-003 | | 2.0100e-003 | 2.0100e-003 | 0.0000 | 53.0189 | 53.0189 | 2.0400e-003 | 0.0000 | 53.0699 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0123** | **0.1988** | **0.3805** | **6.2000e-004** | | **2.0100e-003** | **2.0100e-003** | | **2.0100e-003** | **2.0100e-003** | **0.0000** | **53.0189** | **53.0189** | **2.0400e-003** | **0.0000** | **53.0699** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.0000e-004 | 3.1000e-004 | 4.6500e-003 | 2.0000e-005 | 3.6200e-003 | 1.0000e-005 | 3.6300e-003 | 9.6000e-004 | 1.0000e-005 | 9.7000e-004 | 0.0000 | 2.1390 | 2.1390 | 2.0000e-005 | 0.0000 | 2.1396 |
| **Total** | **6.0000e-004** | **3.1000e-004** | **4.6500e-003** | **2.0000e-005** | **3.6200e-003** | **1.0000e-005** | **3.6300e-003** | **9.6000e-004** | **1.0000e-005** | **9.7000e-004** | **0.0000** | **2.1390** | **2.1390** | **2.0000e-005** | **0.0000** | **2.1396** |

## 4.0 Operational Detail - Mobile

### 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 | 2.1261 | 14.6059 | 29.7562 | 0.1749 | 19.6854 | 0.0720 | 19.7574 | 5.2728 | 0.0670 | 5.3398 | 0.0000 | 16,325.3542 | 16,325.3542 | 0.5920 | 0.0000 | 16,340.1534 |
| Unmitigated | 2.1261 | 14.6059 | 29.7562 | 0.1749 | 19.6854 | 0.0720 | 19.7574 | 5.2728 | 0.0670 | 5.3398 | 0.0000 | 16,325.3542 | 16,325.3542 | 0.5920 | 0.0000 | 16,340.1534 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| High School | 8,422.33 | 2,855.36 | 1169.59 | 28,148,466 | 28,148,466 |
| Single Family Housing | 5,835.76 | 6,074.83 | 5284.06 | 19,789,064 | 19,789,064 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Regional Shopping Center | 1,860.01 | 2,176.69 | 1099.45 | 3,885,768 | 3,885,768 |
| Total | 16,118.10 | 11,106.88 | 7,553.10 | 51,823,298 | 51,823,298 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| High School | 16.60 | 8.40 | 6.90 | 77.80 | 17.20 | 5.00 | 75 | 19 | 6 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Single Family Housing | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Other Non-Asphalt Surfaces | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Regional Shopping Center | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 3,397.5192 | 3,397.5192 | 0.1403 | 0.0290 | 3,409.6739 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 3,397.5192 | 3,397.5192 | 0.1403 | 0.0290 | 3,409.6739 |
| NaturalGas Mitigated | 0.1325 | 1.1495 | 0.6074 | 7.2300e-003 | | 0.0916 | 0.0916 | | 0.0916 | 0.0916 | 0.0000 | 1,311.4651 | 1,311.4651 | 0.0251 | 0.0240 | 1,319.2584 |
| NaturalGas Unmitigated | 0.1325 | 1.1495 | 0.6074 | 7.2300e-003 | | 0.0916 | 0.0916 | | 0.0916 | 0.0916 | 0.0000 | 1,311.4651 | 1,311.4651 | 0.0251 | 0.0240 | 1,319.2584 |

### 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 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 5.72378e+006 | 0.0309 | 0.2806 | 0.2357 | 1.6800e-003 | | 0.0213 | 0.0213 | | 0.0213 | 0.0213 | 0.0000 | 305.4429 | 305.4429 | 5.8500e-003 | 5.6000e-003 | 307.2580 |
| 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 |
| Regional Shopping Center | 96703.2 | 5.2000e-004 | 4.7400e-003 | 3.9800e-003 | 3.0000e-005 | | 3.6000e-004 | 3.6000e-004 | | 3.6000e-004 | 3.6000e-004 | 0.0000 | 5.1605 | 5.1605 | 1.0000e-004 | 9.0000e-005 | 5.1911 |
| Single Family Housing | 1.87554e+007 | 0.1011 | 0.8642 | 0.3678 | 5.5200e-003 | | 0.0699 | 0.0699 | | 0.0699 | 0.0699 | 0.0000 | 1,000.8617 | 1,000.8617 | 0.0192 | 0.0184 | 1,006.8093 |
| **Total** | | **0.1325** | **1.1495** | **0.6074** | **7.2300e-003** | | **0.0916** | **0.0916** | | **0.0916** | **0.0916** | **0.0000** | **1,311.4651** | **1,311.4651** | **0.0251** | **0.0240** | **1,319.2585** |

**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 | | | | | |
| High School | 5.72378e+006 | 0.0309 | 0.2806 | 0.2357 | 1.6800e-003 | | 0.0213 | 0.0213 | | 0.0213 | 0.0213 | 0.0000 | 305.4429 | 305.4429 | 5.8500e-003 | 5.6000e-003 | 307.2580 |
| 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 |
| Regional Shopping Center | 96703.2 | 5.2000e-004 | 4.7400e-003 | 3.9800e-003 | 3.0000e-005 | | 3.6000e-004 | 3.6000e-004 | | 3.6000e-004 | 3.6000e-004 | 0.0000 | 5.1605 | 5.1605 | 1.0000e-004 | 9.0000e-005 | 5.1911 |
| Single Family Housing | 1.87554e+007 | 0.1011 | 0.8642 | 0.3678 | 5.5200e-003 | | 0.0699 | 0.0699 | | 0.0699 | 0.0699 | 0.0000 | 1,000.8617 | 1,000.8617 | 0.0192 | 0.0184 | 1,006.8093 |
| **Total** | | **0.1325** | **1.1495** | **0.6074** | **7.2300e-003** | | **0.0916** | **0.0916** | | **0.0916** | **0.0916** | **0.0000** | **1,311.4651** | **1,311.4651** | **0.0251** | **0.0240** | **1,319.2585** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |

| | | | | | |
|---|---|---|---|---|---|
| High School | 4.76982e+006 | 1,519.7668 | 0.0627 | 0.0130 | 1,525.2039 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 550163 | 175.2937 | 7.2400e-003 | 1.5000e-003 | 175.9208 |
| Single Family Housing | 5.3432e+006 | 1,702.4587 | 0.0703 | 0.0145 | 1,708.5493 |
| **Total** | | **3,397.5192** | **0.1403** | **0.0290** | **3,409.6739** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| High School | 4.76982e+006 | 1,519.7668 | 0.0627 | 0.0130 | 1,525.2039 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 550163 | 175.2937 | 7.2400e-003 | 1.5000e-003 | 175.9208 |
| Single Family Housing | 5.3432e+006 | 1,702.4587 | 0.0703 | 0.0145 | 1,708.5493 |
| **Total** | | **3,397.5192** | **0.1403** | **0.0290** | **3,409.6739** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 12.2380 | 0.2317 | 10.2000 | 0.0103 | | 0.6204 | 0.6204 | | 0.6204 | 0.6204 | 65.1123 | 135.4680 | 200.5803 | 0.2041 | 4.4200e-003 | 206.9986 |
| Unmitigated | 12.2380 | 0.2317 | 10.2000 | 0.0103 | | 0.6204 | 0.6204 | | 0.6204 | 0.6204 | 65.1123 | 135.4680 | 200.5803 | 0.2041 | 4.4200e-003 | 206.9986 |

## 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 | 0.9097 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 9.1313 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 2.0079 | 0.1590 | 3.8968 | 9.9400e-003 | | 0.5853 | 0.5853 | | 0.5853 | 0.5853 | 65.1123 | 125.1235 | 190.2357 | 0.1942 | 4.4200e-003 | 196.4072 |
| Landscaping | 0.1891 | 0.0727 | 6.3032 | 3.3000e-004 | | 0.0351 | 0.0351 | | 0.0351 | 0.0351 | 0.0000 | 10.3446 | 10.3446 | 9.8800e-003 | 0.0000 | 10.5915 |
| **Total** | **12.2380** | **0.2317** | **10.2000** | **0.0103** | | **0.6204** | **0.6204** | | **0.6204** | **0.6204** | **65.1123** | **135.4681** | **200.5803** | **0.2041** | **4.4200e-003** | **206.9986** |

**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 | 0.9097 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 9.1313 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 2.0079 | 0.1590 | 3.8968 | 9.9400e-003 | | 0.5853 | 0.5853 | | 0.5853 | 0.5853 | 65.1123 | 125.1235 | 190.2357 | 0.1942 | 4.4200e-003 | 196.4072 |
| Landscaping | 0.1891 | 0.0727 | 6.3032 | 3.3000e-004 | | 0.0351 | 0.0351 | | 0.0351 | 0.0351 | 0.0000 | 10.3446 | 10.3446 | 9.8800e-003 | 0.0000 | 10.5915 |
| **Total** | **12.2380** | **0.2317** | **10.2000** | **0.0103** | | **0.6204** | **0.6204** | | **0.6204** | **0.6204** | **65.1123** | **135.4681** | **200.5803** | **0.2041** | **4.4200e-003** | **206.9986** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 507.4493 | 1.7111 | 0.0441 | 563.3737 |
| Unmitigated | 583.2951 | 2.1368 | 0.0547 | 653.0181 |

## 7.2 Water by Land Use

### Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| High School | 21.6959 / 55.7895 | 294.3828 | 0.7188 | 0.0192 | 318.0598 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 3.2266 / 1.97759 | 21.4105 | 0.1060 | 2.6600e-003 | 24.8517 |
| Single Family Housing | 39.9394 / 25.1792 | 267.5018 | 1.3120 | 0.0329 | 310.1065 |
| **Total** | | **583.2951** | **2.1368** | **0.0547** | **653.0181** |

### Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| High School | 17.3567 / 52.3863 | 262.9571 | 0.5762 | 0.0156 | 281.9969 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 2.58128 / 1.85696 | 18.1015 | 0.0848 | 2.1300e-003 | 20.8579 |
| Single Family Housing | 31.9515 / 23.6433 | 226.3907 | 1.0501 | 0.0264 | 260.5188 |
| **Total** | | **507.4493** | **1.7111** | **0.0441** | **563.3737** |

## 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 327.6051 | 19.3609 | 0.0000 | 811.6277 |
| Unmitigated | 327.6051 | 19.3609 | 0.0000 | 811.6277 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| High School | 849.42 | 172.4246 | 10.1900 | 0.0000 | 427.1746 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 45.74 | 9.2848 | 0.5487 | 0.0000 | 23.0027 |
| Single Family Housing | 718.73 | 145.8957 | 8.6222 | 0.0000 | 361.4504 |
| **Total** | | **327.6051** | **19.3609** | **0.0000** | **811.6277** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| High School | 849.42 | 172.4246 | 10.1900 | 0.0000 | 427.1746 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 45.74 | 9.2848 | 0.5487 | 0.0000 | 23.0027 |
| Single Family Housing | 718.73 | 145.8957 | 8.6222 | 0.0000 | 361.4504 |
| **Total** | | **327.6051** | **19.3609** | **0.0000** | **811.6277** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

Phase IX Construction - South Coast Air Basin, Summer

# Phase IX Construction

**South Coast Air Basin, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| High School | 653.40 | 1000sqft | 15.00 | 653,400.00 | 0 |
| Single Family Housing | 613.00 | Dwelling Unit | 106.00 | 1,799,657.00 | 1753 |
| Other Non-Asphalt Surfaces | 39.00 | Acre | 39.00 | 1,698,840.00 | 0 |
| Regional Shopping Center | 43.56 | 1000sqft | 1.00 | 43,560.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2040 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics - Construction to be complete end of 2035

Land Use - Based on Phasing Summary
Other Non-Asphalt includes Community Parks (External) and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Vehicle Trips -

Energy Use -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| tblConstEquipMitigation | Tier | No Change | Tier 3 |
|---|---|---|---|
| tblConstructionPhase | NumDays | 220.00 | 282.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 348.00 |
| tblConstructionPhase | NumDays | 220.00 | 44.00 |
| tblConstructionPhase | PhaseEndDate | 3/26/2049 | 12/25/2035 |
| tblConstructionPhase | PhaseEndDate | 7/19/2047 | 12/25/2035 |
| tblConstructionPhase | PhaseEndDate | 5/22/2048 | 12/25/2035 |
| tblConstructionPhase | PhaseStartDate | 5/23/2048 | 11/25/2034 |
| tblConstructionPhase | PhaseStartDate | 9/1/2035 | 8/25/2034 |
| tblConstructionPhase | PhaseStartDate | 7/20/2047 | 10/25/2035 |
| tblLandUse | LandUseSquareFeet | 1,103,400.00 | 1,799,657.00 |
| tblLandUse | LotAcreage | 199.03 | 106.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2034 | 72.8190 | 53.0624 | 72.9241 | 0.3238 | 28.2365 | 0.7498 | 28.9863 | 8.8512 | 0.7434 | 9.5946 | 0.0000 | 33,191.4040 | 33,191.4040 | 1.1347 | 0.0000 | 33,219.7704 |
| 2035 | 72.1887 | 47.7380 | 71.2219 | 0.3221 | 28.2365 | 0.5037 | 28.7402 | 8.8512 | 0.4976 | 9.3488 | 0.0000 | 33,023.7255 | 33,023.7255 | 1.0764 | 0.0000 | 33,050.6352 |
| **Maximum** | **72.8190** | **53.0624** | **72.9241** | **0.3238** | **28.2365** | **0.7498** | **28.9863** | **8.8512** | **0.7434** | **9.5946** | **0.0000** | **33,191.4040** | **33,191.4040** | **1.1347** | **0.0000** | **33,219.7704** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2034 | 70.3548 | 66.8743 | 88.3742 | 0.3238 | 22.9458 | 0.4381 | 23.3839 | 6.6574 | 0.4317 | 7.0890 | 0.0000 | 33,191.4040 | 33,191.4040 | 1.1347 | 0.0000 | 33,219.7704 |
| 2035 | 70.1989 | 66.6738 | 87.2136 | 0.3221 | 22.9458 | 0.4338 | 23.3796 | 6.6574 | 0.4278 | 7.0851 | 0.0000 | 33,023.7255 | 33,023.7255 | 1.0764 | 0.0000 | 33,050.6352 |
| **Maximum** | **70.3548** | **66.8743** | **88.3742** | **0.3238** | **22.9458** | **0.4381** | **23.3839** | **6.6574** | **0.4317** | **7.0890** | **0.0000** | **33,191.4040** | **33,191.4040** | **1.1347** | **0.0000** | **33,219.7704** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.07** | **-32.49** | **-21.81** | **0.00** | **18.74** | **30.44** | **18.99** | **24.79** | **30.74** | **25.18** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 217.1603 | 13.3006 | 362.1681 | 0.7980 | | 47.1068 | 47.1068 | | 47.1068 | 47.1068 | 5,741.9210 | 11,125.2236 | 16,867.1446 | 17.2106 | 0.3897 | 17,413.5467 |
| Energy | 0.7261 | 6.2989 | 3.3283 | 0.0396 | | 0.5017 | 0.5017 | | 0.5017 | 0.5017 | | 7,921.3303 | 7,921.3303 | 0.1518 | 0.1452 | 7,968.4028 |
| Mobile | 14.6206 | 92.4959 | 203.7069 | 1.1811 | 130.5942 | 0.4685 | 131.0628 | 34.9269 | 0.4364 | 35.3633 | | 121,431.4505 | 121,431.4505 | 4.2402 | | 121,537.4562 |
| **Total** | **232.5070** | **112.0953** | **569.2033** | **2.0186** | **130.5942** | **48.0770** | **178.6712** | **34.9269** | **48.0448** | **82.9718** | **5,741.9210** | **140,478.0044** | **146,219.9254** | **21.6027** | **0.5349** | **146,919.4057** |

### Mitigated Operational

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | 217.1603 | 13.3006 | 362.1681 | 0.7980 | | 47.1068 | 47.1068 | | 47.1068 | 47.1068 | 5,741.9210 | 11,125.2236 | 16,867.1446 | 17.2106 | 0.3897 | 17,413.5467 |
| Energy | 0.7261 | 6.2989 | 3.3283 | 0.0396 | | 0.5017 | 0.5017 | | 0.5017 | 0.5017 | | 7,921.3303 | 7,921.3303 | 0.1518 | 0.1452 | 7,968.4028 |
| Mobile | 14.6206 | 92.4959 | 203.7069 | 1.1811 | 130.5942 | 0.4685 | 131.0628 | 34.9269 | 0.4364 | 35.3633 | | 121,431.4505 | 121,431.4505 | 4.2402 | | 121,537.4562 |
| **Total** | **232.5070** | **112.0953** | **569.2033** | **2.0186** | **130.5942** | **48.0770** | **178.6712** | **34.9269** | **48.0448** | **82.9718** | **5,741.9210** | **140,478.0044** | **146,219.9254** | **21.6027** | **0.5349** | **146,919.4057** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 6/25/2034 | 8/31/2035 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 8/25/2034 | 12/25/2035 | 5 | 348 | |
| 3 | Architectural Coating | Architectural Coating | 11/25/2034 | 12/25/2035 | 5 | 282 | |
| 4 | Paving | Paving | 10/25/2035 | 12/25/2035 | 5 | 44 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 39**

**Residential Indoor: 3,644,305; Residential Outdoor: 1,214,768; Non-Residential Indoor: 1,045,440; Non-Residential Outdoor: 348,480;**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |

| | | | | | |
|---|---|---|---|---|---|
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 1,223.00 | 458.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 245.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2034

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2807 | 13.8462 | 23.0239 | 0.0699 | | 0.4879 | 0.4879 | | 0.4879 | 0.4879 | | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **3.2807** | **13.8462** | **23.0239** | **0.0699** | **8.6733** | **0.4879** | **9.1613** | **3.5965** | **0.4879** | **4.0844** | | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0379 | 0.0178 | 0.3232 | 1.5200e-003 | 0.2236 | 8.4000e-004 | 0.2244 | 0.0593 | 7.8000e-004 | 0.0601 | | 152.2646 | 152.2646 | 1.9000e-003 | | 152.3120 |
| **Total** | **0.0379** | **0.0178** | **0.3232** | **1.5200e-003** | **0.2236** | **8.4000e-004** | **0.2244** | **0.0593** | **7.8000e-004** | **0.0601** | | **152.2646** | **152.2646** | **1.9000e-003** | | **152.3120** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0379 | 0.0178 | 0.3232 | 1.5200e-003 | 0.2236 | 8.4000e-004 | 0.2244 | 0.0593 | 7.8000e-004 | 0.0601 | | 152.2646 | 152.2646 | 1.9000e-003 | | 152.3120 |
| **Total** | **0.0379** | **0.0178** | **0.3232** | **1.5200e-003** | **0.2236** | **8.4000e-004** | **0.2244** | **0.0593** | **7.8000e-004** | **0.0601** | | **152.2646** | **152.2646** | **1.9000e-003** | | **152.3120** |

## 3.2 Grading - 2035

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9116 | 9.5942 | 22.5250 | 0.0699 | | 0.3142 | 0.3142 | | 0.3142 | 0.3142 | | 7,213.1148 | 7,213.1148 | 0.2560 | | 7,219.5135 |
| **Total** | **2.9116** | **9.5942** | **22.5250** | **0.0699** | **8.6733** | **0.3142** | **8.9876** | **3.5965** | **0.3142** | **3.9107** | | **7,213.1148** | **7,213.1148** | **0.2560** | | **7,219.5135** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0359 | 0.0169 | 0.3079 | 1.5000e-003 | 0.2236 | 7.9000e-004 | 0.2243 | 0.0593 | 7.3000e-004 | 0.0600 | | 150.1628 | 150.1628 | 1.7600e-003 | | 150.2069 |
| **Total** | **0.0359** | **0.0169** | **0.3079** | **1.5000e-003** | **0.2236** | **7.9000e-004** | **0.2243** | **0.0593** | **7.3000e-004** | **0.0600** | | **150.1628** | **150.1628** | **1.7600e-003** | | **150.2069** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1148 | 7,213.1148 | 0.2560 | | 7,219.5135 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1148** | **7,213.1148** | **0.2560** | | **7,219.5135** |

## Mitigated Construction Off-Site

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0359 | 0.0169 | 0.3079 | 1.5000e-003 | 0.2236 | 7.9000e-004 | 0.2243 | 0.0593 | 7.3000e-004 | 0.0600 | | 150.1628 | 150.1628 | 1.7600e-003 | | 150.2069 |
| **Total** | **0.0359** | **0.0169** | **0.3079** | **1.5000e-003** | **0.2236** | **7.9000e-004** | **0.2243** | **0.0593** | **7.3000e-004** | **0.0600** | | **150.1628** | **150.1628** | **1.7600e-003** | | **150.2069** |

## 3.3 Building Construction - 2034

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.7597 | 29.0994 | 7.9003 | 0.1065 | 2.9308 | 0.0306 | 2.9614 | 0.8437 | 0.0292 | 0.8730 | | 11,470.8185 | 11,470.8185 | 0.5743 | | 11,485.1770 |
| Worker | 2.3181 | 1.0898 | 19.7629 | 0.0932 | 13.6703 | 0.0516 | 13.7219 | 3.6254 | 0.0475 | 3.6729 | | 9,310.9770 | 9,310.9770 | 0.1160 | | 9,313.8776 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **3.0778** | **30.1892** | **27.6632** | **0.1997** | **16.6011** | **0.0822** | **16.6833** | **4.4692** | **0.0767** | **4.5458** | | **20,781.7954** | **20,781.7954** | **0.6904** | | **20,799.0547** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.7597 | 29.0994 | 7.9003 | 0.1065 | 2.9308 | 0.0306 | 2.9614 | 0.8437 | 0.0292 | 0.8730 | | 11,470.8185 | 11,470.8185 | 0.5743 | | 11,485.1770 |
| Worker | 2.3181 | 1.0898 | 19.7629 | 0.0932 | 13.6703 | 0.0516 | 13.7219 | 3.6254 | 0.0475 | 3.6729 | | 9,310.9770 | 9,310.9770 | 0.1160 | | 9,313.8776 |
| **Total** | **3.0778** | **30.1892** | **27.6632** | **0.1997** | **16.6011** | **0.0822** | **16.6833** | **4.4692** | **0.0767** | **4.5458** | | **20,781.7954** | **20,781.7954** | **0.6904** | | **20,799.0547** |

## 3.3 Building Construction - 2035

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.2168 | 7.1613 | 16.1178 | 0.0310 | | 0.0904 | 0.0904 | | 0.0904 | 0.0904 | | 2,897.5468 | 2,897.5468 | 0.1079 | | 2,900.2448 |
| **Total** | **1.2168** | **7.1613** | **16.1178** | **0.0310** | | **0.0904** | **0.0904** | | **0.0904** | **0.0904** | | **2,897.5468** | **2,897.5468** | **0.1079** | | **2,900.2448** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.7558 | 28.9712 | 7.8741 | 0.1063 | 2.9309 | 0.0303 | 2.9611 | 0.8437 | 0.0289 | 0.8727 | | 11,459.5006 | 11,459.5006 | 0.5710 | | 11,473.7753 |
| Worker | 2.1932 | 1.0303 | 18.8305 | 0.0919 | 13.6703 | 0.0484 | 13.7186 | 3.6254 | 0.0445 | 3.6699 | | 9,182.4577 | 9,182.4577 | 0.1078 | | 9,185.1521 |
| **Total** | **2.9489** | **30.0015** | **26.7046** | **0.1983** | **16.6011** | **0.0787** | **16.6798** | **4.4692** | **0.0734** | **4.5426** | | **20,641.9583** | **20,641.9583** | **0.6788** | | **20,658.9274** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1079 | | 2,900.2448 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1079** | | **2,900.2448** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.7558 | 28.9712 | 7.8741 | 0.1063 | 2.9309 | 0.0303 | 2.9611 | 0.8437 | 0.0289 | 0.8727 | | 11,459.5006 | 11,459.5006 | 0.5710 | | 11,473.7753 |
| Worker | 2.1932 | 1.0303 | 18.8305 | 0.0919 | 13.6703 | 0.0484 | 13.7186 | 3.6254 | 0.0445 | 3.6699 | | 9,182.4577 | 9,182.4577 | 0.1078 | | 9,185.1521 |
| **Total** | **2.9489** | **30.0015** | **26.7046** | **0.1983** | **16.6011** | **0.0787** | **16.6798** | **4.4692** | **0.0734** | **4.5426** | | **20,641.9583** | **20,641.9583** | **0.6788** | | **20,658.9274** |

## 3.4 Architectural Coating - 2034

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 64.5183 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **64.6491** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4644 | 0.2183 | 3.9591 | 0.0187 | 2.7385 | 0.0103 | 2.7489 | 0.7263 | 9.5100e-003 | 0.7358 | | 1,865.2407 | 1,865.2407 | 0.0232 | | 1,865.8218 |
| **Total** | **0.4644** | **0.2183** | **3.9591** | **0.0187** | **2.7385** | **0.0103** | **2.7489** | **0.7263** | **9.5100e-003** | **0.7358** | | **1,865.2407** | **1,865.2407** | **0.0232** | | **1,865.8218** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 64.5183 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **64.5778** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4644 | 0.2183 | 3.9591 | 0.0187 | 2.7385 | 0.0103 | 2.7489 | 0.7263 | 9.5100e-003 | 0.7358 | | 1,865.2407 | 1,865.2407 | 0.0232 | | 1,865.8218 |
| **Total** | **0.4644** | **0.2183** | **3.9591** | **0.0187** | **2.7385** | **0.0103** | **2.7489** | **0.7263** | **9.5100e-003** | **0.7358** | | **1,865.2407** | **1,865.2407** | **0.0232** | | **1,865.8218** |

## 3.4 Architectural Coating - 2035

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Archit. Coating | 64.5183 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1179 | 0.7577 | 1.7943 | 2.9700e-003 | | 9.9000e-003 | 9.9000e-003 | | 9.9000e-003 | 9.9000e-003 | | 281.4481 | 281.4481 | 0.0104 | | 281.7081 |
| **Total** | **64.6362** | **0.7577** | **1.7943** | **2.9700e-003** | | **9.9000e-003** | **9.9000e-003** | | **9.9000e-003** | **9.9000e-003** | | **281.4481** | **281.4481** | **0.0104** | | **281.7081** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4394 | 0.2064 | 3.7723 | 0.0184 | 2.7385 | 9.6900e-003 | 2.7482 | 0.7263 | 8.9100e-003 | 0.7352 | | 1,839.4948 | 1,839.4948 | 0.0216 | | 1,840.0346 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.4394** | **0.2064** | **3.7723** | **0.0184** | **2.7385** | **9.6900e-003** | **2.7482** | **0.7263** | **8.9100e-003** | **0.7352** | | **1,839.4948** | **1,839.4948** | **0.0216** | | **1,840.0346** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 64.5183 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0104 | | 281.7081 |
| **Total** | **64.5778** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0104** | | **281.7081** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4394 | 0.2064 | 3.7723 | 0.0184 | 2.7385 | 9.6900e-003 | 2.7482 | 0.7263 | 8.9100e-003 | 0.7352 | | 1,839.4948 | 1,839.4948 | 0.0216 | | 1,840.0346 |
| **Total** | **0.4394** | **0.2064** | **3.7723** | **0.0184** | **2.7385** | **9.6900e-003** | **2.7482** | **0.7263** | **8.9100e-003** | **0.7352** | | **1,839.4948** | **1,839.4948** | **0.0216** | | **1,840.0346** |

## 3.5 Paving - 2035

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1405 | 4.8761 | 15.8203 | 0.0281 | | 0.1874 | 0.1874 | | 0.1874 | 0.1874 | | 2,656.5168 | 2,656.5168 | 0.1022 | | 2,659.0727 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.1405** | **4.8761** | **15.8203** | **0.0281** | | **0.1874** | **0.1874** | | **0.1874** | **0.1874** | | **2,656.5168** | **2,656.5168** | **0.1022** | | **2,659.0727** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0269 | 0.0126 | 0.2310 | 1.1300e-003 | 0.1677 | 5.9000e-004 | 0.1683 | 0.0445 | 5.5000e-004 | 0.0450 | | 112.6221 | 112.6221 | 1.3200e-003 | | 112.6552 |
| **Total** | **0.0269** | **0.0126** | **0.2310** | **1.1300e-003** | **0.1677** | **5.9000e-004** | **0.1683** | **0.0445** | **5.5000e-004** | **0.0450** | | **112.6221** | **112.6221** | **1.3200e-003** | | **112.6552** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1022 | | 2,659.0726 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1022** | | **2,659.0726** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0269 | 0.0126 | 0.2310 | 1.1300e-003 | 0.1677 | 5.9000e-004 | 0.1683 | 0.0445 | 5.5000e-004 | 0.0450 | | 112.6221 | 112.6221 | 1.3200e-003 | | 112.6552 |
| **Total** | **0.0269** | **0.0126** | **0.2310** | **1.1300e-003** | **0.1677** | **5.9000e-004** | **0.1683** | **0.0445** | **5.5000e-004** | **0.0450** | | **112.6221** | **112.6221** | **1.3200e-003** | | **112.6552** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 14.6206 | 92.4959 | 203.7069 | 1.1811 | 130.5942 | 0.4685 | 131.0628 | 34.9269 | 0.4364 | 35.3633 | | 121,431.4505 | 121,431.4505 | 4.2402 | | 121,537.4562 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmitigated | 14.6206 | 92.4959 | 203.7069 | 1.1811 | 130.5942 | 0.4685 | 131.0628 | 34.9269 | 0.4364 | 35.3633 | | 121,431.4505 | 121,431.4505 | 4.2402 | | 121,537.4562 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| High School | 8,422.33 | 2,855.36 | 1169.59 | 28,148,466 | 28,148,466 |
| Single Family Housing | 5,835.76 | 6,074.83 | 5284.06 | 19,789,064 | 19,789,064 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Regional Shopping Center | 1,860.01 | 2,176.69 | 1099.45 | 3,885,768 | 3,885,768 |
| Total | 16,118.10 | 11,106.88 | 7,553.10 | 51,823,298 | 51,823,298 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| High School | 16.60 | 8.40 | 6.90 | 77.80 | 17.20 | 5.00 | 75 | 19 | 6 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Single Family Housing | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Other Non-Asphalt Surfaces | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Regional Shopping Center | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7261 | 6.2989 | 3.3283 | 0.0396 | | 0.5017 | 0.5017 | | 0.5017 | 0.5017 | | 7,921.3303 | 7,921.3303 | 0.1518 | 0.1452 | 7,968.4028 |
| NaturalGas Unmitigated | 0.7261 | 6.2989 | 3.3283 | 0.0396 | | 0.5017 | 0.5017 | | 0.5017 | 0.5017 | | 7,921.3303 | 7,921.3303 | 0.1518 | 0.1452 | 7,968.4028 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| High School | 15681.6 | 0.1691 | 1.5374 | 1.2914 | 9.2200e-003 | | 0.1168 | 0.1168 | | 0.1168 | 0.1168 | | 1,844.8941 | 1,844.8941 | 0.0354 | 0.0338 | 1,855.8574 |
| 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 |
| Regional Shopping Center | 264.94 | 2.8600e-003 | 0.0260 | 0.0218 | 1.6000e-004 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | | 31.1694 | 31.1694 | 6.0000e-004 | 5.7000e-004 | 31.3547 |
| Single Family Housing | 51384.8 | 0.5542 | 4.7355 | 2.0151 | 0.0302 | | 0.3829 | 0.3829 | | 0.3829 | 0.3829 | | 6,045.2667 | 6,045.2667 | 0.1159 | 0.1108 | 6,081.1907 |
| **Total** | | **0.7261** | **6.2988** | **3.3283** | **0.0396** | | **0.5017** | **0.5017** | | **0.5017** | **0.5017** | | **7,921.3303** | **7,921.3303** | **0.1518** | **0.1452** | **7,968.4028** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 15.6816 | 0.1691 | 1.5374 | 1.2914 | 9.2200e-003 | | 0.1168 | 0.1168 | | 0.1168 | 0.1168 | | 1,844.8941 | 1,844.8941 | 0.0354 | 0.0338 | 1,855.8574 |
| 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 |
| Regional Shopping Center | 0.26494 | 2.8600e-003 | 0.0260 | 0.0218 | 1.6000e-004 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | | 31.1694 | 31.1694 | 6.0000e-004 | 5.7000e-004 | 31.3547 |
| Single Family Housing | 51.3848 | 0.5542 | 4.7355 | 2.0151 | 0.0302 | | 0.3829 | 0.3829 | | 0.3829 | 0.3829 | | 6,045.2667 | 6,045.2667 | 0.1159 | 0.1108 | 6,081.1907 |
| **Total** | | **0.7261** | **6.2988** | **3.3283** | **0.0396** | | **0.5017** | **0.5017** | | **0.5017** | **0.5017** | | **7,921.3303** | **7,921.3303** | **0.1518** | **0.1452** | **7,968.4028** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 217.1603 | 13.3006 | 362.1681 | 0.7980 | | 47.1068 | 47.1068 | | 47.1068 | 47.1068 | 5,741.9210 | 11,125.2236 | 16,867.1446 | 17.2106 | 0.3897 | 17,413.5467 |
| Unmitigated | 217.1603 | 13.3006 | 362.1681 | 0.7980 | | 47.1068 | 47.1068 | | 47.1068 | 47.1068 | 5,741.9210 | 11,125.2236 | 16,867.1446 | 17.2106 | 0.3897 | 17,413.5467 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 4.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 50.0348 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 160.6281 | 12.7187 | 311.7423 | 0.7953 | | 46.8260 | 46.8260 | | 46.8260 | 46.8260 | 5,741.9210 | 11,034.0000 | 16,775.9210 | 17.1235 | 0.3897 | 17,320.1457 |
| Landscaping | 1.5128 | 0.5819 | 50.4258 | 2.6800e-003 | | 0.2807 | 0.2807 | | 0.2807 | 0.2807 | | 91.2236 | 91.2236 | 0.0871 | | 93.4009 |
| **Total** | **217.1603** | **13.3006** | **362.1681** | **0.7980** | | **47.1068** | **47.1068** | | **47.1068** | **47.1068** | **5,741.9210** | **11,125.2236** | **16,867.1446** | **17.2106** | **0.3897** | **17,413.5467** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 4.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 50.0348 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 160.6281 | 12.7187 | 311.7423 | 0.7953 | | 46.8260 | 46.8260 | | 46.8260 | 46.8260 | 5,741.9210 | 11,034.0000 | 16,775.9210 | 17.1235 | 0.3897 | 17,320.1457 |
| Landscaping | 1.5128 | 0.5819 | 50.4258 | 2.6800e-003 | | 0.2807 | 0.2807 | | 0.2807 | 0.2807 | | 91.2236 | 91.2236 | 0.0871 | | 93.4009 |
| **Total** | **217.1603** | **13.3006** | **362.1681** | **0.7980** | | **47.1068** | **47.1068** | | **47.1068** | **47.1068** | **5,741.9210** | **11,125.2236** | **16,867.1446** | **17.2106** | **0.3897** | **17,413.5467** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase IX Construction - South Coast Air Basin, Winter

# Phase IX Construction

**South Coast Air Basin, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| High School | 653.40 | 1000sqft | 15.00 | 653,400.00 | 0 |
| Single Family Housing | 613.00 | Dwelling Unit | 106.00 | 1,799,657.00 | 1753 |
| Other Non-Asphalt Surfaces | 39.00 | Acre | 39.00 | 1,698,840.00 | 0 |
| Regional Shopping Center | 43.56 | 1000sqft | 1.00 | 43,560.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2040 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics - Construction to be complete end of 2035

Land Use - Based on Phasing Summary
Other Non-Asphalt includes Community Parks (External) and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Vehicle Trips -

Energy Use -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| tblConstEquipMitigation | Tier | No Change | Tier 3 |
|---|---|---|---|
| tblConstructionPhase | NumDays | 220.00 | 282.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 348.00 |
| tblConstructionPhase | NumDays | 220.00 | 44.00 |
| tblConstructionPhase | PhaseEndDate | 3/26/2049 | 12/25/2035 |
| tblConstructionPhase | PhaseEndDate | 7/19/2047 | 12/25/2035 |
| tblConstructionPhase | PhaseEndDate | 5/22/2048 | 12/25/2035 |
| tblConstructionPhase | PhaseStartDate | 5/23/2048 | 11/25/2034 |
| tblConstructionPhase | PhaseStartDate | 9/1/2035 | 8/25/2034 |
| tblConstructionPhase | PhaseStartDate | 7/20/2047 | 10/25/2035 |
| tblLandUse | LandUseSquareFeet | 1,103,400.00 | 1,799,657.00 |
| tblLandUse | LotAcreage | 199.03 | 106.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2034 | 73.2350 | 53.0241 | 70.9570 | 0.3139 | 28.2365 | 0.7503 | 28.9868 | 8.8512 | 0.7439 | 9.5951 | 0.0000 | 32,176.4851 | 32,176.4851 | 1.1537 | 0.0000 | 32,205.3276 |
| 2035 | 72.5895 | 47.6909 | 69.3532 | 0.3122 | 28.2365 | 0.5041 | 28.7407 | 8.8512 | 0.4981 | 9.3493 | 0.0000 | 32,017.1728 | 32,017.1728 | 1.0957 | 0.0000 | 32,044.5657 |
| **Maximum** | **73.2350** | **53.0241** | **70.9570** | **0.3139** | **28.2365** | **0.7503** | **28.9868** | **8.8512** | **0.7439** | **9.5951** | **0.0000** | **32,176.4851** | **32,176.4851** | **1.1537** | **0.0000** | **32,205.3276** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2034 | 70.7709 | 66.8360 | 86.4072 | 0.3139 | 22.9458 | 0.4386 | 23.3844 | 6.6574 | 0.4322 | 7.0895 | 0.0000 | 32,176.4851 | 32,176.4851 | 1.1537 | 0.0000 | 32,205.3276 |
| 2035 | 70.5997 | 66.6266 | 85.3449 | 0.3122 | 22.9458 | 0.4343 | 23.3801 | 6.6574 | 0.4282 | 7.0855 | 0.0000 | 32,017.1728 | 32,017.1728 | 1.0957 | 0.0000 | 32,044.5657 |
| **Maximum** | **70.7709** | **66.8360** | **86.4072** | **0.3139** | **22.9458** | **0.4386** | **23.3844** | **6.6574** | **0.4322** | **7.0895** | **0.0000** | **32,176.4851** | **32,176.4851** | **1.1537** | **0.0000** | **32,205.3276** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.05** | **-32.52** | **-22.41** | **0.00** | **18.74** | **30.41** | **18.99** | **24.79** | **30.72** | **25.18** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 217.1603 | 13.3006 | 362.1681 | 0.7980 | | 47.1068 | 47.1068 | | 47.1068 | 47.1068 | 5,741.9210 | 11,125.2236 | 16,867.1446 | 17.2106 | 0.3897 | 17,413.5467 |
| Energy | 0.7261 | 6.2989 | 3.3283 | 0.0396 | | 0.5017 | 0.5017 | | 0.5017 | 0.5017 | | 7,921.3303 | 7,921.3303 | 0.1518 | 0.1452 | 7,968.4028 |
| Mobile | 14.0980 | 93.2415 | 190.9845 | 1.1239 | 130.5942 | 0.4695 | 131.0637 | 34.9269 | 0.4373 | 35.3642 | | 115,663.1499 | 115,663.1499 | 4.2828 | | 115,770.2199 |
| **Total** | **231.9845** | **112.8410** | **556.4809** | **1.9615** | **130.5942** | **48.0779** | **178.6722** | **34.9269** | **48.0458** | **82.9727** | **5,741.9210** | **134,709.7038** | **140,451.6248** | **21.6452** | **0.5349** | **141,152.1694** |

### Mitigated Operational

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | 217.1603 | 13.3006 | 362.1681 | 0.7980 | | 47.1068 | 47.1068 | | 47.1068 | 47.1068 | 5,741.9210 | 11,125.2236 | 16,867.1446 | 17.2106 | 0.3897 | 17,413.5467 |
| Energy | 0.7261 | 6.2989 | 3.3283 | 0.0396 | | 0.5017 | 0.5017 | | 0.5017 | 0.5017 | | 7,921.3303 | 7,921.3303 | 0.1518 | 0.1452 | 7,968.4028 |
| Mobile | 14.0980 | 93.2415 | 190.9845 | 1.1239 | 130.5942 | 0.4695 | 131.0637 | 34.9269 | 0.4373 | 35.3642 | | 115,663.1499 | 115,663.1499 | 4.2828 | | 115,770.2199 |
| **Total** | **231.9845** | **112.8410** | **556.4809** | **1.9615** | **130.5942** | **48.0779** | **178.6722** | **34.9269** | **48.0458** | **82.9727** | **5,741.9210** | **134,709.7038** | **140,451.6248** | **21.6452** | **0.5349** | **141,152.1694** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 6/25/2034 | 8/31/2035 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 8/25/2034 | 12/25/2035 | 5 | 348 | |
| 3 | Architectural Coating | Architectural Coating | 11/25/2034 | 12/25/2035 | 5 | 282 | |
| 4 | Paving | Paving | 10/25/2035 | 12/25/2035 | 5 | 44 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 39**

**Residential Indoor: 3,644,305; Residential Outdoor: 1,214,768; Non-Residential Indoor: 1,045,440; Non-Residential Outdoor: 348,480;**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |

| | | | | | |
|---|---|---|---|---|---|
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 1,223.00 | 458.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 245.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2034

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2807 | 13.8462 | 23.0239 | 0.0699 | | 0.4879 | 0.4879 | | 0.4879 | 0.4879 | | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **3.2807** | **13.8462** | **23.0239** | **0.0699** | **8.6733** | **0.4879** | **9.1613** | **3.5965** | **0.4879** | **4.0844** | | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0430 | 0.0195 | 0.2870 | 1.4300e-003 | 0.2236 | 8.4000e-004 | 0.2244 | 0.0593 | 7.8000e-004 | 0.0601 | | 142.6513 | 142.6513 | 1.7500e-003 | | 142.6951 |
| **Total** | **0.0430** | **0.0195** | **0.2870** | **1.4300e-003** | **0.2236** | **8.4000e-004** | **0.2244** | **0.0593** | **7.8000e-004** | **0.0601** | | **142.6513** | **142.6513** | **1.7500e-003** | | **142.6951** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1086 | 7,213.1086 | 0.2915 | | 7,220.3963 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1086** | **7,213.1086** | **0.2915** | | **7,220.3963** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0430 | 0.0195 | 0.2870 | 1.4300e-003 | 0.2236 | 8.4000e-004 | 0.2244 | 0.0593 | 7.8000e-004 | 0.0601 | | 142.6513 | 142.6513 | 1.7500e-003 | | 142.6951 |
| **Total** | **0.0430** | **0.0195** | **0.2870** | **1.4300e-003** | **0.2236** | **8.4000e-004** | **0.2244** | **0.0593** | **7.8000e-004** | **0.0601** | | **142.6513** | **142.6513** | **1.7500e-003** | | **142.6951** |

## 3.2 Grading - 2035

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9116 | 9.5942 | 22.5250 | 0.0699 | | 0.3142 | 0.3142 | | 0.3142 | 0.3142 | | 7,213.1148 | 7,213.1148 | 0.2560 | | 7,219.5135 |
| **Total** | **2.9116** | **9.5942** | **22.5250** | **0.0699** | **8.6733** | **0.3142** | **8.9876** | **3.5965** | **0.3142** | **3.9107** | | **7,213.1148** | **7,213.1148** | **0.2560** | | **7,219.5135** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0408 | 0.0184 | 0.2731 | 1.4100e-003 | 0.2236 | 7.9000e-004 | 0.2243 | 0.0593 | 7.3000e-004 | 0.0600 | | 140.6668 | 140.6668 | 1.6300e-003 | | 140.7075 |
| **Total** | **0.0408** | **0.0184** | **0.2731** | **1.4100e-003** | **0.2236** | **7.9000e-004** | **0.2243** | **0.0593** | **7.3000e-004** | **0.0600** | | **140.6668** | **140.6668** | **1.6300e-003** | | **140.7075** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0699 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 7,213.1148 | 7,213.1148 | 0.2560 | | 7,219.5135 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0699** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **7,213.1148** | **7,213.1148** | **0.2560** | | **7,219.5135** |

## Mitigated Construction Off-Site

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0408 | 0.0184 | 0.2731 | 1.4100e-003 | 0.2236 | 7.9000e-004 | 0.2243 | 0.0593 | 7.3000e-004 | 0.0600 | | 140.6668 | 140.6668 | 1.6300e-003 | | 140.7075 |
| **Total** | **0.0408** | **0.0184** | **0.2731** | **1.4100e-003** | **0.2236** | **7.9000e-004** | **0.2243** | **0.0593** | **7.3000e-004** | **0.0600** | | **140.6668** | **140.6668** | **1.6300e-003** | | **140.7075** |

## 3.3 Building Construction - 2034

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.7970 | 28.9395 | 8.6265 | 0.1037 | 2.9308 | 0.0311 | 2.9619 | 0.8437 | 0.0297 | 0.8734 | | 11,171.1274 | 11,171.1274 | 0.6040 | | 11,186.2276 |
| Worker | 2.6295 | 1.1897 | 17.5494 | 0.0873 | 13.6703 | 0.0516 | 13.7219 | 3.6254 | 0.0475 | 3.6729 | | 8,723.1251 | 8,723.1251 | 0.1073 | | 8,725.8075 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **3.4264** | **30.1292** | **26.1758** | **0.1911** | **16.6011** | **0.0827** | **16.6838** | **4.4692** | **0.0772** | **4.5463** | | **19,894.2525** | **19,894.2525** | **0.7113** | | **19,912.0351** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.7970 | 28.9395 | 8.6265 | 0.1037 | 2.9308 | 0.0311 | 2.9619 | 0.8437 | 0.0297 | 0.8734 | | 11,171.1274 | 11,171.1274 | 0.6040 | | 11,186.2276 |
| Worker | 2.6295 | 1.1897 | 17.5494 | 0.0873 | 13.6703 | 0.0516 | 13.7219 | 3.6254 | 0.0475 | 3.6729 | | 8,723.1251 | 8,723.1251 | 0.1073 | | 8,725.8075 |
| **Total** | **3.4264** | **30.1292** | **26.1758** | **0.1911** | **16.6011** | **0.0827** | **16.6838** | **4.4692** | **0.0772** | **4.5463** | | **19,894.2525** | **19,894.2525** | **0.7113** | | **19,912.0351** |

## 3.3 Building Construction - 2035

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.2168 | 7.1613 | 16.1178 | 0.0310 | | 0.0904 | 0.0904 | | 0.0904 | 0.0904 | | 2,897.5468 | 2,897.5468 | 0.1079 | | 2,900.2448 |
| **Total** | **1.2168** | **7.1613** | **16.1178** | **0.0310** | | **0.0904** | **0.0904** | | **0.0904** | **0.0904** | | **2,897.5468** | **2,897.5468** | **0.1079** | | **2,900.2448** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.7929 | 28.8097 | 8.5991 | 0.1036 | 2.9309 | 0.0308 | 2.9616 | 0.8437 | 0.0294 | 0.8731 | | 11,159.4524 | 11,159.4524 | 0.6003 | | 11,174.4599 |
| Worker | 2.4921 | 1.1244 | 16.6988 | 0.0861 | 13.6703 | 0.0484 | 13.7186 | 3.6254 | 0.0445 | 3.6699 | | 8,601.7756 | 8,601.7756 | 0.0996 | | 8,604.2648 |
| **Total** | **3.2850** | **29.9340** | **25.2979** | **0.1897** | **16.6011** | **0.0791** | **16.6802** | **4.4692** | **0.0739** | **4.5430** | | **19,761.2280** | **19,761.2280** | **0.6999** | | **19,778.7247** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1079 | | 2,900.2448 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1079** | | **2,900.2448** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.7929 | 28.8097 | 8.5991 | 0.1036 | 2.9309 | 0.0308 | 2.9616 | 0.8437 | 0.0294 | 0.8731 | | 11,159.4524 | 11,159.4524 | 0.6003 | | 11,174.4599 |
| Worker | 2.4921 | 1.1244 | 16.6988 | 0.0861 | 13.6703 | 0.0484 | 13.7186 | 3.6254 | 0.0445 | 3.6699 | | 8,601.7756 | 8,601.7756 | 0.0996 | | 8,604.2648 |
| **Total** | **3.2850** | **29.9340** | **25.2979** | **0.1897** | **16.6011** | **0.0791** | **16.6802** | **4.4692** | **0.0739** | **4.5430** | | **19,761.2280** | **19,761.2280** | **0.6999** | | **19,778.7247** |

## 3.4 Architectural Coating - 2034

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 64.5183 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **64.6491** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5268 | 0.2383 | 3.5156 | 0.0175 | 2.7385 | 0.0103 | 2.7489 | 0.7263 | 9.5100e-003 | 0.7358 | | 1,747.4781 | 1,747.4781 | 0.0215 | | 1,748.0154 |
| **Total** | **0.5268** | **0.2383** | **3.5156** | **0.0175** | **2.7385** | **0.0103** | **2.7489** | **0.7263** | **9.5100e-003** | **0.7358** | | **1,747.4781** | **1,747.4781** | **0.0215** | | **1,748.0154** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 64.5183 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **64.5778** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5268 | 0.2383 | 3.5156 | 0.0175 | 2.7385 | 0.0103 | 2.7489 | 0.7263 | 9.5100e-003 | 0.7358 | | 1,747.4781 | 1,747.4781 | 0.0215 | | 1,748.0154 |
| **Total** | **0.5268** | **0.2383** | **3.5156** | **0.0175** | **2.7385** | **0.0103** | **2.7489** | **0.7263** | **9.5100e-003** | **0.7358** | | **1,747.4781** | **1,747.4781** | **0.0215** | | **1,748.0154** |

## 3.4 Architectural Coating - 2035

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Archit. Coating | 64.5183 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1179 | 0.7577 | 1.7943 | 2.9700e-003 | | 9.9000e-003 | 9.9000e-003 | | 9.9000e-003 | 9.9000e-003 | | 281.4481 | 281.4481 | 0.0104 | | 281.7081 |
| **Total** | **64.6362** | **0.7577** | **1.7943** | **2.9700e-003** | | **9.9000e-003** | **9.9000e-003** | | **9.9000e-003** | **9.9000e-003** | | **281.4481** | **281.4481** | **0.0104** | | **281.7081** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4992 | 0.2252 | 3.3452 | 0.0173 | 2.7385 | 9.6900e-003 | 2.7482 | 0.7263 | 8.9100e-003 | 0.7352 | | 1,723.1685 | 1,723.1685 | 0.0200 | | 1,723.6671 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.4992** | **0.2252** | **3.3452** | **0.0173** | **2.7385** | **9.6900e-003** | **2.7482** | **0.7263** | **8.9100e-003** | **0.7352** | | **1,723.1685** | **1,723.1685** | **0.0200** | | **1,723.6671** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 64.5183 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0104 | | 281.7081 |
| **Total** | **64.5778** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0104** | | **281.7081** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4992 | 0.2252 | 3.3452 | 0.0173 | 2.7385 | 9.6900e-003 | 2.7482 | 0.7263 | 8.9100e-003 | 0.7352 | | 1,723.1685 | 1,723.1685 | 0.0200 | | 1,723.6671 |
| **Total** | **0.4992** | **0.2252** | **3.3452** | **0.0173** | **2.7385** | **9.6900e-003** | **2.7482** | **0.7263** | **8.9100e-003** | **0.7352** | | **1,723.1685** | **1,723.1685** | **0.0200** | | **1,723.6671** |

## 3.5 Paving - 2035

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1405 | 4.8761 | 15.8203 | 0.0281 | | 0.1874 | 0.1874 | | 0.1874 | 0.1874 | | 2,656.5168 | 2,656.5168 | 0.1022 | | 2,659.0727 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.1405** | **4.8761** | **15.8203** | **0.0281** | | **0.1874** | **0.1874** | | **0.1874** | **0.1874** | | **2,656.5168** | **2,656.5168** | **0.1022** | | **2,659.0727** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0306 | 0.0138 | 0.2048 | 1.0600e-003 | 0.1677 | 5.9000e-004 | 0.1683 | 0.0445 | 5.5000e-004 | 0.0450 | | 105.5001 | 105.5001 | 1.2200e-003 | | 105.5306 |
| **Total** | **0.0306** | **0.0138** | **0.2048** | **1.0600e-003** | **0.1677** | **5.9000e-004** | **0.1683** | **0.0445** | **5.5000e-004** | **0.0450** | | **105.5001** | **105.5001** | **1.2200e-003** | | **105.5306** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1022 | | 2,659.0726 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1022** | | **2,659.0726** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0306 | 0.0138 | 0.2048 | 1.0600e-003 | 0.1677 | 5.9000e-004 | 0.1683 | 0.0445 | 5.5000e-004 | 0.0450 | | 105.5001 | 105.5001 | 1.2200e-003 | | 105.5306 |
| **Total** | **0.0306** | **0.0138** | **0.2048** | **1.0600e-003** | **0.1677** | **5.9000e-004** | **0.1683** | **0.0445** | **5.5000e-004** | **0.0450** | | **105.5001** | **105.5001** | **1.2200e-003** | | **105.5306** |

# 4.0 Operational Detail - Mobile

## 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 14.0980 | 93.2415 | 190.9845 | 1.1239 | 130.5942 | 0.4695 | 131.0637 | 34.9269 | 0.4373 | 35.3642 | | 115,663.1499 | 115,663.1499 | 4.2828 | | 115,770.2199 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmitigated | 14.0980 | 93.2415 | 190.9845 | 1.1239 | 130.5942 | 0.4695 | 131.0637 | 34.9269 | 0.4373 | 35.3642 | | 115,663.1499 | 115,663.1499 | 4.2828 | | 115,770.2199 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| High School | 8,422.33 | 2,855.36 | 1169.59 | 28,148,466 | 28,148,466 |
| Single Family Housing | 5,835.76 | 6,074.83 | 5284.06 | 19,789,064 | 19,789,064 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Regional Shopping Center | 1,860.01 | 2,176.69 | 1099.45 | 3,885,768 | 3,885,768 |
| Total | 16,118.10 | 11,106.88 | 7,553.10 | 51,823,298 | 51,823,298 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| High School | 16.60 | 8.40 | 6.90 | 77.80 | 17.20 | 5.00 | 75 | 19 | 6 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Single Family Housing | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Other Non-Asphalt Surfaces | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Regional Shopping Center | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7261 | 6.2989 | 3.3283 | 0.0396 | | 0.5017 | 0.5017 | | 0.5017 | 0.5017 | | 7,921.3303 | 7,921.3303 | 0.1518 | 0.1452 | 7,968.4028 |
| NaturalGas Unmitigated | 0.7261 | 6.2989 | 3.3283 | 0.0396 | | 0.5017 | 0.5017 | | 0.5017 | 0.5017 | | 7,921.3303 | 7,921.3303 | 0.1518 | 0.1452 | 7,968.4028 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| High School | 15681.6 | 0.1691 | 1.5374 | 1.2914 | 9.2200e-003 | | 0.1168 | 0.1168 | | 0.1168 | 0.1168 | | 1,844.8941 | 1,844.8941 | 0.0354 | 0.0338 | 1,855.8574 |
| 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 |
| Regional Shopping Center | 264.94 | 2.8600e-003 | 0.0260 | 0.0218 | 1.6000e-004 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | | 31.1694 | 31.1694 | 6.0000e-004 | 5.7000e-004 | 31.3547 |
| Single Family Housing | 51384.8 | 0.5542 | 4.7355 | 2.0151 | 0.0302 | | 0.3829 | 0.3829 | | 0.3829 | 0.3829 | | 6,045.2667 | 6,045.2667 | 0.1159 | 0.1108 | 6,081.1907 |
| **Total** | | **0.7261** | **6.2988** | **3.3283** | **0.0396** | | **0.5017** | **0.5017** | | **0.5017** | **0.5017** | | **7,921.3303** | **7,921.3303** | **0.1518** | **0.1452** | **7,968.4028** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 15.6816 | 0.1691 | 1.5374 | 1.2914 | 9.2200e-003 | | 0.1168 | 0.1168 | | 0.1168 | 0.1168 | | 1,844.8941 | 1,844.8941 | 0.0354 | 0.0338 | 1,855.8574 |
| 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 |
| Regional Shopping Center | 0.26494 | 2.8600e-003 | 0.0260 | 0.0218 | 1.6000e-004 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | | 31.1694 | 31.1694 | 6.0000e-004 | 5.7000e-004 | 31.3547 |
| Single Family Housing | 51.3848 | 0.5542 | 4.7355 | 2.0151 | 0.0302 | | 0.3829 | 0.3829 | | 0.3829 | 0.3829 | | 6,045.2667 | 6,045.2667 | 0.1159 | 0.1108 | 6,081.1907 |
| **Total** | | **0.7261** | **6.2988** | **3.3283** | **0.0396** | | **0.5017** | **0.5017** | | **0.5017** | **0.5017** | | **7,921.3303** | **7,921.3303** | **0.1518** | **0.1452** | **7,968.4028** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 217.1603 | 13.3006 | 362.1681 | 0.7980 | | 47.1068 | 47.1068 | | 47.1068 | 47.1068 | 5,741.9210 | 11,125.2236 | 16,867.1446 | 17.2106 | 0.3897 | 17,413.5467 |
| Unmitigated | 217.1603 | 13.3006 | 362.1681 | 0.7980 | | 47.1068 | 47.1068 | | 47.1068 | 47.1068 | 5,741.9210 | 11,125.2236 | 16,867.1446 | 17.2106 | 0.3897 | 17,413.5467 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 4.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 50.0348 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 160.6281 | 12.7187 | 311.7423 | 0.7953 | | 46.8260 | 46.8260 | | 46.8260 | 46.8260 | 5,741.9210 | 11,034.0000 | 16,775.9210 | 17.1235 | 0.3897 | 17,320.1457 |
| Landscaping | 1.5128 | 0.5819 | 50.4258 | 2.6800e-003 | | 0.2807 | 0.2807 | | 0.2807 | 0.2807 | | 91.2236 | 91.2236 | 0.0871 | | 93.4009 |
| **Total** | **217.1603** | **13.3006** | **362.1681** | **0.7980** | | **47.1068** | **47.1068** | | **47.1068** | **47.1068** | **5,741.9210** | **11,125.2236** | **16,867.1446** | **17.2106** | **0.3897** | **17,413.5467** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 4.9847 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 50.0348 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 160.6281 | 12.7187 | 311.7423 | 0.7953 | | 46.8260 | 46.8260 | | 46.8260 | 46.8260 | 5,741.9210 | 11,034.0000 | 16,775.9210 | 17.1235 | 0.3897 | 17,320.1457 |
| Landscaping | 1.5128 | 0.5819 | 50.4258 | 2.6800e-003 | | 0.2807 | 0.2807 | | 0.2807 | 0.2807 | | 91.2236 | 91.2236 | 0.0871 | | 93.4009 |
| **Total** | **217.1603** | **13.3006** | **362.1681** | **0.7980** | | **47.1068** | **47.1068** | | **47.1068** | **47.1068** | **5,741.9210** | **11,125.2236** | **16,867.1446** | **17.2106** | **0.3897** | **17,413.5467** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

# EHNCP (Proposed Project)

**South Coast Air Basin, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| High School | 600.00 | Student | 18.00 | 784,080.00 | 0 |
| Other Non-Asphalt Surfaces | 198.00 | Acre | 198.00 | 8,624,880.00 | 0 |
| Single Family Housing | 3,000.00 | Dwelling Unit | 531.00 | 7,815,844.00 | 9090 |
| Regional Shopping Center | 566.28 | 1000sqft | 13.00 | 566,282.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2040 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - The 3,000 units within the Plan would generate a population increase of 9,090
Other Non-Asphalt includes parks (internal and external) and utility corridor/bank easement

Construction Phase - According to construction schedule scenario

Trips and VMT - Default assumptions

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips - Based on a gross tripend of 35,446 trips (includes internal and external trips)

Woodstoves - No woodstoves

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Mobile Land Use Mitigation - Milliken & Baseline Station
Metrolink station located further south

Area Mitigation - Per SCAQMD Electric Lawn mower
SCAQMD Rule 445: Natural Gas Hearth

Energy Mitigation - California 2020 Building Standard. The Plan would promote renewable and alternative energy technology
CalGreen Voluntary measure require energy efficiency that exceeds Title 24 requirements by 15-30 percent

Water Mitigation -

Waste Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | CleanPavedRoadPercentReduction | 0 | 92.5 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 880.00 | 913.00 |
| tblConstructionPhase | NumDays | 12,400.00 | 1,837.00 |
| tblConstructionPhase | NumDays | 1,240.00 | 1,550.00 |
| tblConstructionPhase | NumDays | 880.00 | 132.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 150.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 79,596.59 | 784,080.00 |
| tblLandUse | LandUseSquareFeet | 5,400,000.00 | 7,815,844.00 |
| tblLandUse | LandUseSquareFeet | 566,280.00 | 566,282.00 |
| tblLandUse | LotAcreage | 1.83 | 18.00 |
| tblLandUse | LotAcreage | 974.03 | 531.00 |
| tblLandUse | Population | 8,580.00 | 9,090.00 |
| tblVehicleTrips | ST_TR | 0.61 | 0.00 |
| tblVehicleTrips | ST_TR | 49.97 | 0.00 |
| tblVehicleTrips | ST_TR | 9.91 | 11.82 |
| tblVehicleTrips | SU_TR | 0.25 | 0.00 |
| tblVehicleTrips | SU_TR | 25.24 | 0.00 |
| tblVehicleTrips | SU_TR | 8.62 | 11.82 |
| tblVehicleTrips | WD_TR | 1.71 | 0.00 |
| tblVehicleTrips | WD_TR | 42.70 | 0.00 |
| tblVehicleTrips | WD_TR | 9.52 | 11.82 |
| tblWoodstoves | NumberCatalytic | 150.00 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 150.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 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 | | | | | |
| 2023 | 0.4414 | 4.4936 | 3.7239 | 8.3300e-003 | 2.8661 | 0.1854 | 3.0515 | 0.6598 | 0.1706 | 0.8303 | 0.0000 | 732.0462 | 732.0462 | 0.2298 | 0.0000 | 737.7921 |
| 2024 | 0.4307 | 4.2474 | 3.7043 | 8.3800e-003 | 2.8724 | 0.1751 | 3.0475 | 0.6631 | 0.1611 | 0.8243 | 0.0000 | 736.7033 | 736.7033 | 0.2315 | 0.0000 | 742.4906 |
| 2025 | 0.3873 | 3.6520 | 3.5034 | 8.3400e-003 | 2.8692 | 0.1478 | 3.0170 | 0.6615 | 0.1360 | 0.7974 | 0.0000 | 732.8356 | 732.8356 | 0.2305 | 0.0000 | 738.5983 |
| 2026 | 0.3869 | 3.6516 | 3.4990 | 8.3300e-003 | 2.8692 | 0.1478 | 3.0170 | 0.6615 | 0.1360 | 0.7974 | 0.0000 | 732.0730 | 732.0730 | 0.2305 | 0.0000 | 737.8347 |
| 2027 | 0.3865 | 3.6512 | 3.4951 | 8.3200e-003 | 2.8692 | 0.1478 | 3.0170 | 0.6615 | 0.1359 | 0.7974 | 0.0000 | 731.4004 | 731.4004 | 0.2304 | 0.0000 | 737.1612 |
| 2028 | 0.5113 | 4.5627 | 4.5036 | 0.0147 | 3.3407 | 0.1462 | 3.4869 | 0.7751 | 0.1347 | 0.9098 | 0.0000 | 1,329.7677 | 1,329.7677 | 0.2438 | 0.0000 | 1,335.8619 |
| 2029 | 2.4674 | 19.5370 | 20.3902 | 0.1175 | 9.0724 | 0.1278 | 9.2003 | 2.4464 | 0.1197 | 2.5660 | 0.0000 | 11,042.7252 | 11,042.7252 | 0.4666 | 0.0000 | 11,054.3891 |
| 2030 | 2.3360 | 18.7316 | 19.5373 | 0.1165 | 9.0724 | 0.0752 | 9.1476 | 2.4464 | 0.0714 | 2.5177 | 0.0000 | 10,941.9077 | 10,941.9077 | 0.3983 | 0.0000 | 10,951.8659 |
| 2031 | 2.2045 | 18.5631 | 18.7452 | 0.1152 | 9.0725 | 0.0725 | 9.1449 | 2.4464 | 0.0689 | 2.5152 | 0.0000 | 10,830.7847 | 10,830.7847 | 0.3888 | 0.0000 | 10,840.5057 |
| 2032 | 7.0100 | 18.5902 | 19.3774 | 0.1200 | 9.8854 | 0.0749 | 9.9603 | 2.6624 | 0.0712 | 2.7336 | 0.0000 | 11,264.5569 | 11,264.5569 | 0.3892 | 0.0000 | 11,274.2861 |
| 2033 | 11.3567 | 18.4040 | 19.6783 | 0.1229 | 10.5253 | 0.0760 | 10.6013 | 2.8321 | 0.0723 | 2.9043 | 0.0000 | 11,529.1759 | 11,529.1759 | 0.3847 | 0.0000 | 11,538.7928 |
| 2034 | 11.2555 | 18.2517 | 18.9598 | 0.1219 | 10.5253 | 0.0733 | 10.5986 | 2.8321 | 0.0698 | 2.9019 | 0.0000 | 11,434.8458 | 11,434.8458 | 0.3769 | 0.0000 | 11,444.2683 |
| 2035 | 11.1060 | 18.1349 | 19.2055 | 0.1215 | 10.4147 | 0.0738 | 10.4886 | 2.8023 | 0.0705 | 2.8728 | 0.0000 | 11,389.2083 | 11,389.2083 | 0.3712 | 0.0000 | 11,398.4892 |
| **Maximum** | **11.3567** | **19.5370** | **20.3902** | **0.1229** | **10.5253** | **0.1854** | **10.6013** | **2.8321** | **0.1706** | **2.9043** | **0.0000** | **11,529.1759** | **11,529.1759** | **0.4666** | **0.0000** | **11,538.7928** |

## 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 | | | | | |
| 2023 | 0.2076 | 3.1243 | 4.8512 | 8.3300e-003 | 0.9463 | 0.0255 | 0.9719 | 0.2182 | 0.0255 | 0.2437 | 0.0000 | 732.0453 | 732.0453 | 0.2298 | 0.0000 | 737.7912 |
| 2024 | 0.2087 | 3.1477 | 4.8832 | 8.3800e-003 | 0.9484 | 0.0257 | 0.9741 | 0.2193 | 0.0257 | 0.2450 | 0.0000 | 736.7024 | 736.7024 | 0.2315 | 0.0000 | 742.4897 |
| 2025 | 0.2074 | 3.1352 | 4.8595 | 8.3400e-003 | 0.9473 | 0.0256 | 0.9730 | 0.2187 | 0.0256 | 0.2443 | 0.0000 | 732.8348 | 732.8348 | 0.2305 | 0.0000 | 738.5974 |
| 2026 | 0.2070 | 3.1348 | 4.8551 | 8.3300e-003 | 0.9473 | 0.0256 | 0.9730 | 0.2187 | 0.0256 | 0.2443 | 0.0000 | 732.0722 | 732.0722 | 0.2305 | 0.0000 | 737.8339 |
| 2027 | 0.2067 | 3.1344 | 4.8512 | 8.3200e-003 | 0.9473 | 0.0256 | 0.9730 | 0.2187 | 0.0256 | 0.2443 | 0.0000 | 731.3995 | 731.3995 | 0.2304 | 0.0000 | 737.1604 |
| 2028 | 0.3373 | 4.0693 | 5.7900 | 0.0147 | 1.0479 | 0.0286 | 1.0765 | 0.2511 | 0.0284 | 0.2795 | 0.0000 | 1,329.7668 | 1,329.7668 | 0.2438 | 0.0000 | 1,335.8611 |
| 2029 | 2.3769 | 19.3949 | 20.6236 | 0.1175 | 2.0332 | 0.0767 | 2.1099 | 0.7185 | 0.0726 | 0.7911 | 0.0000 | 11,042.7249 | 11,042.7249 | 0.4666 | 0.0000 | 11,054.3887 |
| 2030 | 2.2531 | 19.1813 | 19.7614 | 0.1165 | 2.0332 | 0.0736 | 2.1067 | 0.7185 | 0.0697 | 0.7883 | 0.0000 | 10,941.9073 | 10,941.9073 | 0.3983 | 0.0000 | 10,951.8655 |
| 2031 | 2.1216 | 19.0128 | 18.9692 | 0.1152 | 2.0332 | 0.0708 | 2.1040 | 0.7185 | 0.0672 | 0.7857 | 0.0000 | 10,830.7843 | 10,830.7843 | 0.3888 | 0.0000 | 10,840.5053 |
| 2032 | 6.9220 | 19.0572 | 19.6046 | 0.1200 | 2.1951 | 0.0729 | 2.2680 | 0.7748 | 0.0692 | 0.8439 | 0.0000 | 11,264.5565 | 11,264.5565 | 0.3892 | 0.0000 | 11,274.2857 |
| 2033 | 11.2648 | 18.8818 | 19.9060 | 0.1229 | 2.3201 | 0.0736 | 2.3937 | 0.8181 | 0.0698 | 0.8879 | 0.0000 | 11,529.1755 | 11,529.1755 | 0.3847 | 0.0000 | 11,538.7923 |
| 2034 | 11.1636 | 18.7295 | 19.1875 | 0.1219 | 2.3201 | 0.0709 | 2.3910 | 0.8181 | 0.0674 | 0.8854 | 0.0000 | 11,434.8454 | 11,434.8454 | 0.3769 | 0.0000 | 11,444.2679 |
| 2035 | 10.9904 | 18.9938 | 19.5334 | 0.1215 | 2.2955 | 0.0738 | 2.3694 | 0.8094 | 0.0705 | 0.8799 | 0.0000 | 11,389.2077 | 11,389.2077 | 0.3712 | 0.0000 | 11,398.4886 |
| **Maximum** | **11.2648** | **19.3949** | **20.6236** | **0.1229** | **2.3201** | **0.0767** | **2.3937** | **0.8181** | **0.0726** | **0.8879** | **0.0000** | **11,529.1755** | **11,529.1755** | **0.4666** | **0.0000** | **11,538.7923** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.61** | **0.95** | **-5.91** | **0.00** | **75.64** | **56.09** | **75.30** | **70.20** | **54.66** | **69.28** | **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 | 1-2-2023 | 4-1-2023 | 1.2204 | 0.8240 |
| 2 | 4-2-2023 | 7-1-2023 | 1.2336 | 0.8328 |
| 3 | 7-2-2023 | 10-1-2023 | 1.2471 | 0.8419 |
| 4 | 10-2-2023 | 1-1-2024 | 1.2467 | 0.8423 |
| 5 | 1-2-2024 | 4-1-2024 | 1.1608 | 0.8329 |
| 6 | 4-2-2024 | 7-1-2024 | 1.1604 | 0.8325 |
| 7 | 7-2-2024 | 10-1-2024 | 1.1732 | 0.8417 |
| 8 | 10-2-2024 | 1-1-2025 | 1.1719 | 0.8421 |
| 9 | 1-2-2025 | 4-1-2025 | 0.9951 | 0.8235 |
| 10 | 4-2-2025 | 7-1-2025 | 1.0058 | 0.8323 |
| 11 | 7-2-2025 | 10-1-2025 | 1.0169 | 0.8415 |
| 12 | 10-2-2025 | 1-1-2026 | 1.0172 | 0.8418 |
| 13 | 1-2-2026 | 4-1-2026 | 0.9949 | 0.8233 |
| 14 | 4-2-2026 | 7-1-2026 | 1.0056 | 0.8321 |
| 15 | 7-2-2026 | 10-1-2026 | 1.0167 | 0.8413 |
| 16 | 10-2-2026 | 1-1-2027 | 1.0170 | 0.8416 |
| 17 | 1-2-2027 | 4-1-2027 | 0.9947 | 0.8231 |
| 18 | 4-2-2027 | 7-1-2027 | 1.0054 | 0.8319 |
| 19 | 7-2-2027 | 10-1-2027 | 1.0165 | 0.8411 |
| 20 | 10-2-2027 | 1-1-2028 | 1.0168 | 0.8414 |
| 21 | 1-2-2028 | 4-1-2028 | 1.0056 | 0.8321 |
| 22 | 4-2-2028 | 7-1-2028 | 1.0052 | 0.8317 |
| 23 | 7-2-2028 | 10-1-2028 | 1.0163 | 0.8409 |
| 24 | 10-2-2028 | 1-1-2029 | 2.2168 | 2.0719 |
| 25 | 1-2-2029 | 4-1-2029 | 5.4118 | 5.3545 |
| 26 | 4-2-2029 | 7-1-2029 | 5.4095 | 5.3515 |
| 27 | 7-2-2029 | 10-1-2029 | 5.4696 | 5.4110 |
| 28 | 10-2-2029 | 1-1-2030 | 5.5301 | 5.4732 |
| 29 | 1-2-2030 | 4-1-2030 | 5.1793 | 5.2697 |

| | | | | |
|---|---|---|---|---|
| **30** | **4-2-2030** | **7-1-2030** | 5.1794 | 5.2707 |
| **31** | **7-2-2030** | **10-1-2030** | 5.2369 | 5.3293 |
| **32** | **10-2-2030** | **1-1-2031** | 5.2942 | 5.3866 |
| **33** | **1-2-2031** | **4-1-2031** | 5.1030 | 5.1934 |
| **34** | **4-2-2031** | **7-1-2031** | 5.1074 | 5.1988 |
| **35** | **7-2-2031** | **10-1-2031** | 5.1642 | 5.2565 |
| **36** | **10-2-2031** | **1-1-2032** | 5.2162 | 5.3085 |
| **37** | **1-2-2032** | **4-1-2032** | 5.0821 | 5.1735 |
| **38** | **4-2-2032** | **7-1-2032** | 5.2204 | 5.3121 |
| **39** | **7-2-2032** | **10-1-2032** | 7.5297 | 7.6273 |
| **40** | **10-2-2032** | **1-1-2033** | 7.5896 | 7.6871 |
| **41** | **1-2-2033** | **4-1-2033** | 7.3498 | 7.4453 |
| **42** | **4-2-2033** | **7-1-2033** | 7.3765 | 7.4730 |
| **43** | **7-2-2033** | **10-1-2033** | 7.4582 | 7.5557 |
| **44** | **10-2-2033** | **1-1-2034** | 7.5131 | 7.6106 |
| **45** | **1-2-2034** | **4-1-2034** | 7.2852 | 7.3806 |
| **46** | **4-2-2034** | **7-1-2034** | 7.3153 | 7.4118 |
| **47** | **7-2-2034** | **10-1-2034** | 7.3963 | 7.4939 |
| **48** | **10-2-2034** | **1-1-2035** | 7.4467 | 7.5446 |
| **49** | **1-2-2035** | **4-1-2035** | 7.2021 | 7.3289 |
| **50** | **4-2-2035** | **7-1-2035** | 7.2497 | 7.3869 |
| **51** | **7-2-2035** | **9-30-2035** | 7.4314 | 7.6760 |
| | | **Highest** | 7.5896 | 7.6871 |

## 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 | 37.8554 | 0.8844 | 31.0444 | 5.0100e-003 | | 0.2144 | 0.2144 | | 0.2144 | 0.2144 | 0.0000 | 662.9202 | 662.9202 | 0.0599 | 0.0112 | 667.7638 |
| Energy | 0.5388 | 4.6278 | 2.1344 | 0.0294 | | 0.3722 | 0.3722 | | 0.3722 | 0.3722 | 0.0000 | 17,766.1164 | 17,766.1164 | 0.6155 | 0.2040 | 17,842.2848 |
| Mobile | 5.1241 | 35.5588 | 70.2628 | 0.4107 | 46.0280 | 0.1693 | 46.1973 | 12.3287 | 0.1577 | 12.4864 | 0.0000 | 38,343.4734 | 38,343.4734 | 1.4008 | 0.0000 | 38,378.4932 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 899.4509 | 0.0000 | 899.4509 | 53.1560 | 0.0000 | 2,228.3516 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 76.1571 | 1,547.1854 | 1,623.3424 | 7.8859 | 0.1979 | 1,879.4684 |
| **Total** | **43.5183** | **41.0710** | **103.4416** | **0.4451** | **46.0280** | **0.7559** | **46.7839** | **12.3287** | **0.7443** | **13.0730** | **975.6080** | **58,319.6954** | **59,295.3034** | **63.1182** | **0.4131** | **60,996.3618** |

## 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 | 37.4219 | 0.8117 | 23.6371 | 4.4400e-003 | | 0.1708 | 0.1708 | | 0.1708 | 0.1708 | 0.0000 | 647.7311 | 647.7311 | 0.0370 | 0.0112 | 652.0003 |
| Energy | 0.4738 | 4.0702 | 1.8771 | 0.0259 | | 0.3274 | 0.3274 | | 0.3274 | 0.3274 | 0.0000 | 9,817.1952 | 9,817.1952 | 0.3016 | 0.1298 | 9,863.4069 |
| Mobile | 5.2902 | 36.3925 | 73.8359 | 0.4336 | 48.7828 | 0.1785 | 48.9612 | 13.0666 | 0.1662 | 13.2328 | 0.0000 | 40,480.2679 | 40,480.2679 | 1.4693 | 0.0000 | 40,517.0004 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 269.8353 | 0.0000 | 269.8353 | 15.9468 | 0.0000 | 668.5055 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 60.9257 | 1,237.7483 | 1,298.6740 | 6.3088 | 0.1583 | 1,503.5747 |
| **Total** | **43.1859** | **41.2744** | **99.3501** | **0.4639** | **48.7828** | **0.6766** | **49.4594** | **13.0666** | **0.6644** | **13.7310** | **330.7609** | **52,182.9425** | **52,513.7035** | **24.0634** | **0.2993** | **53,204.4878** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.76** | **-0.50** | **3.96** | **-4.23** | **-5.98** | **10.49** | **-5.72** | **-5.98** | **10.74** | **-5.03** | **66.10** | **10.52** | **11.44** | **61.88** | **27.54** | **12.77** |

# 3.0 Construction Detail

## Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/2/2023 | 12/8/2028 | 5 | 1550 | |
| 2 | Building Construction | Building Construction | 12/9/2028 | 12/25/2035 | 5 | 1837 | |
| 3 | Architectural Coating | Architectural Coating | 6/25/2032 | 12/25/2035 | 5 | 913 | |
| 4 | Paving | Paving | 6/25/2035 | 12/25/2035 | 5 | 132 | |

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

**Acres of Grading (Grading Phase): 3875**

**Acres of Paving: 198**

**Residential Indoor: 15,827,084; Residential Outdoor: 5,275,695; Non-Residential Indoor: 2,025,543; Non-Residential Outdoor: 675,181;**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 5,213.00 | 1,956.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 1,043.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## 3.2 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.8376 | 0.0000 | 2.8376 | 0.6522 | 0.0000 | 0.6522 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.4318 | 4.4870 | 3.6467 | 8.0700e-003 | | 0.1852 | 0.1852 | | 0.1704 | 0.1704 | 0.0000 | 708.9577 | 708.9577 | 0.2293 | 0.0000 | 714.6900 |
| **Total** | **0.4318** | **4.4870** | **3.6467** | **8.0700e-003** | **2.8376** | **0.1852** | **3.0228** | **0.6522** | **0.1704** | **0.8226** | **0.0000** | **708.9577** | **708.9577** | **0.2293** | **0.0000** | **714.6900** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.5500e-003 | 6.5500e-003 | 0.0773 | 2.6000e-004 | 0.0285 | 2.0000e-004 | 0.0287 | 7.5800e-003 | 1.9000e-004 | 7.7600e-003 | 0.0000 | 23.0885 | 23.0885 | 5.4000e-004 | 0.0000 | 23.1021 |
| **Total** | **9.5500e-003** | **6.5500e-003** | **0.0773** | **2.6000e-004** | **0.0285** | **2.0000e-004** | **0.0287** | **7.5800e-003** | **1.9000e-004** | **7.7600e-003** | **0.0000** | **23.0885** | **23.0885** | **5.4000e-004** | **0.0000** | **23.1021** |

## 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 | | | | | 0.9407 | 0.0000 | 0.9407 | 0.2162 | 0.0000 | 0.2162 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1980 | 3.1177 | 4.7739 | 8.0700e-003 | | 0.0253 | 0.0253 | | 0.0253 | 0.0253 | 0.0000 | 708.9569 | 708.9569 | 0.2293 | 0.0000 | 714.6891 |
| **Total** | **0.1980** | **3.1177** | **4.7739** | **8.0700e-003** | **0.9407** | **0.0253** | **0.9660** | **0.2162** | **0.0253** | **0.2415** | **0.0000** | **708.9569** | **708.9569** | **0.2293** | **0.0000** | **714.6891** |

## Mitigated Construction Off-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.5500e-003 | 6.5500e-003 | 0.0773 | 2.6000e-004 | 5.6500e-003 | 2.0000e-004 | 5.8500e-003 | 1.9600e-003 | 1.9000e-004 | 2.1500e-003 | 0.0000 | 23.0885 | 23.0885 | 5.4000e-004 | 0.0000 | 23.1021 |
| **Total** | **9.5500e-003** | **6.5500e-003** | **0.0773** | **2.6000e-004** | **5.6500e-003** | **2.0000e-004** | **5.8500e-003** | **1.9600e-003** | **1.9000e-004** | **2.1500e-003** | **0.0000** | **23.0885** | **23.0885** | **5.4000e-004** | **0.0000** | **23.1021** |

## 3.2 Grading - 2024

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.8436 | 0.0000 | 2.8436 | 0.6555 | 0.0000 | 0.6555 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.4216 | 4.2414 | 3.6317 | 8.1300e-003 | | 0.1749 | 0.1749 | | 0.1609 | 0.1609 | 0.0000 | 714.2058 | 714.2058 | 0.2310 | 0.0000 | 719.9805 |
| **Total** | **0.4216** | **4.2414** | **3.6317** | **8.1300e-003** | **2.8436** | **0.1749** | **3.0186** | **0.6555** | **0.1609** | **0.8164** | **0.0000** | **714.2058** | **714.2058** | **0.2310** | **0.0000** | **719.9805** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.1200e-003 | 6.0200e-003 | 0.0726 | 2.5000e-004 | 0.0287 | 2.0000e-004 | 0.0290 | 7.6300e-003 | 1.9000e-004 | 7.8200e-003 | 0.0000 | 22.4975 | 22.4975 | 5.0000e-004 | 0.0000 | 22.5101 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **9.1200e-003** | **6.0200e-003** | **0.0726** | **2.5000e-004** | **0.0287** | **2.0000e-004** | **0.0290** | **7.6300e-003** | **1.9000e-004** | **7.8200e-003** | **0.0000** | **22.4975** | **22.4975** | **5.0000e-004** | **0.0000** | **22.5101** |

**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 | | | | | 0.9427 | 0.0000 | 0.9427 | 0.2173 | 0.0000 | 0.2173 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1995 | 3.1417 | 4.8107 | 8.1300e-003 | | 0.0255 | 0.0255 | | 0.0255 | 0.0255 | 0.0000 | 714.2049 | 714.2049 | 0.2310 | 0.0000 | 719.9796 |
| **Total** | **0.1995** | **3.1417** | **4.8107** | **8.1300e-003** | **0.9427** | **0.0255** | **0.9682** | **0.2173** | **0.0255** | **0.2428** | **0.0000** | **714.2049** | **714.2049** | **0.2310** | **0.0000** | **719.9796** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.1200e-003 | 6.0200e-003 | 0.0726 | 2.5000e-004 | 5.6900e-003 | 2.0000e-004 | 5.9000e-003 | 1.9800e-003 | 1.9000e-004 | 2.1600e-003 | 0.0000 | 22.4975 | 22.4975 | 5.0000e-004 | 0.0000 | 22.5101 |
| **Total** | **9.1200e-003** | **6.0200e-003** | **0.0726** | **2.5000e-004** | **5.6900e-003** | **2.0000e-004** | **5.9000e-003** | **1.9800e-003** | **1.9000e-004** | **2.1600e-003** | **0.0000** | **22.4975** | **22.4975** | **5.0000e-004** | **0.0000** | **22.5101** |

## 3.2 Grading - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.8406 | 0.0000 | 2.8406 | 0.6539 | 0.0000 | 0.6539 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3786 | 3.6466 | 3.4362 | 8.1000e-003 | | 0.1476 | 0.1476 | | 0.1358 | 0.1358 | 0.0000 | 711.3061 | 711.3061 | 0.2301 | 0.0000 | 717.0573 |
| **Total** | **0.3786** | **3.6466** | **3.4362** | **8.1000e-003** | **2.8406** | **0.1476** | **2.9882** | **0.6539** | **0.1358** | **0.7896** | **0.0000** | **711.3061** | **711.3061** | **0.2301** | **0.0000** | **717.0573** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.6400e-003 | 5.4800e-003 | 0.0672 | 2.4000e-004 | 0.0286 | 2.0000e-004 | 0.0288 | 7.6000e-003 | 1.8000e-004 | 7.7900e-003 | 0.0000 | 21.5295 | 21.5295 | 4.6000e-004 | 0.0000 | 21.5409 |
| **Total** | **8.6400e-003** | **5.4800e-003** | **0.0672** | **2.4000e-004** | **0.0286** | **2.0000e-004** | **0.0288** | **7.6000e-003** | **1.8000e-004** | **7.7900e-003** | **0.0000** | **21.5295** | **21.5295** | **4.6000e-004** | **0.0000** | **21.5409** |

## 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 | | | | | 0.9417 | 0.0000 | 0.9417 | 0.2168 | 0.0000 | 0.2168 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1988 | 3.1297 | 4.7923 | 8.1000e-003 | | 0.0254 | 0.0254 | | 0.0254 | 0.0254 | 0.0000 | 711.3052 | 711.3052 | 0.2301 | 0.0000 | 717.0565 |
| **Total** | **0.1988** | **3.1297** | **4.7923** | **8.1000e-003** | **0.9417** | **0.0254** | **0.9671** | **0.2168** | **0.0254** | **0.2422** | **0.0000** | **711.3052** | **711.3052** | **0.2301** | **0.0000** | **717.0565** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.6400e-003 | 5.4800e-003 | 0.0672 | 2.4000e-004 | 5.6700e-003 | 2.0000e-004 | 5.8700e-003 | 1.9700e-003 | 1.8000e-004 | 2.1500e-003 | 0.0000 | 21.5295 | 21.5295 | 4.6000e-004 | 0.0000 | 21.5409 |
| **Total** | **8.6400e-003** | **5.4800e-003** | **0.0672** | **2.4000e-004** | **5.6700e-003** | **2.0000e-004** | **5.8700e-003** | **1.9700e-003** | **1.8000e-004** | **2.1500e-003** | **0.0000** | **21.5295** | **21.5295** | **4.6000e-004** | **0.0000** | **21.5409** |

## 3.2 Grading - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.8406 | 0.0000 | 2.8406 | 0.6539 | 0.0000 | 0.6539 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3786 | 3.6466 | 3.4362 | 8.1000e-003 | | 0.1476 | 0.1476 | | 0.1358 | 0.1358 | 0.0000 | 711.3061 | 711.3061 | 0.2301 | 0.0000 | 717.0573 |
| **Total** | **0.3786** | **3.6466** | **3.4362** | **8.1000e-003** | **2.8406** | **0.1476** | **2.9882** | **0.6539** | **0.1358** | **0.7896** | **0.0000** | **711.3061** | **711.3061** | **0.2301** | **0.0000** | **717.0573** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.2600e-003 | 5.0500e-003 | 0.0628 | 2.3000e-004 | 0.0286 | 1.9000e-004 | 0.0288 | 7.6000e-003 | 1.8000e-004 | 7.7800e-003 | 0.0000 | 20.7670 | 20.7670 | 4.2000e-004 | 0.0000 | 20.7774 |
| **Total** | **8.2600e-003** | **5.0500e-003** | **0.0628** | **2.3000e-004** | **0.0286** | **1.9000e-004** | **0.0288** | **7.6000e-003** | **1.8000e-004** | **7.7800e-003** | **0.0000** | **20.7670** | **20.7670** | **4.2000e-004** | **0.0000** | **20.7774** |

## 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 | | | | | 0.9417 | 0.0000 | 0.9417 | 0.2168 | 0.0000 | 0.2168 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1988 | 3.1297 | 4.7923 | 8.1000e-003 | | 0.0254 | 0.0254 | | 0.0254 | 0.0254 | 0.0000 | 711.3052 | 711.3052 | 0.2301 | 0.0000 | 717.0565 |
| **Total** | **0.1988** | **3.1297** | **4.7923** | **8.1000e-003** | **0.9417** | **0.0254** | **0.9671** | **0.2168** | **0.0254** | **0.2422** | **0.0000** | **711.3052** | **711.3052** | **0.2301** | **0.0000** | **717.0565** |

## Mitigated Construction Off-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.2600e-003 | 5.0500e-003 | 0.0628 | 2.3000e-004 | 5.6700e-003 | 1.9000e-004 | 5.8600e-003 | 1.9700e-003 | 1.8000e-004 | 2.1400e-003 | 0.0000 | 20.7670 | 20.7670 | 4.2000e-004 | 0.0000 | 20.7774 |
| **Total** | **8.2600e-003** | **5.0500e-003** | **0.0628** | **2.3000e-004** | **5.6700e-003** | **1.9000e-004** | **5.8600e-003** | **1.9700e-003** | **1.8000e-004** | **2.1400e-003** | **0.0000** | **20.7670** | **20.7670** | **4.2000e-004** | **0.0000** | **20.7774** |

## 3.2 Grading - 2027

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.8406 | 0.0000 | 2.8406 | 0.6539 | 0.0000 | 0.6539 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3786 | 3.6466 | 3.4362 | 8.1000e-003 | | 0.1476 | 0.1476 | | 0.1358 | 0.1358 | 0.0000 | 711.3061 | 711.3061 | 0.2301 | 0.0000 | 717.0573 |
| **Total** | **0.3786** | **3.6466** | **3.4362** | **8.1000e-003** | **2.8406** | **0.1476** | **2.9882** | **0.6539** | **0.1358** | **0.7896** | **0.0000** | **711.3061** | **711.3061** | **0.2301** | **0.0000** | **717.0573** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.8800e-003 | 4.6600e-003 | 0.0589 | 2.2000e-004 | 0.0286 | 1.8000e-004 | 0.0288 | 7.6000e-003 | 1.7000e-004 | 7.7700e-003 | 0.0000 | 20.0943 | 20.0943 | 3.8000e-004 | 0.0000 | 20.1039 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **7.8800e-003** | **4.6600e-003** | **0.0589** | **2.2000e-004** | **0.0286** | **1.8000e-004** | **0.0288** | **7.6000e-003** | **1.7000e-004** | **7.7700e-003** | **0.0000** | **20.0943** | **20.0943** | **3.8000e-004** | **0.0000** | **20.1039** |

**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 | | | | | 0.9417 | 0.0000 | 0.9417 | 0.2168 | 0.0000 | 0.2168 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1988 | 3.1297 | 4.7923 | 8.1000e-003 | | 0.0254 | 0.0254 | | 0.0254 | 0.0254 | 0.0000 | 711.3052 | 711.3052 | 0.2301 | 0.0000 | 717.0565 |
| **Total** | **0.1988** | **3.1297** | **4.7923** | **8.1000e-003** | **0.9417** | **0.0254** | **0.9671** | **0.2168** | **0.0254** | **0.2422** | **0.0000** | **711.3052** | **711.3052** | **0.2301** | **0.0000** | **717.0565** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.8800e-003 | 4.6600e-003 | 0.0589 | 2.2000e-004 | 5.6700e-003 | 1.8000e-004 | 5.8500e-003 | 1.9700e-003 | 1.7000e-004 | 2.1300e-003 | 0.0000 | 20.0943 | 20.0943 | 3.8000e-004 | 0.0000 | 20.1039 |
| **Total** | **7.8800e-003** | **4.6600e-003** | **0.0589** | **2.2000e-004** | **5.6700e-003** | **1.8000e-004** | **5.8500e-003** | **1.9700e-003** | **1.7000e-004** | **2.1300e-003** | **0.0000** | **20.0943** | **20.0943** | **3.8000e-004** | **0.0000** | **20.1039** |

## 3.2 Grading - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.7924 | 0.0000 | 2.7924 | 0.6274 | 0.0000 | 0.6274 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3554 | 3.4230 | 3.2256 | 7.6000e-003 | | 0.1385 | 0.1385 | | 0.1275 | 0.1275 | 0.0000 | 667.7011 | 667.7011 | 0.2160 | 0.0000 | 673.0998 |
| **Total** | **0.3554** | **3.4230** | **3.2256** | **7.6000e-003** | **2.7924** | **0.1385** | **2.9310** | **0.6274** | **0.1275** | **0.7548** | **0.0000** | **667.7011** | **667.7011** | **0.2160** | **0.0000** | **673.0998** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.0300e-003 | 4.0400e-003 | 0.0520 | 2.0000e-004 | 0.0269 | 1.6000e-004 | 0.0270 | 7.1400e-003 | 1.4000e-004 | 7.2800e-003 | 0.0000 | 18.3063 | 18.3063 | 3.3000e-004 | 0.0000 | 18.3146 |
| **Total** | **7.0300e-003** | **4.0400e-003** | **0.0520** | **2.0000e-004** | **0.0269** | **1.6000e-004** | **0.0270** | **7.1400e-003** | **1.4000e-004** | **7.2800e-003** | **0.0000** | **18.3063** | **18.3063** | **3.3000e-004** | **0.0000** | **18.3146** |

## 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 | | | | | 0.9257 | 0.0000 | 0.9257 | 0.2080 | 0.0000 | 0.2080 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1866 | 2.9379 | 4.4985 | 7.6000e-003 | | 0.0239 | 0.0239 | | 0.0239 | 0.0239 | 0.0000 | 667.7003 | 667.7003 | 0.2160 | 0.0000 | 673.0990 |
| **Total** | **0.1866** | **2.9379** | **4.4985** | **7.6000e-003** | **0.9257** | **0.0239** | **0.9496** | **0.2080** | **0.0239** | **0.2319** | **0.0000** | **667.7003** | **667.7003** | **0.2160** | **0.0000** | **673.0990** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.0300e-003 | 4.0400e-003 | 0.0520 | 2.0000e-004 | 5.3200e-003 | 1.6000e-004 | 5.4800e-003 | 1.8500e-003 | 1.4000e-004 | 1.9900e-003 | 0.0000 | 18.3063 | 18.3063 | 3.3000e-004 | 0.0000 | 18.3146 |
| **Total** | **7.0300e-003** | **4.0400e-003** | **0.0520** | **2.0000e-004** | **5.3200e-003** | **1.6000e-004** | **5.4800e-003** | **1.8500e-003** | **1.4000e-004** | **1.9900e-003** | **0.0000** | **18.3063** | **18.3063** | **3.3000e-004** | **0.0000** | **18.3146** |

## 3.3 Building Construction - 2028

**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 | 0.0103 | 0.0935 | 0.1206 | 2.0000e-004 | | 3.9600e-003 | 3.9600e-003 | | 3.7200e-003 | 3.7200e-003 | 0.0000 | 17.3940 | 17.3940 | 4.0900e-003 | 0.0000 | 17.4962 |
| **Total** | **0.0103** | **0.0935** | **0.1206** | **2.0000e-004** | | **3.9600e-003** | **3.9600e-003** | | **3.7200e-003** | **3.7200e-003** | **0.0000** | **17.3940** | **17.3940** | **4.0900e-003** | **0.0000** | **17.4962** |

## 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 | 0.0264 | 0.9776 | 0.2752 | 3.4300e-003 | 0.0925 | 1.0800e-003 | 0.0935 | 0.0267 | 1.0300e-003 | 0.0277 | 0.0000 | 334.2318 | 334.2318 | 0.0181 | 0.0000 | 334.6843 |
| Worker | 0.1122 | 0.0645 | 0.8302 | 3.2300e-003 | 0.4290 | 2.5100e-003 | 0.4315 | 0.1139 | 2.3100e-003 | 0.1162 | 0.0000 | 292.1345 | 292.1345 | 5.3000e-003 | 0.0000 | 292.2670 |
| **Total** | **0.1386** | **1.0421** | **1.1054** | **6.6600e-003** | **0.5214** | **3.5900e-003** | **0.5250** | **0.1406** | **3.3400e-003** | **0.1439** | **0.0000** | **626.3663** | **626.3663** | **0.0234** | **0.0000** | **626.9513** |

## 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 | 5.0500e-003 | 0.0854 | 0.1341 | 2.0000e-004 | | 1.0200e-003 | 1.0200e-003 | | 1.0200e-003 | 1.0200e-003 | 0.0000 | 17.3939 | 17.3939 | 4.0900e-003 | 0.0000 | 17.4962 |
| **Total** | **5.0500e-003** | **0.0854** | **0.1341** | **2.0000e-004** | | **1.0200e-003** | **1.0200e-003** | | **1.0200e-003** | **1.0200e-003** | **0.0000** | **17.3939** | **17.3939** | **4.0900e-003** | **0.0000** | **17.4962** |

## 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 | 0.0264 | 0.9776 | 0.2752 | 3.4300e-003 | 0.0319 | 1.0800e-003 | 0.0330 | 0.0118 | 1.0300e-003 | 0.0128 | 0.0000 | 334.2318 | 334.2318 | 0.0181 | 0.0000 | 334.6843 |
| Worker | 0.1122 | 0.0645 | 0.8302 | 3.2300e-003 | 0.0850 | 2.5100e-003 | 0.0875 | 0.0295 | 2.3100e-003 | 0.0318 | 0.0000 | 292.1345 | 292.1345 | 5.3000e-003 | 0.0000 | 292.2670 |
| **Total** | **0.1386** | **1.0421** | **1.1054** | **6.6600e-003** | **0.1169** | **3.5900e-003** | **0.1204** | **0.0413** | **3.3400e-003** | **0.0446** | **0.0000** | **626.3663** | **626.3663** | **0.0234** | **0.0000** | **626.9513** |

## 3.3 Building Construction - 2029

### 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 | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

### 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 | 0.4513 | 16.8763 | 4.7289 | 0.0594 | 1.6087 | 0.0184 | 1.6271 | 0.4642 | 0.0176 | 0.4818 | 0.0000 | 5,793.9312 | 5,793.9312 | 0.3108 | 0.0000 | 5,801.7022 |
| Worker | 1.8376 | 1.0334 | 13.5622 | 0.0546 | 7.4638 | 0.0406 | 7.5043 | 1.9822 | 0.0373 | 2.0195 | 0.0000 | 4,946.1391 | 4,946.1391 | 0.0846 | 0.0000 | 4,948.2534 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **2.2889** | **17.9097** | **18.2911** | **0.1140** | **9.0724** | **0.0590** | **9.1314** | **2.4463** | **0.0549** | **2.5013** | **0.0000** | **10,740.0703** | **10,740.0703** | **0.3954** | **0.0000** | **10,749.9556** |

**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 | 0.0879 | 1.4852 | 2.3325 | 3.5200e-003 | | 0.0177 | 0.0177 | | 0.0177 | 0.0177 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| **Total** | **0.0879** | **1.4852** | **2.3325** | **3.5200e-003** | | **0.0177** | **0.0177** | | **0.0177** | **0.0177** | **0.0000** | **302.6545** | **302.6545** | **0.0711** | **0.0000** | **304.4331** |

**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 | 0.4513 | 16.8763 | 4.7289 | 0.0594 | 0.5546 | 0.0184 | 0.5730 | 0.2054 | 0.0176 | 0.2230 | 0.0000 | 5,793.9312 | 5,793.9312 | 0.3108 | 0.0000 | 5,801.7022 |
| Worker | 1.8376 | 1.0334 | 13.5622 | 0.0546 | 1.4786 | 0.0406 | 1.5192 | 0.5131 | 0.0373 | 0.5504 | 0.0000 | 4,946.1391 | 4,946.1391 | 0.0846 | 0.0000 | 4,948.2534 |
| **Total** | **2.2889** | **17.9097** | **18.2911** | **0.1140** | **2.0332** | **0.0590** | **2.0922** | **0.7185** | **0.0549** | **0.7735** | **0.0000** | **10,740.0703** | **10,740.0703** | **0.3954** | **0.0000** | **10,749.9556** |

## 3.3 Building Construction - 2030

**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 | 0.1708 | 1.0355 | 2.1085 | 4.0400e-003 | | 0.0193 | 0.0193 | | 0.0193 | 0.0193 | 0.0000 | 343.0336 | 343.0336 | 0.0138 | 0.0000 | 343.3777 |
| **Total** | **0.1708** | **1.0355** | **2.1085** | **4.0400e-003** | | **0.0193** | **0.0193** | | **0.0193** | **0.0193** | **0.0000** | **343.0336** | **343.0336** | **0.0138** | **0.0000** | **343.3777** |

## 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 | 0.4450 | 16.7466 | 4.6830 | 0.0591 | 1.6087 | 0.0181 | 1.6268 | 0.4642 | 0.0173 | 0.4815 | 0.0000 | 5,774.3068 | 5,774.3068 | 0.3070 | 0.0000 | 5,781.9818 |
| Worker | 1.7202 | 0.9495 | 12.7458 | 0.0533 | 7.4638 | 0.0378 | 7.5015 | 1.9822 | 0.0347 | 2.0169 | 0.0000 | 4,824.5672 | 4,824.5672 | 0.0776 | 0.0000 | 4,826.5065 |
| **Total** | **2.1651** | **17.6961** | **17.4288** | **0.1124** | **9.0725** | **0.0559** | **9.1283** | **2.4464** | **0.0520** | **2.4984** | **0.0000** | **10,598.8740** | **10,598.8740** | **0.3846** | **0.0000** | **10,608.4882** |

## 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 | 0.0879 | 1.4852 | 2.3325 | 4.0400e-003 | | 0.0177 | 0.0177 | | 0.0177 | 0.0177 | 0.0000 | 343.0332 | 343.0332 | 0.0138 | 0.0000 | 343.3773 |
| **Total** | **0.0879** | **1.4852** | **2.3325** | **4.0400e-003** | | **0.0177** | **0.0177** | | **0.0177** | **0.0177** | **0.0000** | **343.0332** | **343.0332** | **0.0138** | **0.0000** | **343.3773** |

**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 | 0.4450 | 16.7466 | 4.6830 | 0.0591 | 0.5546 | 0.0181 | 0.5727 | 0.2054 | 0.0173 | 0.2227 | 0.0000 | 5,774.3068 | 5,774.3068 | 0.3070 | 0.0000 | 5,781.9818 |
| Worker | 1.7202 | 0.9495 | 12.7458 | 0.0533 | 1.4786 | 0.0378 | 1.5164 | 0.5131 | 0.0347 | 0.5478 | 0.0000 | 4,824.5672 | 4,824.5672 | 0.0776 | 0.0000 | 4,826.5065 |
| **Total** | **2.1651** | **17.6961** | **17.4288** | **0.1124** | **2.0332** | **0.0559** | **2.0891** | **0.7185** | **0.0520** | **0.7706** | **0.0000** | **10,598.8740** | **10,598.8740** | **0.3846** | **0.0000** | **10,608.4882** |

## 3.3 Building Construction - 2031

**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 | 0.1708 | 1.0355 | 2.1085 | 4.0400e-003 | | 0.0193 | 0.0193 | | 0.0193 | 0.0193 | 0.0000 | 343.0336 | 343.0336 | 0.0138 | 0.0000 | 343.3777 |
| **Total** | **0.1708** | **1.0355** | **2.1085** | **4.0400e-003** | | **0.0193** | **0.0193** | | **0.0193** | **0.0193** | **0.0000** | **343.0336** | **343.0336** | **0.0138** | **0.0000** | **343.3777** |

## 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 | 0.4420 | 16.6609 | 4.6655 | 0.0590 | 1.6087 | 0.0179 | 1.6266 | 0.4642 | 0.0171 | 0.4812 | 0.0000 | 5,765.6070 | 5,765.6070 | 0.3041 | 0.0000 | 5,773.2085 |
| Worker | 1.5917 | 0.8667 | 11.9712 | 0.0521 | 7.4638 | 0.0353 | 7.4990 | 1.9822 | 0.0325 | 2.0147 | 0.0000 | 4,722.1441 | 4,722.1441 | 0.0710 | 0.0000 | 4,723.9195 |
| **Total** | **2.0336** | **17.5276** | **16.6367** | **0.1112** | **9.0725** | **0.0531** | **9.1256** | **2.4464** | **0.0495** | **2.4959** | **0.0000** | **10,487.7510** | **10,487.7510** | **0.3751** | **0.0000** | **10,497.1280** |

## 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 | 0.0879 | 1.4852 | 2.3325 | 4.0400e-003 | | 0.0177 | 0.0177 | | 0.0177 | 0.0177 | 0.0000 | 343.0332 | 343.0332 | 0.0138 | 0.0000 | 343.3773 |
| **Total** | **0.0879** | **1.4852** | **2.3325** | **4.0400e-003** | | **0.0177** | **0.0177** | | **0.0177** | **0.0177** | **0.0000** | **343.0332** | **343.0332** | **0.0138** | **0.0000** | **343.3773** |

## 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 | 0.4420 | 16.6609 | 4.6655 | 0.0590 | 0.5546 | 0.0179 | 0.5725 | 0.2054 | 0.0171 | 0.2225 | 0.0000 | 5,765.6070 | 5,765.6070 | 0.3041 | 0.0000 | 5,773.2085 |
| Worker | 1.5917 | 0.8667 | 11.9712 | 0.0521 | 1.4786 | 0.0353 | 1.5139 | 0.5131 | 0.0325 | 0.5456 | 0.0000 | 4,722.1441 | 4,722.1441 | 0.0710 | 0.0000 | 4,723.9195 |
| **Total** | **2.0336** | **17.5276** | **16.6367** | **0.1112** | **2.0332** | **0.0531** | **2.0863** | **0.7185** | **0.0495** | **0.7681** | **0.0000** | **10,487.7510** | **10,487.7510** | **0.3751** | **0.0000** | **10,497.1280** |

## 3.3 Building Construction - 2032

### 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 | 0.1715 | 1.0394 | 2.1166 | 4.0600e-003 | | 0.0194 | 0.0194 | | 0.0194 | 0.0194 | 0.0000 | 344.3479 | 344.3479 | 0.0138 | 0.0000 | 344.6933 |
| **Total** | **0.1715** | **1.0394** | **2.1166** | **4.0600e-003** | | **0.0194** | **0.0194** | | **0.0194** | **0.0194** | **0.0000** | **344.3479** | **344.3479** | **0.0138** | **0.0000** | **344.6933** |

### 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 | 0.4397 | 16.6120 | 4.6625 | 0.0591 | 1.6149 | 0.0177 | 1.6326 | 0.4659 | 0.0169 | 0.4828 | 0.0000 | 5,775.4945 | 5,775.4945 | 0.3026 | 0.0000 | 5,783.0584 |
| Worker | 1.4825 | 0.7977 | 11.3023 | 0.0513 | 7.4923 | 0.0330 | 7.5254 | 1.9898 | 0.0304 | 2.0202 | 0.0000 | 4,644.9442 | 4,644.9442 | 0.0653 | 0.0000 | 4,646.5769 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.9222** | **17.4096** | **15.9648** | **0.1104** | **9.1072** | **0.0507** | **9.1579** | **2.4557** | **0.0473** | **2.5030** | **0.0000** | **10,420.4387** | **10,420.4387** | **0.3679** | **0.0000** | **10,429.6353** |

**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 | 0.0883 | 1.4909 | 2.3415 | 4.0600e-003 | | 0.0178 | 0.0178 | | 0.0178 | 0.0178 | 0.0000 | 344.3475 | 344.3475 | 0.0138 | 0.0000 | 344.6929 |
| **Total** | **0.0883** | **1.4909** | **2.3415** | **4.0600e-003** | | **0.0178** | **0.0178** | | **0.0178** | **0.0178** | **0.0000** | **344.3475** | **344.3475** | **0.0138** | **0.0000** | **344.6929** |

**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 | 0.4397 | 16.6120 | 4.6625 | 0.0591 | 0.5567 | 0.0177 | 0.5744 | 0.2062 | 0.0169 | 0.2231 | 0.0000 | 5,775.4945 | 5,775.4945 | 0.3026 | 0.0000 | 5,783.0584 |
| Worker | 1.4825 | 0.7977 | 11.3023 | 0.0513 | 1.4843 | 0.0330 | 1.5173 | 0.5151 | 0.0304 | 0.5455 | 0.0000 | 4,644.9442 | 4,644.9442 | 0.0653 | 0.0000 | 4,646.5769 |
| **Total** | **1.9222** | **17.4096** | **15.9648** | **0.1104** | **2.0410** | **0.0507** | **2.0917** | **0.7213** | **0.0473** | **0.7686** | **0.0000** | **10,420.4387** | **10,420.4387** | **0.3679** | **0.0000** | **10,429.6353** |

## 3.3 Building Construction - 2033

**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 | 0.1702 | 1.0315 | 2.1004 | 4.0200e-003 | | 0.0193 | 0.0193 | | 0.0193 | 0.0193 | 0.0000 | 341.7193 | 341.7193 | 0.0137 | 0.0000 | 342.0621 |
| **Total** | **0.1702** | **1.0315** | **2.1004** | **4.0200e-003** | | **0.0193** | **0.0193** | | **0.0193** | **0.0193** | **0.0000** | **341.7193** | **341.7193** | **0.0137** | **0.0000** | **342.0621** |

## 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 | 0.4334 | 16.3840 | 4.6124 | 0.0586 | 1.6026 | 0.0173 | 1.6199 | 0.4624 | 0.0166 | 0.4789 | 0.0000 | 5,721.6169 | 5,721.6169 | 0.2979 | 0.0000 | 5,729.0650 |
| Worker | 1.3737 | 0.7309 | 10.6091 | 0.0500 | 7.4352 | 0.0306 | 7.4658 | 1.9746 | 0.0282 | 2.0028 | 0.0000 | 4,526.9167 | 4,526.9167 | 0.0598 | 0.0000 | 4,528.4103 |
| **Total** | **1.8071** | **17.1149** | **15.2215** | **0.1085** | **9.0377** | **0.0480** | **9.0857** | **2.4370** | **0.0447** | **2.4817** | **0.0000** | **10,248.5336** | **10,248.5336** | **0.3577** | **0.0000** | **10,257.4753** |

## 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 | 0.0876 | 1.4795 | 2.3236 | 4.0200e-003 | | 0.0176 | 0.0176 | | 0.0176 | 0.0176 | 0.0000 | 341.7189 | 341.7189 | 0.0137 | 0.0000 | 342.0617 |
| **Total** | **0.0876** | **1.4795** | **2.3236** | **4.0200e-003** | | **0.0176** | **0.0176** | | **0.0176** | **0.0176** | **0.0000** | **341.7189** | **341.7189** | **0.0137** | **0.0000** | **342.0617** |

**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 | 0.4334 | 16.3840 | 4.6124 | 0.0586 | 0.5525 | 0.0173 | 0.5698 | 0.2046 | 0.0166 | 0.2212 | 0.0000 | 5,721.6169 | 5,721.6169 | 0.2979 | 0.0000 | 5,729.0650 |
| Worker | 1.3737 | 0.7309 | 10.6091 | 0.0500 | 1.4729 | 0.0306 | 1.5036 | 0.5112 | 0.0282 | 0.5393 | 0.0000 | 4,526.9167 | 4,526.9167 | 0.0598 | 0.0000 | 4,528.4103 |
| **Total** | **1.8071** | **17.1149** | **15.2215** | **0.1085** | **2.0254** | **0.0480** | **2.0734** | **0.7158** | **0.0447** | **0.7605** | **0.0000** | **10,248.5336** | **10,248.5336** | **0.3577** | **0.0000** | **10,257.4753** |

## 3.3 Building Construction - 2034

**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 | 0.1702 | 1.0315 | 2.1004 | 4.0200e-003 | | 0.0193 | 0.0193 | | 0.0193 | 0.0193 | 0.0000 | 341.7193 | 341.7193 | 0.0137 | 0.0000 | 342.0621 |
| **Total** | **0.1702** | **1.0315** | **2.1004** | **4.0200e-003** | | **0.0193** | **0.0193** | | **0.0193** | **0.0193** | **0.0000** | **341.7193** | **341.7193** | **0.0137** | **0.0000** | **342.0621** |

## 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 | 0.4308 | 16.2928 | 4.5968 | 0.0585 | 1.6026 | 0.0171 | 1.6197 | 0.4624 | 0.0163 | 0.4787 | 0.0000 | 5,714.0638 | 5,714.0638 | 0.2959 | 0.0000 | 5,721.4622 |
| Worker | 1.2915 | 0.6800 | 10.0234 | 0.0492 | 7.4352 | 0.0286 | 7.4638 | 1.9746 | 0.0263 | 2.0009 | 0.0000 | 4,454.6072 | 4,454.6072 | 0.0549 | 0.0000 | 4,455.9802 |
| **Total** | **1.7224** | **16.9728** | **14.6202** | **0.1076** | **9.0377** | **0.0457** | **9.0834** | **2.4370** | **0.0427** | **2.4796** | **0.0000** | **10,168.6710** | **10,168.6710** | **0.3509** | **0.0000** | **10,177.4424** |

## 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 | 0.0876 | 1.4795 | 2.3236 | 4.0200e-003 | | 0.0176 | 0.0176 | | 0.0176 | 0.0176 | 0.0000 | 341.7189 | 341.7189 | 0.0137 | 0.0000 | 342.0617 |
| **Total** | **0.0876** | **1.4795** | **2.3236** | **4.0200e-003** | | **0.0176** | **0.0176** | | **0.0176** | **0.0176** | **0.0000** | **341.7189** | **341.7189** | **0.0137** | **0.0000** | **342.0617** |

## 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 | 0.4308 | 16.2928 | 4.5968 | 0.0585 | 0.5525 | 0.0171 | 0.5696 | 0.2046 | 0.0163 | 0.2210 | 0.0000 | 5,714.0638 | 5,714.0638 | 0.2959 | 0.0000 | 5,721.4622 |
| Worker | 1.2915 | 0.6800 | 10.0234 | 0.0492 | 1.4729 | 0.0286 | 1.5015 | 0.5112 | 0.0263 | 0.5375 | 0.0000 | 4,454.6072 | 4,454.6072 | 0.0549 | 0.0000 | 4,455.9802 |
| **Total** | **1.7224** | **16.9728** | **14.6202** | **0.1076** | **2.0254** | **0.0457** | **2.0711** | **0.7158** | **0.0427** | **0.7584** | **0.0000** | **10,168.6710** | **10,168.6710** | **0.3509** | **0.0000** | **10,177.4424** |

## 3.3 Building Construction - 2035

### 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 | 0.1564 | 0.9202 | 2.0711 | 3.9800e-003 | | 0.0116 | 0.0116 | | 0.0116 | 0.0116 | 0.0000 | 337.7764 | 337.7764 | 0.0126 | 0.0000 | 338.0909 |
| **Total** | **0.1564** | **0.9202** | **2.0711** | **3.9800e-003** | | **0.0116** | **0.0116** | | **0.0116** | **0.0116** | **0.0000** | **337.7764** | **337.7764** | **0.0126** | **0.0000** | **338.0909** |

### 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 | 0.4237 | 16.0321 | 4.5290 | 0.0577 | 1.5841 | 0.0167 | 1.6008 | 0.4571 | 0.0160 | 0.4730 | 0.0000 | 5,642.4230 | 5,642.4230 | 0.2908 | 0.0000 | 5,649.6924 |
| Worker | 1.2091 | 0.6354 | 9.4300 | 0.0479 | 7.3494 | 0.0265 | 7.3758 | 1.9518 | 0.0244 | 1.9762 | 0.0000 | 4,341.9939 | 4,341.9939 | 0.0504 | 0.0000 | 4,343.2536 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.6328** | **16.6674** | **13.9590** | **0.1056** | **8.9334** | **0.0432** | **8.9767** | **2.4089** | **0.0404** | **2.4492** | **0.0000** | **9,984.4169** | **9,984.4169** | **0.3412** | **0.0000** | **9,992.9460** |

**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 | 0.0866 | 1.4624 | 2.2968 | 3.9800e-003 | | 0.0174 | 0.0174 | | 0.0174 | 0.0174 | 0.0000 | 337.7760 | 337.7760 | 0.0126 | 0.0000 | 338.0905 |
| **Total** | **0.0866** | **1.4624** | **2.2968** | **3.9800e-003** | | **0.0174** | **0.0174** | | **0.0174** | **0.0174** | **0.0000** | **337.7760** | **337.7760** | **0.0126** | **0.0000** | **338.0905** |

**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 | 0.4237 | 16.0321 | 4.5290 | 0.0577 | 0.5461 | 0.0167 | 0.5629 | 0.2023 | 0.0160 | 0.2183 | 0.0000 | 5,642.4230 | 5,642.4230 | 0.2908 | 0.0000 | 5,649.6924 |
| Worker | 1.2091 | 0.6354 | 9.4300 | 0.0479 | 1.4559 | 0.0265 | 1.4824 | 0.5053 | 0.0244 | 0.5296 | 0.0000 | 4,341.9939 | 4,341.9939 | 0.0504 | 0.0000 | 4,343.2536 |
| **Total** | **1.6328** | **16.6674** | **13.9590** | **0.1056** | **2.0021** | **0.0432** | **2.0453** | **0.7075** | **0.0404** | **0.7479** | **0.0000** | **9,984.4169** | **9,984.4169** | **0.3412** | **0.0000** | **9,992.9460** |

## 3.4 Architectural Coating - 2032

**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 | 4.7535 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 8.8900e-003 | 0.0582 | 0.1223 | 2.0000e-004 | | 1.3800e-003 | 1.3800e-003 | | 1.3800e-003 | 1.3800e-003 | 0.0000 | 17.3621 | 17.3621 | 7.0000e-004 | 0.0000 | 17.3797 |
| **Total** | **4.7624** | **0.0582** | **0.1223** | **2.0000e-004** | | **1.3800e-003** | **1.3800e-003** | | **1.3800e-003** | **1.3800e-003** | **0.0000** | **17.3621** | **17.3621** | **7.0000e-004** | **0.0000** | **17.3797** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.1540 | 0.0829 | 1.1738 | 5.3300e-003 | 0.7781 | 3.4300e-003 | 0.7816 | 0.2067 | 3.1600e-003 | 0.2098 | 0.0000 | 482.4082 | 482.4082 | 6.7800e-003 | 0.0000 | 482.5778 |
| **Total** | **0.1540** | **0.0829** | **1.1738** | **5.3300e-003** | **0.7781** | **3.4300e-003** | **0.7816** | **0.2067** | **3.1600e-003** | **0.2098** | **0.0000** | **482.4082** | **482.4082** | **6.7800e-003** | **0.0000** | **482.5778** |

## 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 | 4.7535 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.0400e-003 | 0.0738 | 0.1246 | 2.0000e-004 | | 9.7000e-004 | 9.7000e-004 | | 9.7000e-004 | 9.7000e-004 | 0.0000 | 17.3621 | 17.3621 | 7.0000e-004 | 0.0000 | 17.3797 |
| **Total** | **4.7575** | **0.0738** | **0.1246** | **2.0000e-004** | | **9.7000e-004** | **9.7000e-004** | | **9.7000e-004** | **9.7000e-004** | **0.0000** | **17.3621** | **17.3621** | **7.0000e-004** | **0.0000** | **17.3797** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.1540 | 0.0829 | 1.1738 | 5.3300e-003 | 0.1542 | 3.4300e-003 | 0.1576 | 0.0535 | 3.1600e-003 | 0.0567 | 0.0000 | 482.4082 | 482.4082 | 6.7800e-003 | 0.0000 | 482.5778 |
| **Total** | **0.1540** | **0.0829** | **1.1738** | **5.3300e-003** | **0.1542** | **3.4300e-003** | **0.1576** | **0.0535** | **3.1600e-003** | **0.0567** | **0.0000** | **482.4082** | **482.4082** | **6.7800e-003** | **0.0000** | **482.5778** |

## 3.4 Architectural Coating - 2033

**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 | 9.0875 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0170 | 0.1113 | 0.2337 | 3.9000e-004 | | 2.6400e-003 | 2.6400e-003 | | 2.6400e-003 | 2.6400e-003 | 0.0000 | 33.1923 | 33.1923 | 1.3400e-003 | 0.0000 | 33.2259 |
| **Total** | **9.1045** | **0.1113** | **0.2337** | **3.9000e-004** | | **2.6400e-003** | **2.6400e-003** | | **2.6400e-003** | **2.6400e-003** | **0.0000** | **33.1923** | **33.1923** | **1.3400e-003** | **0.0000** | **33.2259** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.2748 | 0.1462 | 2.1226 | 0.0100 | 1.4876 | 6.1300e-003 | 1.4937 | 0.3951 | 5.6400e-003 | 0.4007 | 0.0000 | 905.7307 | 905.7307 | 0.0120 | 0.0000 | 906.0295 |
| **Total** | **0.2748** | **0.1462** | **2.1226** | **0.0100** | **1.4876** | **6.1300e-003** | **1.4937** | **0.3951** | **5.6400e-003** | **0.4007** | **0.0000** | **905.7307** | **905.7307** | **0.0120** | **0.0000** | **906.0295** |

## 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 | 9.0875 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.7300e-003 | 0.1411 | 0.2382 | 3.9000e-004 | | 1.8500e-003 | 1.8500e-003 | | 1.8500e-003 | 1.8500e-003 | 0.0000 | 33.1923 | 33.1923 | 1.3400e-003 | 0.0000 | 33.2258 |
| **Total** | **9.0952** | **0.1411** | **0.2382** | **3.9000e-004** | | **1.8500e-003** | **1.8500e-003** | | **1.8500e-003** | **1.8500e-003** | **0.0000** | **33.1923** | **33.1923** | **1.3400e-003** | **0.0000** | **33.2258** |

## Mitigated Construction Off-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.2748 | 0.1462 | 2.1226 | 0.0100 | 0.2947 | 6.1300e-003 | 0.3008 | 0.1023 | 5.6400e-003 | 0.1079 | 0.0000 | 905.7307 | 905.7307 | 0.0120 | 0.0000 | 906.0295 |
| **Total** | **0.2748** | **0.1462** | **2.1226** | **0.0100** | **0.2947** | **6.1300e-003** | **0.3008** | **0.1023** | **5.6400e-003** | **0.1079** | **0.0000** | **905.7307** | **905.7307** | **0.0120** | **0.0000** | **906.0295** |

## 3.4 Architectural Coating - 2034

### 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 | 9.0875 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0170 | 0.1113 | 0.2337 | 3.9000e-004 | | 2.6400e-003 | 2.6400e-003 | | 2.6400e-003 | 2.6400e-003 | 0.0000 | 33.1923 | 33.1923 | 1.3400e-003 | 0.0000 | 33.2259 |
| **Total** | **9.1045** | **0.1113** | **0.2337** | **3.9000e-004** | | **2.6400e-003** | **2.6400e-003** | | **2.6400e-003** | **2.6400e-003** | **0.0000** | **33.1923** | **33.1923** | **1.3400e-003** | **0.0000** | **33.2259** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.2584 | 0.1361 | 2.0055 | 9.8400e-003 | 1.4876 | 5.7200e-003 | 1.4933 | 0.3951 | 5.2600e-003 | 0.4003 | 0.0000 | 891.2632 | 891.2632 | 0.0110 | 0.0000 | 891.5380 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.2584** | **0.1361** | **2.0055** | **9.8400e-003** | **1.4876** | **5.7200e-003** | **1.4933** | **0.3951** | **5.2600e-003** | **0.4003** | **0.0000** | **891.2632** | **891.2632** | **0.0110** | **0.0000** | **891.5380** |

**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 | 9.0875 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.7300e-003 | 0.1411 | 0.2382 | 3.9000e-004 | | 1.8500e-003 | 1.8500e-003 | | 1.8500e-003 | 1.8500e-003 | 0.0000 | 33.1923 | 33.1923 | 1.3400e-003 | 0.0000 | 33.2258 |
| **Total** | **9.0952** | **0.1411** | **0.2382** | **3.9000e-004** | | **1.8500e-003** | **1.8500e-003** | | **1.8500e-003** | **1.8500e-003** | **0.0000** | **33.1923** | **33.1923** | **1.3400e-003** | **0.0000** | **33.2258** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.2584 | 0.1361 | 2.0055 | 9.8400e-003 | 0.2947 | 5.7200e-003 | 0.3004 | 0.1023 | 5.2600e-003 | 0.1075 | 0.0000 | 891.2632 | 891.2632 | 0.0110 | 0.0000 | 891.5380 |
| **Total** | **0.2584** | **0.1361** | **2.0055** | **9.8400e-003** | **0.2947** | **5.7200e-003** | **0.3004** | **0.1023** | **5.2600e-003** | **0.1075** | **0.0000** | **891.2632** | **891.2632** | **0.0110** | **0.0000** | **891.5380** |

## 3.4 Architectural Coating - 2035

**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 | 8.9826 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0152 | 0.0974 | 0.2306 | 3.8000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 32.8093 | 32.8093 | 1.2100e-003 | 0.0000 | 32.8396 |
| **Total** | **8.9978** | **0.0974** | **0.2306** | **3.8000e-004** | | **1.2700e-003** | **1.2700e-003** | | **1.2700e-003** | **1.2700e-003** | **0.0000** | **32.8093** | **32.8093** | **1.2100e-003** | **0.0000** | **32.8396** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.2419 | 0.1271 | 1.8867 | 9.5900e-003 | 1.4704 | 5.3000e-003 | 1.4757 | 0.3905 | 4.8700e-003 | 0.3954 | 0.0000 | 868.7319 | 868.7319 | 0.0101 | 0.0000 | 868.9840 |
| **Total** | **0.2419** | **0.1271** | **1.8867** | **9.5900e-003** | **1.4704** | **5.3000e-003** | **1.4757** | **0.3905** | **4.8700e-003** | **0.3954** | **0.0000** | **868.7319** | **868.7319** | **0.0101** | **0.0000** | **868.9840** |

## 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 | 8.9826 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.6400e-003 | 0.1395 | 0.2355 | 3.8000e-004 | | 1.8300e-003 | 1.8300e-003 | | 1.8300e-003 | 1.8300e-003 | 0.0000 | 32.8093 | 32.8093 | 1.2100e-003 | 0.0000 | 32.8396 |
| **Total** | **8.9903** | **0.1395** | **0.2355** | **3.8000e-004** | | **1.8300e-003** | **1.8300e-003** | | **1.8300e-003** | **1.8300e-003** | **0.0000** | **32.8093** | **32.8093** | **1.2100e-003** | **0.0000** | **32.8396** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.2419 | 0.1271 | 1.8867 | 9.5900e-003 | 0.2913 | 5.3000e-003 | 0.2966 | 0.1011 | 4.8700e-003 | 0.1060 | 0.0000 | 868.7319 | 868.7319 | 0.0101 | 0.0000 | 868.9840 |
| **Total** | **0.2419** | **0.1271** | **1.8867** | **9.5900e-003** | **0.2913** | **5.3000e-003** | **0.2966** | **0.1011** | **4.8700e-003** | **0.1060** | **0.0000** | **868.7319** | **868.7319** | **0.0101** | **0.0000** | **868.9840** |

## 3.5 Paving - 2035

**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 | 0.0753 | 0.3218 | 1.0441 | 1.8500e-003 | | 0.0124 | 0.0124 | | 0.0124 | 0.0124 | 0.0000 | 159.0568 | 159.0568 | 6.1200e-003 | 0.0000 | 159.2098 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0753** | **0.3218** | **1.0441** | **1.8500e-003** | | **0.0124** | **0.0124** | | **0.0124** | **0.0124** | **0.0000** | **159.0568** | **159.0568** | **6.1200e-003** | **0.0000** | **159.2098** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.7900e-003 | 9.4000e-004 | 0.0139 | 7.0000e-005 | 0.0109 | 4.0000e-005 | 0.0109 | 2.8800e-003 | 4.0000e-005 | 2.9200e-003 | 0.0000 | 6.4170 | 6.4170 | 7.0000e-005 | 0.0000 | 6.4189 |
| **Total** | **1.7900e-003** | **9.4000e-004** | **0.0139** | **7.0000e-005** | **0.0109** | **4.0000e-005** | **0.0109** | **2.8800e-003** | **4.0000e-005** | **2.9200e-003** | **0.0000** | **6.4170** | **6.4170** | **7.0000e-005** | **0.0000** | **6.4189** |

## 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 | 0.0370 | 0.5964 | 1.1415 | 1.8500e-003 | | 6.0300e-003 | 6.0300e-003 | | 6.0300e-003 | 6.0300e-003 | 0.0000 | 159.0566 | 159.0566 | 6.1200e-003 | 0.0000 | 159.2096 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0370** | **0.5964** | **1.1415** | **1.8500e-003** | | **6.0300e-003** | **6.0300e-003** | | **6.0300e-003** | **6.0300e-003** | **0.0000** | **159.0566** | **159.0566** | **6.1200e-003** | **0.0000** | **159.2096** |

## Mitigated Construction Off-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.7900e-003 | 9.4000e-004 | 0.0139 | 7.0000e-005 | 2.1500e-003 | 4.0000e-005 | 2.1900e-003 | 7.5000e-004 | 4.0000e-005 | 7.8000e-004 | 0.0000 | 6.4170 | 6.4170 | 7.0000e-005 | 0.0000 | 6.4189 |
| **Total** | **1.7900e-003** | **9.4000e-004** | **0.0139** | **7.0000e-005** | **2.1500e-003** | **4.0000e-005** | **2.1900e-003** | **7.5000e-004** | **4.0000e-005** | **7.8000e-004** | **0.0000** | **6.4170** | **6.4170** | **7.0000e-005** | **0.0000** | **6.4189** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Increase Transit Accessibility

Improve Pedestrian Network

| | ROG | NOx | CO | SO2 | Fugitive 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 | 5.2902 | 36.3925 | 73.8359 | 0.4336 | 48.7828 | 0.1785 | 48.9612 | 13.0666 | 0.1662 | 13.2328 | 0.0000 | 40,480.2679 | 40,480.2679 | 1.4693 | 0.0000 | 40,517.0004 |
| Unmitigated | 5.1241 | 35.5588 | 70.2628 | 0.4107 | 46.0280 | 0.1693 | 46.1973 | 12.3287 | 0.1577 | 12.4864 | 0.0000 | 38,343.4734 | 38,343.4734 | 1.4008 | 0.0000 | 38,378.4932 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |

| | | | | | |
|---|---|---|---|---|---|
| High School | 0.00 | 0.00 | 0.00 | | |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Regional Shopping Center | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 35,460.00 | 35,460.00 | 35460.00 | 121,172,207 | 128,424,287 |
| Total | 35,460.00 | 35,460.00 | 35,460.00 | 121,172,207 | 128,424,287 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| High School | 16.60 | 8.40 | 6.90 | 77.80 | 17.20 | 5.00 | 75 | 19 | 6 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Other Non-Asphalt Surfaces | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Regional Shopping Center | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Single Family Housing | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5,127.7692 | 5,127.7692 | 0.2117 | 0.0438 | 5,146.1140 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 12,434.3176 | 12,434.3176 | 0.5134 | 0.1062 | 12,478.8017 |
| NaturalGas Mitigated | 0.4738 | 4.0702 | 1.8771 | 0.0259 | | 0.3274 | 0.3274 | | 0.3274 | 0.3274 | 0.0000 | 4,689.4260 | 4,689.4260 | 0.0899 | 0.0860 | 4,717.2929 |
| NaturalGas Unmitigated | 0.5388 | 4.6278 | 2.1344 | 0.0294 | | 0.3722 | 0.3722 | | 0.3722 | 0.3722 | 0.0000 | 5,331.7988 | 5,331.7988 | 0.1022 | 0.0978 | 5,363.4831 |

## 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 | | | | | |
| High School | 6.86854e+006 | 0.0370 | 0.3367 | 0.2828 | 2.0200e-003 | | 0.0256 | 0.0256 | | 0.0256 | 0.0256 | 0.0000 | 366.5315 | 366.5315 | 7.0300e-003 | 6.7200e-003 | 368.7096 |
| 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 |
| Regional Shopping Center | 1.25715e+006 | 6.7800e-003 | 0.0616 | 0.0518 | 3.7000e-004 | | 4.6800e-003 | 4.6800e-003 | | 4.6800e-003 | 4.6800e-003 | 0.0000 | 67.0861 | 67.0861 | 1.2900e-003 | 1.2300e-003 | 67.4848 |
| Single Family Housing | 9.17885e+007 | 0.4949 | 4.2295 | 1.7998 | 0.0270 | | 0.3420 | 0.3420 | | 0.3420 | 0.3420 | 0.0000 | 4,898.1812 | 4,898.1812 | 0.0939 | 0.0898 | 4,927.2887 |
| **Total** | | **0.5388** | **4.6278** | **2.1344** | **0.0294** | | **0.3722** | **0.3722** | | **0.3722** | **0.3722** | **0.0000** | **5,331.7988** | **5,331.7988** | **0.1022** | **0.0978** | **5,363.4831** |

### 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 | | | | | |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 6.04879e+006 | 0.0326 | 0.2965 | 0.2491 | 1.7800e-003 | | 0.0225 | 0.0225 | | 0.0225 | 0.0225 | 0.0000 | 322.7862 | 322.7862 | 6.1900e-003 | 5.9200e-003 | 324.7044 |
| 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 |
| Regional Shopping Center | 1.09406e+006 | 5.9000e-003 | 0.0536 | 0.0451 | 3.2000e-004 | | 4.0800e-003 | 4.0800e-003 | | 4.0800e-003 | 4.0800e-003 | 0.0000 | 58.3830 | 58.3830 | 1.1200e-003 | 1.0700e-003 | 58.7300 |
| Single Family Housing | 8.07337e+007 | 0.4353 | 3.7201 | 1.5830 | 0.0238 | | 0.3008 | 0.3008 | | 0.3008 | 0.3008 | 0.0000 | 4,308.2568 | 4,308.2568 | 0.0826 | 0.0790 | 4,333.8586 |
| **Total** | | **0.4739** | **4.0702** | **1.8771** | **0.0259** | | **0.3274** | **0.3274** | | **0.3274** | **0.3274** | **0.0000** | **4,689.4260** | **4,689.4260** | **0.0899** | **0.0860** | **4,717.2929** |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| High School | 5.72378e+006 | 1,823.7202 | 0.0753 | 0.0156 | 1,830.2446 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 7.15214e+006 | 2,278.8256 | 0.0941 | 0.0195 | 2,286.9781 |
| Single Family Housing | 2.61494e+007 | 8,331.7718 | 0.3440 | 0.0712 | 8,361.5790 |
| **Total** | | **12,434.3176** | **0.5133** | **0.1062** | **12,478.8017** |

### Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| High School | 2.10447e+006 | 670.5295 | 0.0277 | 5.7300e-003 | 672.9283 |

| | | | | | |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 2.58734e+006 | 824.3827 | 0.0340 | 7.0400e-003 | 827.3320 |
| Single Family Housing | 1.14018e+007 | 3,632.8570 | 0.1500 | 0.0310 | 3,645.8537 |
| **Total** | | **5,127.7692** | **0.2117** | **0.0438** | **5,146.1140** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 37.4219 | 0.8117 | 23.6371 | 4.4400e-003 | | 0.1708 | 0.1708 | | 0.1708 | 0.1708 | 0.0000 | 647.7311 | 647.7311 | 0.0370 | 0.0112 | 652.0003 |
| Unmitigated | 37.8554 | 0.8844 | 31.0444 | 5.0100e-003 | | 0.2144 | 0.2144 | | 0.2144 | 0.2144 | 0.0000 | 662.9202 | 662.9202 | 0.0599 | 0.0112 | 667.7638 |

## 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 | 3.1911 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 33.6796 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0619 | 0.5288 | 0.2250 | 3.3700e-003 | | 0.0428 | 0.0428 | | 0.0428 | 0.0428 | 0.0000 | 612.3497 | 612.3497 | 0.0117 | 0.0112 | 615.9886 |
| Landscaping | 0.9229 | 0.3557 | 30.8194 | 1.6300e-003 | | 0.1716 | 0.1716 | | 0.1716 | 0.1716 | 0.0000 | 50.5705 | 50.5705 | 0.0482 | 0.0000 | 51.7753 |
| **Total** | **37.8555** | **0.8844** | **31.0444** | **5.0000e-003** | | **0.2144** | **0.2144** | | **0.2144** | **0.2144** | **0.0000** | **662.9202** | **662.9202** | **0.0599** | **0.0112** | **667.7638** |

**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 | 3.1911 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 33.6796 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0619 | 0.5288 | 0.2250 | 3.3700e-003 | | 0.0428 | 0.0428 | | 0.0428 | 0.0428 | 0.0000 | 612.3497 | 612.3497 | 0.0117 | 0.0112 | 615.9886 |
| Landscaping | 0.4893 | 0.2830 | 23.4121 | 1.0600e-003 | | 0.1280 | 0.1280 | | 0.1280 | 0.1280 | 0.0000 | 35.3814 | 35.3814 | 0.0252 | 0.0000 | 36.0117 |
| **Total** | **37.4219** | **0.8117** | **23.6371** | **4.4300e-003** | | **0.1708** | **0.1708** | | **0.1708** | **0.1708** | **0.0000** | **647.7311** | **647.7311** | **0.0370** | **0.0112** | **652.0003** |

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 1,298.6740 | 6.3088 | 0.1583 | 1,503.5747 |
| Unmitigated | 1,623.3424 | 7.8859 | 0.1979 | 1,879.4684 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| High School | 2.64298 / 6.79622 | 35.8614 | 0.0876 | 2.3300e-003 | 38.7458 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 41.9458 / 25.7087 | 278.3367 | 1.3778 | 0.0345 | 323.0724 |

| | | | | | |
|---|---|---|---|---|---|
| Single Family Housing | 195.462 / 123.226 | 1,309.1443 | 6.4206 | 0.1610 | 1,517.6503 |
| **Total** | | **1,623.3425** | **7.8859** | **0.1979** | **1,879.4684** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| High School | 2.11438 / 5.43698 | 28.6892 | 0.0701 | 1.8700e-003 | 30.9966 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 33.5566 / 20.567 | 222.6694 | 1.1022 | 0.0276 | 258.4579 |
| Single Family Housing | 156.37 / 98.5809 | 1,047.3154 | 5.1365 | 0.1288 | 1,214.1202 |
| **Total** | | **1,298.6740** | **6.3088** | **0.1583** | **1,503.5747** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 269.8353 | 15.9468 | 0.0000 | 668.5055 |

| | | | | |
|---|---|---|---|---|
| Unmitigated | 899.4509 | 53.1560 | 0.0000 | 2,228.3516 |

## 8.2 Waste by Land Use

### Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| High School | 109.5 | 22.2275 | 1.3136 | 0.0000 | 55.0677 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 594.59 | 120.6964 | 7.1330 | 0.0000 | 299.0202 |
| Single Family Housing | 3726.9 | 756.5270 | 44.7095 | 0.0000 | 1,874.2637 |
| **Total** | | **899.4509** | **53.1560** | **0.0000** | **2,228.3516** |

### Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| High School | 32.85 | 6.6683 | 0.3941 | 0.0000 | 16.5203 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 178.377 | 36.2089 | 2.1399 | 0.0000 | 89.7061 |
| Single Family Housing | 1118.07 | 226.9581 | 13.4128 | 0.0000 | 562.2791 |

| | | | | | |
|---|---|---|---|---|---|
| **Total** | | **269.8353** | **15.9468** | **0.0000** | **668.5055** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

# EHNCP (Proposed Project)

**South Coast Air Basin, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| High School | 600.00 | Student | 18.00 | 784,080.00 | 0 |
| Other Non-Asphalt Surfaces | 198.00 | Acre | 198.00 | 8,624,880.00 | 0 |
| Single Family Housing | 3,000.00 | Dwelling Unit | 531.00 | 7,815,844.00 | 9090 |
| Regional Shopping Center | 566.28 | 1000sqft | 13.00 | 566,282.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2040 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - The 3,000 units within the Plan would generate a population increase of 9,090
Other Non-Asphalt includes parks (internal and external) and utility corridor/bank easement

Construction Phase - According to construction schedule scenario

Trips and VMT - Default assumptions

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips - Based on a gross tripend of 35,446 trips (includes internal and external trips)

Woodstoves - No woodstoves

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Mobile Land Use Mitigation - Milliken & Baseline Station
Metrolink station located further south

Area Mitigation - Per SCAQMD Electric Lawn mower
SCAQMD Rule 445: Natural Gas Hearth

Energy Mitigation - California 2020 Building Standard. The Plan would promote renewable and alternative energy technology
CalGreen Voluntary measure require energy efficiency that exceeds Title 24 requirements by 15-30 percent

Water Mitigation -

Waste Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | CleanPavedRoadPercentReduction | 0 | 92.5 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 880.00 | 913.00 |
| tblConstructionPhase | NumDays | 12,400.00 | 1,837.00 |
| tblConstructionPhase | NumDays | 1,240.00 | 1,550.00 |
| tblConstructionPhase | NumDays | 880.00 | 132.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 150.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 79,596.59 | 784,080.00 |
| tblLandUse | LandUseSquareFeet | 5,400,000.00 | 7,815,844.00 |
| tblLandUse | LandUseSquareFeet | 566,280.00 | 566,282.00 |
| tblLandUse | LotAcreage | 1.83 | 18.00 |
| tblLandUse | LotAcreage | 974.03 | 531.00 |
| tblLandUse | Population | 8,580.00 | 9,090.00 |
| tblVehicleTrips | ST_TR | 0.61 | 0.00 |
| tblVehicleTrips | ST_TR | 49.97 | 0.00 |
| tblVehicleTrips | ST_TR | 9.91 | 11.82 |
| tblVehicleTrips | SU_TR | 0.25 | 0.00 |
| tblVehicleTrips | SU_TR | 25.24 | 0.00 |
| tblVehicleTrips | SU_TR | 8.62 | 11.82 |
| tblVehicleTrips | WD_TR | 1.71 | 0.00 |
| tblVehicleTrips | WD_TR | 42.70 | 0.00 |
| tblVehicleTrips | WD_TR | 9.52 | 11.82 |
| tblWoodstoves | NumberCatalytic | 150.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblWoodstoves | NumberNoncatalytic | 150.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 3.3956 | 34.5602 | 28.6925 | 0.0642 | 8.8969 | 1.4261 | 10.3230 | 3.6558 | 1.3120 | 4.9678 | 0.0000 | 6,216.9797 | 6,216.9797 | 1.9491 | 0.0000 | 6,265.7072 |
| 2024 | 3.2880 | 32.4176 | 28.3216 | 0.0641 | 8.8969 | 1.3369 | 10.2338 | 3.6558 | 1.2300 | 4.8858 | 0.0000 | 6,208.4797 | 6,208.4797 | 1.9481 | 0.0000 | 6,257.1831 |
| 2025 | 2.9676 | 27.9801 | 26.8877 | 0.0640 | 8.8969 | 1.1324 | 10.0293 | 3.6558 | 1.0418 | 4.6976 | 0.0000 | 6,199.1929 | 6,199.1929 | 1.9473 | 0.0000 | 6,247.8746 |
| 2026 | 2.9646 | 27.9771 | 26.8517 | 0.0639 | 8.8969 | 1.1324 | 10.0293 | 3.6558 | 1.0418 | 4.6976 | 0.0000 | 6,192.4368 | 6,192.4368 | 1.9469 | 0.0000 | 6,241.1099 |
| 2027 | 2.9616 | 27.9745 | 26.8196 | 0.0639 | 8.8969 | 1.1323 | 10.0292 | 3.6558 | 1.0417 | 4.6975 | 0.0000 | 6,186.4825 | 6,186.4825 | 1.9466 | 0.0000 | 6,235.1480 |
| 2028 | 19.7510 | 149.2389 | 171.1021 | 0.9405 | 70.7854 | 1.1322 | 71.7896 | 19.0564 | 1.0416 | 19.9962 | 0.0000 | 97,309.0416 | 97,309.0416 | 4.0201 | 0.0000 | 97,409.5431 |
| 2029 | 18.8052 | 147.6401 | 163.4492 | 0.9264 | 70.7856 | 0.9780 | 71.7636 | 19.0565 | 0.9156 | 19.9721 | 0.0000 | 95,910.9261 | 95,910.9261 | 3.9195 | 0.0000 | 96,008.9135 |
| 2030 | 17.7925 | 141.5729 | 156.5202 | 0.9179 | 70.7857 | 0.5748 | 71.3605 | 19.0565 | 0.5455 | 19.6020 | 0.0000 | 95,009.4947 | 95,009.4947 | 3.3419 | 0.0000 | 95,093.0427 |
| 2031 | 16.7827 | 140.3695 | 150.1129 | 0.9079 | 70.7857 | 0.5541 | 71.3398 | 19.0565 | 0.5264 | 19.5829 | 0.0000 | 94,032.4273 | 94,032.4273 | 3.2606 | 0.0000 | 94,113.9420 |
| 2032 | 88.1604 | 140.9846 | 164.7593 | 0.9836 | 82.4441 | 0.6048 | 83.0489 | 22.1484 | 0.5746 | 22.7230 | 0.0000 | 101,587.8502 | 101,587.8502 | 3.3145 | 0.0000 | 101,670.7119 |
| 2033 | 87.2334 | 139.7360 | 158.6771 | 0.9739 | 82.4441 | 0.5834 | 83.0275 | 22.1484 | 0.5549 | 22.7032 | 0.0000 | 100,627.6041 | 100,627.6041 | 3.2416 | 0.0000 | 100,708.6446 |
| 2034 | 86.4459 | 138.6416 | 152.7880 | 0.9655 | 82.4442 | 0.5631 | 83.0073 | 22.1484 | 0.5361 | 22.6845 | 0.0000 | 99,796.2550 | 99,796.2550 | 3.1740 | 0.0000 | 99,875.6053 |
| 2035 | 86.8522 | 141.8068 | 163.9152 | 0.9875 | 82.6119 | 0.6650 | 83.2770 | 22.1929 | 0.6394 | 22.8323 | 0.0000 | 101,859.6446 | 101,859.6446 | 3.2117 | 0.0000 | 101,939.9381 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Maximum** | **88.1604** | **149.2389** | **171.1021** | **0.9875** | **82.6119** | **1.4261** | **83.2770** | **22.1929** | **1.3120** | **22.8323** | **0.0000** | **101,859.6446** | **101,859.6446** | **4.0201** | **0.0000** | **101,939.9381** |

## Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 1.5969 | 24.0272 | 37.3639 | 0.0642 | 2.9190 | 0.1965 | 3.1155 | 1.2074 | 0.1964 | 1.4038 | 0.0000 | 6,216.9797 | 6,216.9797 | 1.9491 | 0.0000 | 6,265.7072 |
| 2024 | 1.5930 | 24.0232 | 37.3214 | 0.0641 | 2.9190 | 0.1965 | 3.1154 | 1.2074 | 0.1963 | 1.4037 | 0.0000 | 6,208.4797 | 6,208.4797 | 1.9481 | 0.0000 | 6,257.1830 |
| 2025 | 1.5895 | 24.0198 | 37.2792 | 0.0640 | 2.9190 | 0.1964 | 3.1154 | 1.2074 | 0.1963 | 1.4037 | 0.0000 | 6,199.1929 | 6,199.1929 | 1.9473 | 0.0000 | 6,247.8746 |
| 2026 | 1.5864 | 24.0168 | 37.2432 | 0.0639 | 2.9190 | 0.1964 | 3.1154 | 1.2074 | 0.1963 | 1.4037 | 0.0000 | 6,192.4367 | 6,192.4367 | 1.9469 | 0.0000 | 6,241.1099 |
| 2027 | 1.5835 | 24.0142 | 37.2111 | 0.0639 | 2.9190 | 0.1963 | 3.1153 | 1.2074 | 0.1962 | 1.4036 | 0.0000 | 6,186.4825 | 6,186.4825 | 1.9466 | 0.0000 | 6,235.1480 |
| 2028 | 19.0575 | 148.1501 | 172.8912 | 0.9405 | 15.6746 | 0.6121 | 16.2867 | 5.5292 | 0.5791 | 6.1083 | 0.0000 | 97,309.0416 | 97,309.0416 | 4.0201 | 0.0000 | 97,409.5431 |
| 2029 | 18.1117 | 146.5512 | 165.2383 | 0.9264 | 15.6747 | 0.5860 | 16.2607 | 5.5293 | 0.5549 | 6.0841 | 0.0000 | 95,910.9261 | 95,910.9261 | 3.9195 | 0.0000 | 96,008.9135 |
| 2030 | 17.1573 | 145.0192 | 158.2369 | 0.9179 | 15.6748 | 0.5622 | 16.2370 | 5.5293 | 0.5329 | 6.0622 | 0.0000 | 95,009.4947 | 95,009.4947 | 3.3419 | 0.0000 | 95,093.0427 |
| 2031 | 16.1474 | 143.8157 | 151.8297 | 0.9079 | 15.6749 | 0.5415 | 16.2164 | 5.5293 | 0.5138 | 6.0431 | 0.0000 | 94,032.4273 | 94,032.4273 | 3.2606 | 0.0000 | 94,113.9420 |
| 2032 | 87.4538 | 144.6601 | 166.5107 | 0.9836 | 17.9580 | 0.5861 | 18.5441 | 6.3200 | 0.5559 | 6.8759 | 0.0000 | 101,587.8502 | 101,587.8502 | 3.3145 | 0.0000 | 101,670.7119 |
| 2033 | 86.5269 | 143.4115 | 160.4286 | 0.9739 | 17.9581 | 0.5647 | 18.5228 | 6.3200 | 0.5362 | 6.8562 | 0.0000 | 100,627.6041 | 100,627.6041 | 3.2416 | 0.0000 | 100,708.6446 |
| 2034 | 85.7394 | 142.3172 | 154.5395 | 0.9655 | 17.9581 | 0.5444 | 18.5025 | 6.3200 | 0.5174 | 6.8375 | 0.0000 | 99,796.2550 | 99,796.2550 | 3.1740 | 0.0000 | 99,875.6053 |
| 2035 | 85.6713 | 150.5142 | 167.1847 | 0.9875 | 17.9910 | 0.6185 | 18.6095 | 6.3314 | 0.5929 | 6.9243 | 0.0000 | 101,859.6446 | 101,859.6446 | 3.2117 | 0.0000 | 101,939.9380 |
| **Maximum** | **87.4538** | **150.5142** | **172.8912** | **0.9875** | **17.9910** | **0.6185** | **18.6095** | **6.3314** | **0.5929** | **6.9243** | **0.0000** | **101,859.6446** | **101,859.6446** | **4.0201** | **0.0000** | **101,939.9380** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.11** | **0.49** | **-4.54** | **0.00** | **77.32** | **52.62** | **76.88** | **70.82** | **51.24** | **69.69** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 214.3641 | 45.1455 | 264.5549 | 0.2831 | | 4.7930 | 4.7930 | | 4.7930 | 4.7930 | 0.0000 | 54,445.9555 | 54,445.9555 | 1.4600 | 0.9900 | 54,777.4745 |
| Energy | 2.9521 | 25.3577 | 11.6951 | 0.1610 | | 2.0396 | 2.0396 | | 2.0396 | 2.0396 | | 32,204.3954 | 32,204.3954 | 0.6173 | 0.5904 | 32,395.7701 |
| Mobile | 29.8942 | 191.1390 | 405.5233 | 2.3408 | 257.5736 | 0.9304 | 258.5040 | 68.8871 | 0.8665 | 69.7536 | | 240,718.4327 | 240,718.4327 | 8.4694 | | 240,930.1676 |
| **Total** | **247.2104** | **261.6423** | **681.7734** | **2.7849** | **257.5736** | **7.7630** | **265.3366** | **68.8871** | **7.6992** | **76.5862** | **0.0000** | **327,368.7837** | **327,368.7837** | **10.5466** | **1.5804** | **328,103.4122** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 210.8955 | 44.5637 | 205.2968 | 0.2785 | | 4.4442 | 4.4442 | | 4.4442 | 4.4442 | 0.0000 | 54,312.0106 | 54,312.0106 | 1.2573 | 0.9900 | 54,638.4637 |
| Energy | 2.5964 | 22.3026 | 10.2857 | 0.1416 | | 1.7939 | 1.7939 | | 1.7939 | 1.7939 | | 28,324.4237 | 28,324.4237 | 0.5429 | 0.5193 | 28,492.7416 |
| Mobile | 30.8112 | 195.3987 | 426.7031 | 2.4715 | 272.9892 | 0.9809 | 273.9701 | 73.0099 | 0.9136 | 73.9235 | | 254,121.9940 | 254,121.9940 | 8.8886 | | 254,344.2098 |
| **Total** | **244.3031** | **262.2650** | **642.2855** | **2.8916** | **272.9892** | **7.2190** | **280.2082** | **73.0099** | **7.1517** | **80.1616** | **0.0000** | **336,758.4283** | **336,758.4283** | **10.6888** | **1.5093** | **337,475.4150** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **1.18** | **-0.24** | **5.79** | **-3.83** | **-5.98** | **7.01** | **-5.60** | **-5.98** | **7.11** | **-4.67** | **0.00** | **-2.87** | **-2.87** | **-1.35** | **4.50** | **-2.86** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/2/2023 | 12/8/2028 | 5 | 1550 | |
| 2 | Building Construction | Building Construction | 12/9/2028 | 12/25/2035 | 5 | 1837 | |
| 3 | Architectural Coating | Architectural Coating | 6/25/2032 | 12/25/2035 | 5 | 913 | |
| 4 | Paving | Paving | 6/25/2035 | 12/25/2035 | 5 | 132 | |

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

**Acres of Grading (Grading Phase): 3875**

**Acres of Paving: 198**

**Residential Indoor: 15,827,084; Residential Outdoor: 5,275,695; Non-Residential Indoor: 2,025,543; Non-Residential Outdoor: 675,181;**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |

| | | | | | |
|---|---|---|---|---|---|
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 5,213.00 | 1,956.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 1,043.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## 3.2 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **8.6733** | **1.4245** | **10.0978** | **3.5965** | **1.3105** | **4.9070** | | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0738 | 0.0446 | 0.6413 | 2.0600e-003 | 0.2236 | 1.5700e-003 | 0.2251 | 0.0593 | 1.4400e-003 | 0.0607 | | 205.5020 | 205.5020 | 4.8700e-003 | | 205.6236 |
| **Total** | **0.0738** | **0.0446** | **0.6413** | **2.0600e-003** | **0.2236** | **1.5700e-003** | **0.2251** | **0.0593** | **1.4400e-003** | **0.0607** | | **205.5020** | **205.5020** | **4.8700e-003** | | **205.6236** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0738 | 0.0446 | 0.6413 | 2.0600e-003 | 0.0438 | 1.5700e-003 | 0.0453 | 0.0152 | 1.4400e-003 | 0.0166 | | 205.5020 | 205.5020 | 4.8700e-003 | | 205.6236 |
| **Total** | **0.0738** | **0.0446** | **0.6413** | **2.0600e-003** | **0.0438** | **1.5700e-003** | **0.0453** | **0.0152** | **1.4400e-003** | **0.0166** | | **205.5020** | **205.5020** | **4.8700e-003** | | **205.6236** |

## 3.2 Grading - 2024

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2181 | 32.3770 | 27.7228 | 0.0621 | | 1.3354 | 1.3354 | | 1.2286 | 1.2286 | | 6,009.7487 | 6,009.7487 | 1.9437 | | 6,058.3405 |
| **Total** | **3.2181** | **32.3770** | **27.7228** | **0.0621** | **8.6733** | **1.3354** | **10.0087** | **3.5965** | **1.2286** | **4.8251** | | **6,009.7487** | **6,009.7487** | **1.9437** | | **6,058.3405** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0699 | 0.0407 | 0.5988 | 1.9900e-003 | 0.2236 | 1.5400e-003 | 0.2251 | 0.0593 | 1.4200e-003 | 0.0607 | | 198.7310 | 198.7310 | 4.4600e-003 | | 198.8425 |
| **Total** | **0.0699** | **0.0407** | **0.5988** | **1.9900e-003** | **0.2236** | **1.5400e-003** | **0.2251** | **0.0593** | **1.4200e-003** | **0.0607** | | **198.7310** | **198.7310** | **4.4600e-003** | | **198.8425** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,009.7487 | 6,009.7487 | 1.9437 | | 6,058.3405 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,009.7487** | **6,009.7487** | **1.9437** | | **6,058.3405** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0699 | 0.0407 | 0.5988 | 1.9900e-003 | 0.0438 | 1.5400e-003 | 0.0453 | 0.0152 | 1.4200e-003 | 0.0166 | | 198.7310 | 198.7310 | 4.4600e-003 | | 198.8425 |
| **Total** | **0.0699** | **0.0407** | **0.5988** | **1.9900e-003** | **0.0438** | **1.5400e-003** | **0.0453** | **0.0152** | **1.4200e-003** | **0.0166** | | **198.7310** | **198.7310** | **4.4600e-003** | | **198.8425** |

## 3.2 Grading - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0664 | 0.0372 | 0.5566 | 1.9100e-003 | 0.2236 | 1.5100e-003 | 0.2251 | 0.0593 | 1.3900e-003 | 0.0607 | | 190.9115 | 190.9115 | 4.0700e-003 | | 191.0132 |
| **Total** | **0.0664** | **0.0372** | **0.5566** | **1.9100e-003** | **0.2236** | **1.5100e-003** | **0.2251** | **0.0593** | **1.3900e-003** | **0.0607** | | **190.9115** | **190.9115** | **4.0700e-003** | | **191.0132** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0664 | 0.0372 | 0.5566 | 1.9100e-003 | 0.0438 | 1.5100e-003 | 0.0453 | 0.0152 | 1.3900e-003 | 0.0166 | | 190.9115 | 190.9115 | 4.0700e-003 | | 191.0132 |
| **Total** | **0.0664** | **0.0372** | **0.5566** | **1.9100e-003** | **0.0438** | **1.5100e-003** | **0.0453** | **0.0152** | **1.3900e-003** | **0.0166** | | **190.9115** | **190.9115** | **4.0700e-003** | | **191.0132** |

## 3.2 Grading - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0634 | 0.0343 | 0.5206 | 1.8500e-003 | 0.2236 | 1.4600e-003 | 0.2250 | 0.0593 | 1.3500e-003 | 0.0606 | | 184.1553 | 184.1553 | 3.7300e-003 | | 184.2485 |
| **Total** | **0.0634** | **0.0343** | **0.5206** | **1.8500e-003** | **0.2236** | **1.4600e-003** | **0.2250** | **0.0593** | **1.3500e-003** | **0.0606** | | **184.1553** | **184.1553** | **3.7300e-003** | | **184.2485** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0634 | 0.0343 | 0.5206 | 1.8500e-003 | 0.0438 | 1.4600e-003 | 0.0452 | 0.0152 | 1.3500e-003 | 0.0165 | | 184.1553 | 184.1553 | 3.7300e-003 | | 184.2485 |
| **Total** | **0.0634** | **0.0343** | **0.5206** | **1.8500e-003** | **0.0438** | **1.4600e-003** | **0.0452** | **0.0152** | **1.3500e-003** | **0.0165** | | **184.1553** | **184.1553** | **3.7300e-003** | | **184.2485** |

## 3.2 Grading - 2027

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0604 | 0.0316 | 0.4886 | 1.7900e-003 | 0.2236 | 1.3800e-003 | 0.2249 | 0.0593 | 1.2700e-003 | 0.0606 | | 178.2011 | 178.2011 | 3.4200e-003 | | 178.2866 |
| **Total** | **0.0604** | **0.0316** | **0.4886** | **1.7900e-003** | **0.2236** | **1.3800e-003** | **0.2249** | **0.0593** | **1.2700e-003** | **0.0606** | | **178.2011** | **178.2011** | **3.4200e-003** | | **178.2866** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0604 | 0.0316 | 0.4886 | 1.7900e-003 | 0.0438 | 1.3800e-003 | 0.0452 | 0.0152 | 1.2700e-003 | 0.0164 | | 178.2011 | 178.2011 | 3.4200e-003 | | 178.2866 |
| **Total** | **0.0604** | **0.0316** | **0.4886** | **1.7900e-003** | **0.0438** | **1.3800e-003** | **0.0452** | **0.0152** | **1.2700e-003** | **0.0164** | | **178.2011** | **178.2011** | **3.4200e-003** | | **178.2866** |

## 3.2 Grading - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0573 | 0.0292 | 0.4604 | 1.7300e-003 | 0.2236 | 1.2800e-003 | 0.2248 | 0.0593 | 1.1800e-003 | 0.0605 | | 172.9594 | 172.9594 | 3.1600e-003 | | 173.0383 |
| **Total** | **0.0573** | **0.0292** | **0.4604** | **1.7300e-003** | **0.2236** | **1.2800e-003** | **0.2248** | **0.0593** | **1.1800e-003** | **0.0605** | | **172.9594** | **172.9594** | **3.1600e-003** | | **173.0383** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0573 | 0.0292 | 0.4604 | 1.7300e-003 | 0.0438 | 1.2800e-003 | 0.0451 | 0.0152 | 1.1800e-003 | 0.0163 | | 172.9594 | 172.9594 | 3.1600e-003 | | 173.0383 |
| **Total** | **0.0573** | **0.0292** | **0.4604** | **1.7300e-003** | **0.0438** | **1.2800e-003** | **0.0451** | **0.0152** | **1.1800e-003** | **0.0163** | | **172.9594** | **172.9594** | **3.1600e-003** | | **173.0383** |

## 3.3 Building Construction - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.4399 | 129.1541 | 35.0049 | 0.4617 | 12.5164 | 0.1422 | 12.6586 | 3.6032 | 0.1359 | 3.7391 | | 49,670.7106 | 49,670.7106 | 2.5963 | | 49,735.6190 |
| Worker | 14.9437 | 7.6151 | 120.0126 | 0.4519 | 58.2691 | 0.3344 | 58.6034 | 15.4532 | 0.3076 | 15.7609 | | 45,081.8567 | 45,081.8567 | 0.8228 | | 45,102.4260 |
| **Total** | **18.3836** | **136.7692** | **155.0175** | **0.9136** | **70.7854** | **0.4766** | **71.2620** | **19.0564** | **0.4435** | **19.4999** | | **94,752.5673** | **94,752.5673** | **3.4191** | | **94,838.0450** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.4399 | 129.1541 | 35.0049 | 0.4617 | 4.2637 | 0.1422 | 4.4058 | 1.5775 | 0.1359 | 1.7134 | | 49,670.7106 | 49,670.7106 | 2.5963 | | 49,735.6190 |
| Worker | 14.9437 | 7.6151 | 120.0126 | 0.4519 | 11.4109 | 0.3344 | 11.7453 | 3.9517 | 0.3076 | 4.2593 | | 45,081.8567 | 45,081.8567 | 0.8228 | | 45,102.4260 |
| **Total** | **18.3836** | **136.7692** | **155.0175** | **0.9136** | **15.6746** | **0.4766** | **16.1511** | **5.5292** | **0.4435** | **5.9727** | | **94,752.5673** | **94,752.5673** | **3.4191** | | **94,838.0450** |

## 3.3 Building Construction - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.3850 | 128.1549 | 34.5696 | 0.4598 | 12.5165 | 0.1397 | 12.6562 | 3.6032 | 0.1335 | 3.7368 | | 49,483.4429 | 49,483.4429 | 2.5632 | | 49,547.5222 |
| Worker | 14.0528 | 7.0155 | 112.7949 | 0.4397 | 58.2691 | 0.3107 | 58.5798 | 15.4532 | 0.2858 | 15.7391 | | 43,871.0089 | 43,871.0089 | 0.7554 | | 43,889.8932 |
| **Total** | **17.4378** | **135.1704** | **147.3646** | **0.8994** | **70.7856** | **0.4504** | **71.2360** | **19.0565** | **0.4194** | **19.4758** | | **93,354.4517** | **93,354.4517** | **3.3186** | | **93,437.4154** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.3850 | 128.1549 | 34.5696 | 0.4598 | 4.2638 | 0.1397 | 4.4035 | 1.5776 | 0.1335 | 1.7111 | | 49,483.4429 | 49,483.4429 | 2.5632 | | 49,547.5222 |
| Worker | 14.0528 | 7.0155 | 112.7949 | 0.4397 | 11.4109 | 0.3107 | 11.7217 | 3.9517 | 0.2858 | 4.2375 | | 43,871.0089 | 43,871.0089 | 0.7554 | | 43,889.8932 |
| **Total** | **17.4378** | **135.1704** | **147.3646** | **0.8994** | **15.6747** | **0.4504** | **16.1251** | **5.5293** | **0.4194** | **5.9486** | | **93,354.4517** | **93,354.4517** | **3.3186** | | **93,437.4154** |

## 3.3 Building Construction - 2030

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.3377 | 127.1899 | 34.2368 | 0.4581 | 12.5166 | 0.1373 | 12.6540 | 3.6033 | 0.1313 | 3.7345 | | 49,314.5828 | 49,314.5828 | 2.5323 | | 49,377.8912 |
| Worker | 13.1457 | 6.4484 | 106.1264 | 0.4288 | 58.2691 | 0.2893 | 58.5584 | 15.4532 | 0.2661 | 15.7194 | | 42,797.3652 | 42,797.3652 | 0.6933 | | 42,814.6986 |
| **Total** | **16.4834** | **133.6383** | **140.3632** | **0.8869** | **70.7857** | **0.4267** | **71.2123** | **19.0565** | **0.3974** | **19.4539** | | **92,111.9480** | **92,111.9480** | **3.2257** | | **92,192.5898** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.3377 | 127.1899 | 34.2368 | 0.4581 | 4.2639 | 0.1373 | 4.4012 | 1.5776 | 0.1313 | 1.7089 | | 49,314.5828 | 49,314.5828 | 2.5323 | | 49,377.8912 |
| Worker | 13.1457 | 6.4484 | 106.1264 | 0.4288 | 11.4109 | 0.2893 | 11.7003 | 3.9517 | 0.2661 | 4.2178 | | 42,797.3652 | 42,797.3652 | 0.6933 | | 42,814.6986 |
| **Total** | **16.4834** | **133.6383** | **140.3632** | **0.8869** | **15.6748** | **0.4267** | **16.1015** | **5.5293** | **0.3974** | **5.9267** | | **92,111.9480** | **92,111.9480** | **3.2257** | | **92,192.5898** |

## 3.3 Building Construction - 2031

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.3157 | 126.5450 | 34.1158 | 0.4572 | 12.5167 | 0.1356 | 12.6522 | 3.6033 | 0.1296 | 3.7328 | | 49,239.1396 | 49,239.1396 | 2.5089 | | 49,301.8622 |
| Worker | 12.1579 | 5.8898 | 99.8401 | 0.4197 | 58.2691 | 0.2704 | 58.5395 | 15.4532 | 0.2487 | 15.7019 | | 41,895.7410 | 41,895.7410 | 0.6354 | | 41,911.6269 |
| **Total** | **15.4735** | **132.4348** | **133.9559** | **0.8770** | **70.7857** | **0.4059** | **71.1917** | **19.0565** | **0.3783** | **19.4348** | | **91,134.8806** | **91,134.8806** | **3.1443** | | **91,213.4891** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.3157 | 126.5450 | 34.1158 | 0.4572 | 4.2640 | 0.1356 | 4.3995 | 1.5776 | 0.1296 | 1.7072 | | 49,239.1396 | 49,239.1396 | 2.5089 | | 49,301.8622 |
| Worker | 12.1579 | 5.8898 | 99.8401 | 0.4197 | 11.4109 | 0.2704 | 11.6813 | 3.9517 | 0.2487 | 4.2004 | | 41,895.7410 | 41,895.7410 | 0.6354 | | 41,911.6269 |
| **Total** | **15.4735** | **132.4348** | **133.9559** | **0.8770** | **15.6749** | **0.4059** | **16.0808** | **5.5293** | **0.3783** | **5.9076** | | **91,134.8806** | **91,134.8806** | **3.1443** | | **91,213.4891** |

## 3.3 Building Construction - 2032

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.2858 | 125.7096 | 33.9638 | 0.4561 | 12.5168 | 0.1338 | 12.6505 | 3.6033 | 0.1278 | 3.7311 | | 49,135.5773 | 49,135.5773 | 2.4876 | | 49,197.7673 |
| Worker | 11.2751 | 5.4030 | 94.0280 | 0.4113 | 58.2691 | 0.2521 | 58.5212 | 15.4532 | 0.2319 | 15.6851 | | 41,058.4397 | 41,058.4397 | 0.5827 | | 41,073.0061 |
| **Total** | **14.5609** | **131.1126** | **127.9917** | **0.8674** | **70.7858** | **0.3859** | **71.1717** | **19.0565** | **0.3597** | **19.4163** | | **90,194.0170** | **90,194.0170** | **3.0703** | | **90,270.7734** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.2858 | 125.7096 | 33.9638 | 0.4561 | 4.2640 | 0.1338 | 4.3978 | 1.5776 | 0.1278 | 1.7055 | | 49,135.5773 | 49,135.5773 | 2.4876 | | 49,197.7673 |
| Worker | 11.2751 | 5.4030 | 94.0280 | 0.4113 | 11.4109 | 0.2521 | 11.6631 | 3.9517 | 0.2319 | 4.1836 | | 41,058.4397 | 41,058.4397 | 0.5827 | | 41,073.0061 |
| **Total** | **14.5609** | **131.1126** | **127.9917** | **0.8674** | **15.6749** | **0.3859** | **16.0608** | **5.5293** | **0.3597** | **5.8891** | | **90,194.0170** | **90,194.0170** | **3.0703** | | **90,270.7734** |

## 3.3 Building Construction - 2033

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.2640 | 124.9556 | 33.8564 | 0.4553 | 12.5168 | 0.1322 | 12.6490 | 3.6033 | 0.1263 | 3.7297 | | 49,052.4615 | 49,052.4615 | 2.4689 | | 49,114.1839 |
| Worker | 10.5208 | 4.9909 | 89.0494 | 0.4039 | 58.2691 | 0.2356 | 58.5047 | 15.4532 | 0.2167 | 15.6700 | | 40,327.5445 | 40,327.5445 | 0.5375 | | 40,340.9830 |
| **Total** | **13.7848** | **129.9465** | **122.9057** | **0.8592** | **70.7859** | **0.3678** | **71.1537** | **19.0566** | **0.3431** | **19.3996** | | **89,380.0060** | **89,380.0060** | **3.0064** | | **89,455.1669** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.2640 | 124.9556 | 33.8564 | 0.4553 | 4.2641 | 0.1322 | 4.3963 | 1.5777 | 0.1263 | 1.7040 | | 49,052.4615 | 49,052.4615 | 2.4689 | | 49,114.1839 |
| Worker | 10.5208 | 4.9909 | 89.0494 | 0.4039 | 11.4109 | 0.2356 | 11.6466 | 3.9517 | 0.2167 | 4.1684 | | 40,327.5445 | 40,327.5445 | 0.5375 | | 40,340.9830 |
| **Total** | **13.7848** | **129.9465** | **122.9057** | **0.8592** | **15.6750** | **0.3678** | **16.0428** | **5.5293** | **0.3431** | **5.8724** | | **89,380.0060** | **89,380.0060** | **3.0064** | | **89,455.1669** |

## 3.3 Building Construction - 2034

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.2443 | 124.2762 | 33.7402 | 0.4546 | 12.5169 | 0.1306 | 12.6475 | 3.6034 | 0.1248 | 3.7282 | | 48,988.9103 | 48,988.9103 | 2.4529 | | 49,050.2320 |
| Worker | 9.8810 | 4.6451 | 84.2389 | 0.3974 | 58.2691 | 0.2200 | 58.4891 | 15.4532 | 0.2024 | 15.6556 | | 39,687.7539 | 39,687.7539 | 0.4946 | | 39,700.1179 |
| **Total** | **13.1253** | **128.9214** | **117.9791** | **0.8520** | **70.7859** | **0.3506** | **71.1365** | **19.0566** | **0.3272** | **19.3837** | | **88,676.6641** | **88,676.6641** | **2.9474** | | **88,750.3499** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.2443 | 124.2762 | 33.7402 | 0.4546 | 4.2641 | 0.1306 | 4.3947 | 1.5777 | 0.1248 | 1.7025 | | 48,988.9103 | 48,988.9103 | 2.4529 | | 49,050.2320 |
| Worker | 9.8810 | 4.6451 | 84.2389 | 0.3974 | 11.4109 | 0.2200 | 11.6309 | 3.9517 | 0.2024 | 4.1540 | | 39,687.7539 | 39,687.7539 | 0.4946 | | 39,700.1179 |
| **Total** | **13.1253** | **128.9214** | **117.9791** | **0.8520** | **15.6751** | **0.3506** | **16.0257** | **5.5294** | **0.3272** | **5.8565** | | **88,676.6641** | **88,676.6641** | **2.9474** | | **88,750.3499** |

## 3.3 Building Construction - 2035

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.2168 | 7.1613 | 16.1178 | 0.0310 | | 0.0904 | 0.0904 | | 0.0904 | 0.0904 | | 2,897.5468 | 2,897.5468 | 0.1079 | | 2,900.2448 |
| **Total** | **1.2168** | **7.1613** | **16.1178** | **0.0310** | | **0.0904** | **0.0904** | | **0.0904** | **0.0904** | | **2,897.5468** | **2,897.5468** | **0.1079** | | **2,900.2448** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.2277 | 123.7287 | 33.6283 | 0.4541 | 12.5169 | 0.1293 | 12.6463 | 3.6034 | 0.1236 | 3.7270 | | 48,940.5745 | 48,940.5745 | 2.4386 | | 49,001.5383 |
| Worker | 9.3483 | 4.3916 | 80.2645 | 0.3919 | 58.2691 | 0.2061 | 58.4752 | 15.4532 | 0.1896 | 15.6428 | | 39,139.9443 | 39,139.9443 | 0.4594 | | 39,151.4291 |
| **Total** | **12.5760** | **128.1203** | **113.8928** | **0.8460** | **70.7860** | **0.3355** | **71.1215** | **19.0566** | **0.3132** | **19.3698** | | **88,080.5188** | **88,080.5188** | **2.8979** | | **88,152.9674** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1079 | | 2,900.2448 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1079** | | **2,900.2448** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.2277 | 123.7287 | 33.6283 | 0.4541 | 4.2642 | 0.1293 | 4.3935 | 1.5777 | 0.1236 | 1.7013 | | 48,940.5745 | 48,940.5745 | 2.4386 | | 49,001.5383 |
| Worker | 9.3483 | 4.3916 | 80.2645 | 0.3919 | 11.4109 | 0.2061 | 11.6170 | 3.9517 | 0.1896 | 4.1413 | | 39,139.9443 | 39,139.9443 | 0.4594 | | 39,151.4291 |
| **Total** | **12.5760** | **128.1203** | **113.8928** | **0.8460** | **15.6751** | **0.3355** | **16.0106** | **5.5294** | **0.3132** | **5.8426** | | **88,080.5188** | **88,080.5188** | **2.8979** | | **88,152.9674** |

## 3.4 Architectural Coating - 2032

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **70.0345** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.2559 | 1.0810 | 18.8128 | 0.0823 | 11.6583 | 0.0505 | 11.7087 | 3.0918 | 0.0464 | 3.1382 | | 8,214.8384 | 8,214.8384 | 0.1166 | | 8,217.7528 |
| **Total** | **2.2559** | **1.0810** | **18.8128** | **0.0823** | **11.6583** | **0.0505** | **11.7087** | **3.0918** | **0.0464** | **3.1382** | | **8,214.8384** | **8,214.8384** | **0.1166** | | **8,217.7528** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **69.9632** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.2559 | 1.0810 | 18.8128 | 0.0823 | 2.2831 | 0.0505 | 2.3335 | 0.7906 | 0.0464 | 0.8370 | | 8,214.8384 | 8,214.8384 | 0.1166 | | 8,217.7528 |
| **Total** | **2.2559** | **1.0810** | **18.8128** | **0.0823** | **2.2831** | **0.0505** | **2.3335** | **0.7906** | **0.0464** | **0.8370** | | **8,214.8384** | **8,214.8384** | **0.1166** | | **8,217.7528** |

## 3.4 Architectural Coating - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **70.0345** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.1050 | 0.9986 | 17.8167 | 0.0808 | 11.6583 | 0.0471 | 11.7054 | 3.0918 | 0.0434 | 3.1352 | | 8,068.6033 | 8,068.6033 | 0.1076 | | 8,071.2920 |
| **Total** | **2.1050** | **0.9986** | **17.8167** | **0.0808** | **11.6583** | **0.0471** | **11.7054** | **3.0918** | **0.0434** | **3.1352** | | **8,068.6033** | **8,068.6033** | **0.1076** | | **8,071.2920** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **69.9632** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.1050 | 0.9986 | 17.8167 | 0.0808 | 2.2831 | 0.0471 | 2.3302 | 0.7906 | 0.0434 | 0.8340 | | 8,068.6033 | 8,068.6033 | 0.1076 | | 8,071.2920 |
| **Total** | **2.1050** | **0.9986** | **17.8167** | **0.0808** | **2.2831** | **0.0471** | **2.3302** | **0.7906** | **0.0434** | **0.8340** | | **8,068.6033** | **8,068.6033** | **0.1076** | | **8,071.2920** |

## 3.4 Architectural Coating - 2034

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **70.0345** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 1.9770 | 0.9294 | 16.8542 | 0.0795 | 11.6583 | 0.0440 | 11.7023 | 3.0918 | 0.0405 | 3.1323 | | 7,940.5961 | 7,940.5961 | 0.0990 | | 7,943.0698 |
| **Total** | **1.9770** | **0.9294** | **16.8542** | **0.0795** | **11.6583** | **0.0440** | **11.7023** | **3.0918** | **0.0405** | **3.1323** | | **7,940.5961** | **7,940.5961** | **0.0990** | | **7,943.0698** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **69.9632** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 1.9770 | 0.9294 | 16.8542 | 0.0795 | 2.2831 | 0.0440 | 2.3271 | 0.7906 | 0.0405 | 0.8311 | | 7,940.5961 | 7,940.5961 | 0.0990 | | 7,943.0698 |
| **Total** | **1.9770** | **0.9294** | **16.8542** | **0.0795** | **2.2831** | **0.0440** | **2.3271** | **0.7906** | **0.0405** | **0.8311** | | **7,940.5961** | **7,940.5961** | **0.0990** | | **7,943.0698** |

## 3.4 Architectural Coating - 2035

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1179 | 0.7577 | 1.7943 | 2.9700e-003 | | 9.9000e-003 | 9.9000e-003 | | 9.9000e-003 | 9.9000e-003 | | 281.4481 | 281.4481 | 0.0104 | | 281.7081 |
| **Total** | **70.0216** | **0.7577** | **1.7943** | **2.9700e-003** | | **9.9000e-003** | **9.9000e-003** | | **9.9000e-003** | **9.9000e-003** | | **281.4481** | **281.4481** | **0.0104** | | **281.7081** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 1.8704 | 0.8787 | 16.0591 | 0.0784 | 11.6583 | 0.0412 | 11.6995 | 3.0918 | 0.0379 | 3.1298 | | 7,830.9921 | 7,830.9921 | 0.0919 | | 7,833.2900 |
| **Total** | **1.8704** | **0.8787** | **16.0591** | **0.0784** | **11.6583** | **0.0412** | **11.6995** | **3.0918** | **0.0379** | **3.1298** | | **7,830.9921** | **7,830.9921** | **0.0919** | | **7,833.2900** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0104 | | 281.7081 |
| **Total** | **69.9632** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0104** | | **281.7081** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 1.8704 | 0.8787 | 16.0591 | 0.0784 | 2.2831 | 0.0412 | 2.3243 | 0.7906 | 0.0379 | 0.8286 | | 7,830.9921 | 7,830.9921 | 0.0919 | | 7,833.2900 |
| **Total** | **1.8704** | **0.8787** | **16.0591** | **0.0784** | **2.2831** | **0.0412** | **2.3243** | **0.7906** | **0.0379** | **0.8286** | | **7,830.9921** | **7,830.9921** | **0.0919** | | **7,833.2900** |

## 3.5 Paving - 2035

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1405 | 4.8761 | 15.8203 | 0.0281 | | 0.1874 | 0.1874 | | 0.1874 | 0.1874 | | 2,656.5168 | 2,656.5168 | 0.1022 | | 2,659.0727 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.1405** | **4.8761** | **15.8203** | **0.0281** | | **0.1874** | **0.1874** | | **0.1874** | **0.1874** | | **2,656.5168** | **2,656.5168** | **0.1022** | | **2,659.0727** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0269 | 0.0126 | 0.2310 | 1.1300e-003 | 0.1677 | 5.9000e-004 | 0.1683 | 0.0445 | 5.5000e-004 | 0.0450 | | 112.6221 | 112.6221 | 1.3200e-003 | | 112.6552 |
| **Total** | **0.0269** | **0.0126** | **0.2310** | **1.1300e-003** | **0.1677** | **5.9000e-004** | **0.1683** | **0.0445** | **5.5000e-004** | **0.0450** | | **112.6221** | **112.6221** | **1.3200e-003** | | **112.6552** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1022 | | 2,659.0726 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1022** | | **2,659.0726** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0269 | 0.0126 | 0.2310 | 1.1300e-003 | 0.0328 | 5.9000e-004 | 0.0334 | 0.0114 | 5.5000e-004 | 0.0119 | | 112.6221 | 112.6221 | 1.3200e-003 | | 112.6552 |
| **Total** | **0.0269** | **0.0126** | **0.2310** | **1.1300e-003** | **0.0328** | **5.9000e-004** | **0.0334** | **0.0114** | **5.5000e-004** | **0.0119** | | **112.6221** | **112.6221** | **1.3200e-003** | | **112.6552** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Increase Transit Accessibility

Improve Pedestrian Network

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.8112 | 195.3987 | 426.7031 | 2.4715 | 272.9892 | 0.9809 | 273.9701 | 73.0099 | 0.9136 | 73.9235 | | 254,121.9940 | 254,121.9940 | 8.8886 | | 254,344.2098 |
| Unmitigated | 29.8942 | 191.1390 | 405.5233 | 2.3408 | 257.5736 | 0.9304 | 258.5040 | 68.8871 | 0.8665 | 69.7536 | | 240,718.4327 | 240,718.4327 | 8.4694 | | 240,930.1676 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| High School | 0.00 | 0.00 | 0.00 | | |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Regional Shopping Center | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 35,460.00 | 35,460.00 | 35460.00 | 121,172,207 | 128,424,287 |
| Total | 35,460.00 | 35,460.00 | 35,460.00 | 121,172,207 | 128,424,287 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| High School | 16.60 | 8.40 | 6.90 | 77.80 | 17.20 | 5.00 | 75 | 19 | 6 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Other Non-Asphalt Surfaces | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Regional Shopping Center | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Single Family Housing | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 2.5964 | 22.3026 | 10.2857 | 0.1416 | | 1.7939 | 1.7939 | | 1.7939 | 1.7939 | | 28,324.4237 | 28,324.4237 | 0.5429 | 0.5193 | 28,492.7416 |
| NaturalGas Unmitigated | 2.9521 | 25.3577 | 11.6951 | 0.1610 | | 2.0396 | 2.0396 | | 2.0396 | 2.0396 | | 32,204.3954 | 32,204.3954 | 0.6173 | 0.5904 | 32,395.7701 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| High School | 18817.9 | 0.2029 | 1.8449 | 1.5497 | 0.0111 | | 0.1402 | 0.1402 | | 0.1402 | 0.1402 | | 2,213.8729 | 2,213.8729 | 0.0424 | 0.0406 | 2,227.0289 |
| 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 |
| Regional Shopping Center | 3444.24 | 0.0371 | 0.3377 | 0.2836 | 2.0300e-003 | | 0.0257 | 0.0257 | | 0.0257 | 0.0257 | | 405.2042 | 405.2042 | 7.7700e-003 | 7.4300e-003 | 407.6121 |
| Single Family Housing | 251475 | 2.7120 | 23.1752 | 9.8618 | 0.1479 | | 1.8737 | 1.8737 | | 1.8737 | 1.8737 | | 29,585.3183 | 29,585.3183 | 0.5671 | 0.5424 | 29,761.1291 |
| **Total** | | **2.9521** | **25.3577** | **11.6951** | **0.1610** | | **2.0396** | **2.0396** | | **2.0396** | **2.0396** | | **32,204.3954** | **32,204.3954** | **0.6173** | **0.5904** | **32,395.7701** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| High School | 16.572 | 0.1787 | 1.6247 | 1.3648 | 9.7500e-003 | | 0.1235 | 0.1235 | | 0.1235 | 0.1235 | | 1,949.6487 | 1,949.6487 | 0.0374 | 0.0357 | 1,961.2345 |
| 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 |
| Regional Shopping Center | 2.99742 | 0.0323 | 0.2939 | 0.2469 | 1.7600e-003 | | 0.0223 | 0.0223 | | 0.0223 | 0.0223 | | 352.6372 | 352.6372 | 6.7600e-003 | 6.4700e-003 | 354.7327 |
| Single Family Housing | 221.188 | 2.3854 | 20.3840 | 8.6741 | 0.1301 | | 1.6481 | 1.6481 | | 1.6481 | 1.6481 | | 26,022.1378 | 26,022.1378 | 0.4988 | 0.4771 | 26,176.7744 |
| **Total** | | **2.5964** | **22.3026** | **10.2857** | **0.1416** | | **1.7939** | **1.7939** | | **1.7939** | **1.7939** | | **28,324.4237** | **28,324.4237** | **0.5429** | **0.5193** | **28,492.7416** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mitigated | 210.8955 | 44.5637 | 205.2968 | 0.2785 | | 4.4442 | 4.4442 | | 4.4442 | 4.4442 | 0.0000 | 54,312.0106 | 54,312.0106 | 1.2573 | 0.9900 | 54,638.4637 |
| Unmitigated | 214.3641 | 45.1455 | 264.5549 | 0.2831 | | 4.7930 | 4.7930 | | 4.7930 | 4.7930 | 0.0000 | 54,445.9555 | 54,445.9555 | 1.4600 | 0.9900 | 54,777.4745 |

## 6.2 Area by SubCategory

### Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 17.4855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 184.5458 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 4.9500 | 42.3000 | 18.0000 | 0.2700 | | 3.4200 | 3.4200 | | 3.4200 | 3.4200 | 0.0000 | 54,000.0000 | 54,000.0000 | 1.0350 | 0.9900 | 54,320.8950 |
| Landscaping | 7.3828 | 2.8455 | 246.5549 | 0.0131 | | 1.3730 | 1.3730 | | 1.3730 | 1.3730 | | 445.9555 | 445.9555 | 0.4250 | | 456.5795 |
| **Total** | **214.3641** | **45.1455** | **264.5549** | **0.2831** | | **4.7930** | **4.7930** | | **4.7930** | **4.7930** | **0.0000** | **54,445.9555** | **54,445.9555** | **1.4600** | **0.9900** | **54,777.4745** |

### Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 17.4855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 184.5458 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 4.9500 | 42.3000 | 18.0000 | 0.2700 | | 3.4200 | 3.4200 | | 3.4200 | 3.4200 | 0.0000 | 54,000.0000 | 54,000.0000 | 1.0350 | 0.9900 | 54,320.8950 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landscaping | 3.9142 | 2.2637 | 187.2968 | 8.4900e-003 | | 1.0242 | 1.0242 | | 1.0242 | 1.0242 | | 312.0106 | 312.0106 | 0.2223 | | 317.5687 |
| **Total** | **210.8955** | **44.5637** | **205.2968** | **0.2785** | | **4.4442** | **4.4442** | | **4.4442** | **4.4442** | **0.0000** | **54,312.0106** | **54,312.0106** | **1.2573** | **0.9900** | **54,638.4637** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase I Construction - South Coast Air Basin, Winter

# Phase I Construction

**South Coast Air Basin, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 5.00 | Acre | 5.00 | 217,800.00 | 0 |
| Single Family Housing | 144.00 | Dwelling Unit | 20.00 | 433,711.00 | 412 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2025 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary
Other Non-Asphalt Surfaces include Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 20.00 | 44.00 |
| tblLandUse | LandUseSquareFeet | 259,200.00 | 433,711.00 |
| tblLandUse | LotAcreage | 46.75 | 20.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 3.4036 | 34.5646 | 28.6295 | 0.0640 | 8.8969 | 1.4261 | 10.3230 | 3.6558 | 1.3120 | 4.9678 | 0.0000 | 6,204.2162 | 6,204.2162 | 1.9488 | 0.0000 | 6,252.9357 |
| 2024 | 66.5241 | 28.0747 | 38.7190 | 0.0822 | 2.4166 | 1.1613 | 3.5779 | 0.6483 | 1.0861 | 1.7344 | 0.0000 | 8,073.2152 | 8,073.2152 | 1.4492 | 0.0000 | 8,109.4446 |
| **Maximum** | **66.5241** | **34.5646** | **38.7190** | **0.0822** | **8.8969** | **1.4261** | **10.3230** | **3.6558** | **1.3120** | **4.9678** | **0.0000** | **8,073.2152** | **8,073.2152** | **1.9488** | **0.0000** | **8,109.4446** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 1.6049 | 24.0315 | 37.3009 | 0.0640 | 3.6062 | 0.1965 | 3.8026 | 1.4619 | 0.1964 | 1.6583 | 0.0000 | 6,204.2162 | 6,204.2162 | 1.9488 | 0.0000 | 6,252.9357 |
| 2024 | 65.1779 | 25.3902 | 43.1181 | 0.0822 | 2.4166 | 0.2598 | 2.6763 | 0.6483 | 0.2584 | 0.9067 | 0.0000 | 8,073.2152 | 8,073.2152 | 1.4492 | 0.0000 | 8,109.4446 |
| **Maximum** | **65.1779** | **25.3902** | **43.1181** | **0.0822** | **3.6062** | **0.2598** | **3.8026** | **1.4619** | **0.2584** | **1.6583** | **0.0000** | **8,073.2152** | **8,073.2152** | **1.9488** | **0.0000** | **8,109.4446** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **4.50** | **21.10** | **-19.41** | **0.00** | **46.77** | **82.37** | **53.39** | **50.97** | **81.03** | **61.73** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 47.5143 | 3.1245 | 85.1009 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.3926 | 3,962.2289 | 4.0430 | 0.0916 | 4,090.5851 |
| Energy | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| Mobile | 1.9322 | 9.1396 | 25.4469 | 0.1079 | 10.3622 | 0.0798 | 10.4421 | 2.7717 | 0.0741 | 2.8458 | | 11,012.2356 | 11,012.2356 | 0.4850 | | 11,024.3613 |
| **Total** | **49.5767** | **13.3765** | **111.0211** | **0.3024** | **10.3622** | **11.2355** | **21.5978** | **2.7717** | **11.2299** | **14.0015** | **1,348.8363** | **15,045.7235** | **16,394.5598** | **4.5552** | **0.1176** | **16,543.4806** |

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 47.5143 | 3.1245 | 85.1009 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.3926 | 3,962.2289 | 4.0430 | 0.0916 | 4,090.5851 |
| Energy | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| Mobile | 1.9322 | 9.1396 | 25.4469 | 0.1079 | 10.3622 | 0.0798 | 10.4421 | 2.7717 | 0.0741 | 2.8458 | | 11,012.2356 | 11,012.2356 | 0.4850 | | 11,024.3613 |
| **Total** | **49.5767** | **13.3765** | **111.0211** | **0.3024** | **10.3622** | **11.2355** | **21.5978** | **2.7717** | **11.2299** | **14.0015** | **1,348.8363** | **15,045.7235** | **16,394.5598** | **4.5552** | **0.1176** | **16,543.4806** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/2/2023 | 2/17/2023 | 5 | 35 | |
| 2 | Building Construction | Building Construction | 2/18/2023 | 6/18/2024 | 5 | 370 | |
| 3 | Architectural Coating | Architectural Coating | 4/18/2024 | 6/18/2024 | 5 | 44 | |
| 4 | Paving | Paving | 5/22/2024 | 6/18/2024 | 5 | 20 | |

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

**Acres of Grading (Grading Phase): 87.5**

**Acres of Paving: 5**

**Residential Indoor: 878,265; Residential Outdoor: 292,755; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 143.00 | 51.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 29.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **8.6733** | **1.4245** | **10.0978** | **3.5965** | **1.3105** | **4.9070** | | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0818 | 0.0490 | 0.5784 | 1.9300e-003 | 0.2236 | 1.5700e-003 | 0.2251 | 0.0593 | 1.4400e-003 | 0.0607 | | 192.7385 | 192.7385 | 4.5400e-003 | | 192.8521 |
| **Total** | **0.0818** | **0.0490** | **0.5784** | **1.9300e-003** | **0.2236** | **1.5700e-003** | **0.2251** | **0.0593** | **1.4400e-003** | **0.0607** | | **192.7385** | **192.7385** | **4.5400e-003** | | **192.8521** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0818 | 0.0490 | 0.5784 | 1.9300e-003 | 0.2236 | 1.5700e-003 | 0.2251 | 0.0593 | 1.4400e-003 | 0.0607 | | 192.7385 | 192.7385 | 4.5400e-003 | | 192.8521 |
| **Total** | **0.0818** | **0.0490** | **0.5784** | **1.9300e-003** | **0.2236** | **1.5700e-003** | **0.2251** | **0.0593** | **1.4400e-003** | **0.0607** | | **192.7385** | **192.7385** | **4.5400e-003** | | **192.8521** |

## 3.3 Building Construction - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1051 | 3.4785 | 1.1073 | 0.0120 | 0.3263 | 4.2100e-003 | 0.3305 | 0.0939 | 4.0200e-003 | 0.0980 | | 1,290.4536 | 1,290.4536 | 0.0773 | | 1,292.3864 |
| Worker | 0.5850 | 0.3502 | 4.1352 | 0.0138 | 1.5984 | 0.0112 | 1.6096 | 0.4239 | 0.0103 | 0.4342 | | 1,378.0804 | 1,378.0804 | 0.0325 | | 1,378.8928 |
| **Total** | **0.6901** | **3.8287** | **5.2425** | **0.0259** | **1.9247** | **0.0154** | **1.9401** | **0.5178** | **0.0143** | **0.5322** | | **2,668.5340** | **2,668.5340** | **0.1098** | | **2,671.2792** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0269 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0269** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1051 | 3.4785 | 1.1073 | 0.0120 | 0.3263 | 4.2100e-003 | 0.3305 | 0.0939 | 4.0200e-003 | 0.0980 | | 1,290.4536 | 1,290.4536 | 0.0773 | | 1,292.3864 |
| Worker | 0.5850 | 0.3502 | 4.1352 | 0.0138 | 1.5984 | 0.0112 | 1.6096 | 0.4239 | 0.0103 | 0.4342 | | 1,378.0804 | 1,378.0804 | 0.0325 | | 1,378.8928 |
| **Total** | **0.6901** | **3.8287** | **5.2425** | **0.0259** | **1.9247** | **0.0154** | **1.9401** | **0.5178** | **0.0143** | **0.5322** | | **2,668.5340** | **2,668.5340** | **0.1098** | | **2,671.2792** |

# 3.3 Building Construction - 2024

## Unmitigated Construction On-Site

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1027 | 3.4703 | 1.0758 | 0.0120 | 0.3263 | 4.1400e-003 | 0.3305 | 0.0939 | 3.9600e-003 | 0.0979 | | 1,285.9756 | 1,285.9756 | 0.0761 | | 1,287.8784 |
| Worker | 0.5553 | 0.3191 | 3.8545 | 0.0134 | 1.5984 | 0.0110 | 1.6094 | 0.4239 | 0.0102 | 0.4341 | | 1,332.5348 | 1,332.5348 | 0.0298 | | 1,333.2784 |
| **Total** | **0.6580** | **3.7894** | **4.9303** | **0.0254** | **1.9247** | **0.0152** | **1.9399** | **0.5178** | **0.0141** | **0.5320** | | **2,618.5104** | **2,618.5104** | **0.1059** | | **2,621.1569** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1027 | 3.4703 | 1.0758 | 0.0120 | 0.3263 | 4.1400e-003 | 0.3305 | 0.0939 | 3.9600e-003 | 0.0979 | | 1,285.9756 | 1,285.9756 | 0.0761 | | 1,287.8784 |
| Worker | 0.5553 | 0.3191 | 3.8545 | 0.0134 | 1.5984 | 0.0110 | 1.6094 | 0.4239 | 0.0102 | 0.4341 | | 1,332.5348 | 1,332.5348 | 0.0298 | | 1,333.2784 |
| **Total** | **0.6580** | **3.7894** | **4.9303** | **0.0254** | **1.9247** | **0.0152** | **1.9399** | **0.5178** | **0.0141** | **0.5320** | | **2,618.5104** | **2,618.5104** | **0.1059** | | **2,621.1569** |

## 3.4 Architectural Coating - 2024

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 63.0548 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **63.2355** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1126 | 0.0647 | 0.7817 | 2.7100e-003 | 0.3242 | 2.2400e-003 | 0.3264 | 0.0860 | 2.0600e-003 | 0.0880 | | 270.2343 | 270.2343 | 6.0300e-003 | | 270.3851 |
| **Total** | **0.1126** | **0.0647** | **0.7817** | **2.7100e-003** | **0.3242** | **2.2400e-003** | **0.3264** | **0.0860** | **2.0600e-003** | **0.0880** | | **270.2343** | **270.2343** | **6.0300e-003** | | **270.3851** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 63.0548 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **63.1142** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1126 | 0.0647 | 0.7817 | 2.7100e-003 | 0.3242 | 2.2400e-003 | 0.3264 | 0.0860 | 2.0600e-003 | 0.0880 | | 270.2343 | 270.2343 | 6.0300e-003 | | 270.3851 |
| **Total** | **0.1126** | **0.0647** | **0.7817** | **2.7100e-003** | **0.3242** | **2.2400e-003** | **0.3264** | **0.0860** | **2.0600e-003** | **0.0880** | | **270.2343** | **270.2343** | **6.0300e-003** | | **270.3851** |

## 3.5 Paving - 2024

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0583 | 0.0335 | 0.4043 | 1.4000e-003 | 0.1677 | 1.1600e-003 | 0.1688 | 0.0445 | 1.0700e-003 | 0.0455 | | 139.7764 | 139.7764 | 3.1200e-003 | | 139.8544 |
| **Total** | **0.0583** | **0.0335** | **0.4043** | **1.4000e-003** | **0.1677** | **1.1600e-003** | **0.1688** | **0.0445** | **1.0700e-003** | **0.0455** | | **139.7764** | **139.7764** | **3.1200e-003** | | **139.8544** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0583 | 0.0335 | 0.4043 | 1.4000e-003 | 0.1677 | 1.1600e-003 | 0.1688 | 0.0445 | 1.0700e-003 | 0.0455 | | 139.7764 | 139.7764 | 3.1200e-003 | | 139.8544 |
| **Total** | **0.0583** | **0.0335** | **0.4043** | **1.4000e-003** | **0.1677** | **1.1600e-003** | **0.1688** | **0.0445** | **1.0700e-003** | **0.0455** | | **139.7764** | **139.7764** | **3.1200e-003** | | **139.8544** |

# 4.0 Operational Detail - Mobile

## 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1.9322 | 9.1396 | 25.4469 | 0.1079 | 10.3622 | 0.0798 | 10.4421 | 2.7717 | 0.0741 | 2.8458 | | 11,012.2356 | 11,012.2356 | 0.4850 | | 11,024.3613 |
| Unmitigated | 1.9322 | 9.1396 | 25.4469 | 0.1079 | 10.3622 | 0.0798 | 10.4421 | 2.7717 | 0.0741 | 2.8458 | | 11,012.2356 | 11,012.2356 | 0.4850 | | 11,024.3613 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 1,370.88 | 1,427.04 | 1241.28 | 4,648,654 | 4,648,654 |
| Total | 1,370.88 | 1,427.04 | 1,241.28 | 4,648,654 | 4,648,654 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.553907 | 0.042339 | 0.204535 | 0.114490 | 0.014186 | 0.005810 | 0.021866 | 0.032691 | 0.002129 | 0.001663 | 0.004844 | 0.000713 | 0.000827 |
| Single Family Housing | 0.553907 | 0.042339 | 0.204535 | 0.114490 | 0.014186 | 0.005810 | 0.021866 | 0.032691 | 0.002129 | 0.001663 | 0.004844 | 0.000713 | 0.000827 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| NaturalGas Unmitigated | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 12070.8 | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| **Total** | | **0.1302** | **1.1124** | **0.4734** | **7.1000e-003** | | **0.0899** | **0.0899** | | **0.0899** | **0.0899** | | **1,420.0953** | **1,420.0953** | **0.0272** | **0.0260** | **1,428.5342** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 12.0708 | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| **Total** | | **0.1302** | **1.1124** | **0.4734** | **7.1000e-003** | | **0.0899** | **0.0899** | | **0.0899** | **0.0899** | | **1,420.0953** | **1,420.0953** | **0.0272** | **0.0260** | **1,428.5342** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 47.5143 | 3.1245 | 85.1009 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.3926 | 3,962.2289 | 4.0430 | 0.0916 | 4,090.5851 |
| Unmitigated | 47.5143 | 3.1245 | 85.1009 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.3926 | 3,962.2289 | 4.0430 | 0.0916 | 4,090.5851 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.7601 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 8.6646 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37.7332 | 2.9878 | 73.2315 | 0.1868 | | 10.9999 | 10.9999 | | 10.9999 | 10.9999 | 1,348.8363 | 2,592.0000 | 3,940.8363 | 4.0225 | 0.0916 | 4,068.6802 |
| Landscaping | 0.3564 | 0.1367 | 11.8694 | 6.3000e-004 | | 0.0659 | 0.0659 | | 0.0659 | 0.0659 | | 21.3926 | 21.3926 | 0.0205 | | 21.9048 |
| **Total** | **47.5143** | **3.1245** | **85.1009** | **0.1875** | | **11.0658** | **11.0658** | | **11.0658** | **11.0658** | **1,348.8363** | **2,613.3926** | **3,962.2289** | **4.0430** | **0.0916** | **4,090.5851** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.7601 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 8.6646 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37.7332 | 2.9878 | 73.2315 | 0.1868 | | 10.9999 | 10.9999 | | 10.9999 | 10.9999 | 1,348.8363 | 2,592.0000 | 3,940.8363 | 4.0225 | 0.0916 | 4,068.6802 |
| Landscaping | 0.3564 | 0.1367 | 11.8694 | 6.3000e-004 | | 0.0659 | 0.0659 | | 0.0659 | 0.0659 | | 21.3926 | 21.3926 | 0.0205 | | 21.9048 |
| **Total** | **47.5143** | **3.1245** | **85.1009** | **0.1875** | | **11.0658** | **11.0658** | | **11.0658** | **11.0658** | **1,348.8363** | **2,613.3926** | **3,962.2289** | **4.0430** | **0.0916** | **4,090.5851** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

EHNCP (Proposed Project) - South Coast Air Basin, Winter

# EHNCP (Proposed Project)

**South Coast Air Basin, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| High School | 600.00 | Student | 18.00 | 784,080.00 | 0 |
| Other Non-Asphalt Surfaces | 198.00 | Acre | 198.00 | 8,624,880.00 | 0 |
| Single Family Housing | 3,000.00 | Dwelling Unit | 531.00 | 7,815,844.00 | 9090 |
| Regional Shopping Center | 566.28 | 1000sqft | 13.00 | 566,282.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2040 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - The 3,000 units within the Plan would generate a population increase of 9,090
Other Non-Asphalt includes parks (internal and external) and utility corridor/bank easement

Construction Phase - According to construction schedule scenario

Trips and VMT - Default assumptions

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips - Based on a gross tripend of 35,446 trips (includes internal and external trips)

Woodstoves - No woodstoves

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Mobile Land Use Mitigation - Milliken & Baseline Station
Metrolink station located further south

Area Mitigation - Per SCAQMD Electric Lawn mower
SCAQMD Rule 445: Natural Gas Hearth
Energy Mitigation - California 2020 Building Standard. The Plan would promote renewable and alternative energy technology
CalGreen Voluntary measure require energy efficiency that exceeds Title 24 requirements by 15-30 percent

Water Mitigation -

Waste Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | CleanPavedRoadPercentReduction | 0 | 92.5 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 880.00 | 913.00 |
| tblConstructionPhase | NumDays | 12,400.00 | 1,837.00 |
| tblConstructionPhase | NumDays | 1,240.00 | 1,550.00 |
| tblConstructionPhase | NumDays | 880.00 | 132.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 150.00 | 0.00 |
| tblLandUse | LandUseSquareFeet | 79,596.59 | 784,080.00 |
| tblLandUse | LandUseSquareFeet | 5,400,000.00 | 7,815,844.00 |
| tblLandUse | LandUseSquareFeet | 566,280.00 | 566,282.00 |
| tblLandUse | LotAcreage | 1.83 | 18.00 |
| tblLandUse | LotAcreage | 974.03 | 531.00 |
| tblLandUse | Population | 8,580.00 | 9,090.00 |
| tblVehicleTrips | ST_TR | 0.61 | 0.00 |
| tblVehicleTrips | ST_TR | 49.97 | 0.00 |
| tblVehicleTrips | ST_TR | 9.91 | 11.82 |
| tblVehicleTrips | SU_TR | 0.25 | 0.00 |
| tblVehicleTrips | SU_TR | 25.24 | 0.00 |
| tblVehicleTrips | SU_TR | 8.62 | 11.82 |
| tblVehicleTrips | WD_TR | 1.71 | 0.00 |
| tblVehicleTrips | WD_TR | 42.70 | 0.00 |
| tblVehicleTrips | WD_TR | 9.52 | 11.82 |
| tblWoodstoves | NumberCatalytic | 150.00 | 0.00 |

| | | | |
|---|---|---|---|
| tblWoodstoves | NumberNoncatalytic | 150.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 3.4036 | 34.5646 | 28.6295 | 0.0640 | 8.8969 | 1.4261 | 10.3230 | 3.6558 | 1.3120 | 4.9678 | 0.0000 | 6,204.2162 | 6,204.2162 | 1.9488 | 0.0000 | 6,252.9357 |
| 2024 | 3.2958 | 32.4216 | 28.2619 | 0.0639 | 8.8969 | 1.3369 | 10.2338 | 3.6558 | 1.2300 | 4.8858 | 0.0000 | 6,196.1172 | 6,196.1172 | 1.9478 | 0.0000 | 6,244.8131 |
| 2025 | 2.9752 | 27.9837 | 26.8317 | 0.0639 | 8.8969 | 1.1324 | 10.0293 | 3.6558 | 1.0418 | 4.6976 | 0.0000 | 6,187.3167 | 6,187.3167 | 1.9470 | 0.0000 | 6,235.9914 |
| 2026 | 2.9721 | 27.9805 | 26.7988 | 0.0638 | 8.8969 | 1.1324 | 10.0293 | 3.6558 | 1.0418 | 4.6976 | 0.0000 | 6,180.9762 | 6,180.9762 | 1.9467 | 0.0000 | 6,229.6430 |
| 2027 | 2.9689 | 27.9775 | 26.7696 | 0.0637 | 8.8969 | 1.1323 | 10.0292 | 3.6558 | 1.0417 | 4.6975 | 0.0000 | 6,175.3824 | 6,175.3824 | 1.9464 | 0.0000 | 6,224.0420 |
| 2028 | 21.7698 | 149.3047 | 161.9188 | 0.9004 | 70.7854 | 1.1322 | 71.7940 | 19.0564 | 1.0416 | 20.0004 | 0.0000 | 93,194.9395 | 93,194.9395 | 4.1073 | 0.0000 | 93,297.6205 |
| 2029 | 20.7412 | 147.6460 | 154.8364 | 0.8871 | 70.7856 | 0.9819 | 71.7674 | 19.0565 | 0.9193 | 19.9758 | 0.0000 | 91,877.3266 | 91,877.3266 | 4.0067 | 0.0000 | 91,977.4945 |
| 2030 | 19.6366 | 141.5179 | 148.4352 | 0.8792 | 70.7857 | 0.5782 | 71.3639 | 19.0565 | 0.5488 | 19.6053 | 0.0000 | 91,045.3534 | 91,045.3534 | 3.4293 | 0.0000 | 91,131.0862 |
| 2031 | 18.5168 | 140.2616 | 142.4862 | 0.8698 | 70.7857 | 0.5571 | 71.3428 | 19.0565 | 0.5293 | 19.5858 | 0.0000 | 90,121.4741 | 90,121.4741 | 3.3482 | 0.0000 | 90,205.1791 |
| 2032 | 90.0918 | 140.9210 | 155.5478 | 0.9409 | 82.4441 | 0.6075 | 83.0516 | 22.1484 | 0.5772 | 22.7255 | 0.0000 | 97,209.5679 | 97,209.5679 | 3.3941 | 0.0000 | 97,294.4201 |
| 2033 | 89.0659 | 139.6142 | 149.9641 | 0.9316 | 82.4441 | 0.5858 | 83.0300 | 22.1484 | 0.5572 | 22.7056 | 0.0000 | 96,298.9322 | 96,298.9322 | 3.3223 | 0.0000 | 96,381.9899 |
| 2034 | 88.1977 | 138.4699 | 144.5661 | 0.9236 | 82.4442 | 0.5652 | 83.0095 | 22.1484 | 0.5382 | 22.6866 | 0.0000 | 95,509.3186 | 95,509.3186 | 3.2560 | 0.0000 | 95,590.7198 |
| 2035 | 88.5436 | 141.5990 | 156.0808 | 0.9460 | 82.6119 | 0.6670 | 83.2789 | 22.1929 | 0.6413 | 22.8342 | 0.0000 | 97,600.7367 | 97,600.7367 | 3.2948 | 0.0000 | 97,683.1075 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Maximum** | **90.0918** | **149.3047** | **161.9188** | **0.9460** | **82.6119** | **1.4261** | **83.2789** | **22.1929** | **1.3120** | **22.8342** | **0.0000** | **97,600.7367** | **97,600.7367** | **4.1073** | **0.0000** | **97,683.1075** |

## Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 1.6049 | 24.0315 | 37.3009 | 0.0640 | 2.9190 | 0.1965 | 3.1155 | 1.2074 | 0.1964 | 1.4038 | 0.0000 | 6,204.2162 | 6,204.2162 | 1.9488 | 0.0000 | 6,252.9357 |
| 2024 | 1.6008 | 24.0272 | 37.2617 | 0.0639 | 2.9190 | 0.1965 | 3.1154 | 1.2074 | 0.1963 | 1.4037 | 0.0000 | 6,196.1172 | 6,196.1172 | 1.9478 | 0.0000 | 6,244.8130 |
| 2025 | 1.5971 | 24.0234 | 37.2232 | 0.0639 | 2.9190 | 0.1964 | 3.1154 | 1.2074 | 0.1963 | 1.4037 | 0.0000 | 6,187.3167 | 6,187.3167 | 1.9470 | 0.0000 | 6,235.9914 |
| 2026 | 1.5939 | 24.0201 | 37.1903 | 0.0638 | 2.9190 | 0.1964 | 3.1154 | 1.2074 | 0.1963 | 1.4037 | 0.0000 | 6,180.9762 | 6,180.9762 | 1.9467 | 0.0000 | 6,229.6430 |
| 2027 | 1.5908 | 24.0172 | 37.1611 | 0.0637 | 2.9190 | 0.1963 | 3.1153 | 1.2074 | 0.1962 | 1.4036 | 0.0000 | 6,175.3824 | 6,175.3824 | 1.9464 | 0.0000 | 6,224.0420 |
| 2028 | 21.0763 | 148.2159 | 163.7079 | 0.9004 | 15.6746 | 0.6165 | 16.2911 | 5.5292 | 0.5833 | 6.1125 | 0.0000 | 93,194.9395 | 93,194.9395 | 4.1073 | 0.0000 | 93,297.6205 |
| 2029 | 20.0477 | 146.5572 | 156.6255 | 0.8871 | 15.6747 | 0.5898 | 16.2645 | 5.5293 | 0.5586 | 6.0878 | 0.0000 | 91,877.3266 | 91,877.3266 | 4.0067 | 0.0000 | 91,977.4945 |
| 2030 | 19.0014 | 144.9641 | 150.1519 | 0.8792 | 15.6748 | 0.5656 | 16.2404 | 5.5293 | 0.5362 | 6.0654 | 0.0000 | 91,045.3534 | 91,045.3534 | 3.4293 | 0.0000 | 91,131.0862 |
| 2031 | 17.8816 | 143.7078 | 144.2030 | 0.8698 | 15.6749 | 0.5445 | 16.2193 | 5.5293 | 0.5167 | 6.0460 | 0.0000 | 90,121.4741 | 90,121.4741 | 3.3482 | 0.0000 | 90,205.1791 |
| 2032 | 89.3853 | 144.5965 | 157.2992 | 0.9409 | 17.9580 | 0.5888 | 18.5468 | 6.3200 | 0.5585 | 6.8785 | 0.0000 | 97,209.5679 | 97,209.5679 | 3.3941 | 0.0000 | 97,294.4200 |
| 2033 | 88.3593 | 143.2897 | 151.7155 | 0.9316 | 17.9581 | 0.5672 | 18.5252 | 6.3200 | 0.5385 | 6.8585 | 0.0000 | 96,298.9322 | 96,298.9322 | 3.3223 | 0.0000 | 96,381.9899 |
| 2034 | 87.4912 | 142.1455 | 146.3175 | 0.9236 | 17.9581 | 0.5466 | 18.5047 | 6.3200 | 0.5195 | 6.8395 | 0.0000 | 95,509.3186 | 95,509.3186 | 3.2560 | 0.0000 | 95,590.7198 |
| 2035 | 87.3626 | 150.3065 | 159.3503 | 0.9460 | 17.9910 | 0.6205 | 18.6115 | 6.3314 | 0.5948 | 6.9262 | 0.0000 | 97,600.7367 | 97,600.7367 | 3.2948 | 0.0000 | 97,683.1075 |
| **Maximum** | **89.3853** | **150.3065** | **163.7079** | **0.9460** | **17.9910** | **0.6205** | **18.6115** | **6.3314** | **0.5948** | **6.9262** | **0.0000** | **97,600.7367** | **97,600.7367** | **4.1073** | **0.0000** | **97,683.1075** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.00** | **0.49** | **-4.77** | **0.00** | **77.32** | **52.50** | **76.87** | **70.82** | **51.11** | **69.68** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 214.3641 | 45.1455 | 264.5549 | 0.2831 | | 4.7930 | 4.7930 | | 4.7930 | 4.7930 | 0.0000 | 54,445.9555 | 54,445.9555 | 1.4600 | 0.9900 | 54,777.4745 |
| Energy | 2.9521 | 25.3577 | 11.6951 | 0.1610 | | 2.0396 | 2.0396 | | 2.0396 | 2.0396 | | 32,204.3954 | 32,204.3954 | 0.6173 | 0.5904 | 32,395.7701 |
| Mobile | 28.7937 | 192.4236 | 381.0911 | 2.2268 | 257.5736 | 0.9324 | 258.5060 | 68.8871 | 0.8685 | 69.7555 | | 229,211.6653 | 229,211.6653 | 8.5667 | | 229,425.8320 |
| **Total** | **246.1098** | **262.9269** | **657.3411** | **2.6709** | **257.5736** | **7.7651** | **265.3387** | **68.8871** | **7.7011** | **76.5882** | **0.0000** | **315,862.0162** | **315,862.0162** | **10.6439** | **1.5804** | **316,599.0766** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 210.8955 | 44.5637 | 205.2968 | 0.2785 | | 4.4442 | 4.4442 | | 4.4442 | 4.4442 | 0.0000 | 54,312.0106 | 54,312.0106 | 1.2573 | 0.9900 | 54,638.4637 |
| Energy | 2.5964 | 22.3026 | 10.2857 | 0.1416 | | 1.7939 | 1.7939 | | 1.7939 | 1.7939 | | 28,324.4237 | 28,324.4237 | 0.5429 | 0.5193 | 28,492.7416 |
| Mobile | 29.7024 | 196.9137 | 400.2641 | 2.3517 | 272.9892 | 0.9829 | 273.9721 | 73.0099 | 0.9155 | 73.9254 | | 242,033.6080 | 242,033.6080 | 8.9808 | | 242,258.1268 |
| **Total** | **243.1943** | **263.7800** | **615.8465** | **2.7718** | **272.9892** | **7.2210** | **280.2102** | **73.0099** | **7.1537** | **80.1636** | **0.0000** | **324,670.0423** | **324,670.0423** | **10.7810** | **1.5093** | **325,389.3320** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **1.18** | **-0.32** | **6.31** | **-3.78** | **-5.98** | **7.01** | **-5.60** | **-5.98** | **7.11** | **-4.67** | **0.00** | **-2.79** | **-2.79** | **-1.29** | **4.50** | **-2.78** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/2/2023 | 12/8/2028 | 5 | 1550 | |
| 2 | Building Construction | Building Construction | 12/9/2028 | 12/25/2035 | 5 | 1837 | |
| 3 | Architectural Coating | Architectural Coating | 6/25/2032 | 12/25/2035 | 5 | 913 | |
| 4 | Paving | Paving | 6/25/2035 | 12/25/2035 | 5 | 132 | |

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

**Acres of Grading (Grading Phase): 3875**

**Acres of Paving: 198**

**Residential Indoor: 15,827,084; Residential Outdoor: 5,275,695; Non-Residential Indoor: 2,025,543; Non-Residential Outdoor: 675,181;**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |

| | | | | | |
|---|---|---|---|---|---|
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 5,213.00 | 1,956.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 1,043.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## 3.2 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **8.6733** | **1.4245** | **10.0978** | **3.5965** | **1.3105** | **4.9070** | | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0818 | 0.0490 | 0.5784 | 1.9300e-003 | 0.2236 | 1.5700e-003 | 0.2251 | 0.0593 | 1.4400e-003 | 0.0607 | | 192.7385 | 192.7385 | 4.5400e-003 | | 192.8521 |
| **Total** | **0.0818** | **0.0490** | **0.5784** | **1.9300e-003** | **0.2236** | **1.5700e-003** | **0.2251** | **0.0593** | **1.4400e-003** | **0.0607** | | **192.7385** | **192.7385** | **4.5400e-003** | | **192.8521** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0818 | 0.0490 | 0.5784 | 1.9300e-003 | 0.0438 | 1.5700e-003 | 0.0453 | 0.0152 | 1.4400e-003 | 0.0166 | | 192.7385 | 192.7385 | 4.5400e-003 | | 192.8521 |
| **Total** | **0.0818** | **0.0490** | **0.5784** | **1.9300e-003** | **0.0438** | **1.5700e-003** | **0.0453** | **0.0152** | **1.4400e-003** | **0.0166** | | **192.7385** | **192.7385** | **4.5400e-003** | | **192.8521** |

## 3.2 Grading - 2024

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2181 | 32.3770 | 27.7228 | 0.0621 | | 1.3354 | 1.3354 | | 1.2286 | 1.2286 | | 6,009.7487 | 6,009.7487 | 1.9437 | | 6,058.3405 |
| **Total** | **3.2181** | **32.3770** | **27.7228** | **0.0621** | **8.6733** | **1.3354** | **10.0087** | **3.5965** | **1.2286** | **4.8251** | | **6,009.7487** | **6,009.7487** | **1.9437** | | **6,058.3405** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0777 | 0.0446 | 0.5391 | 1.8700e-003 | 0.2236 | 1.5400e-003 | 0.2251 | 0.0593 | 1.4200e-003 | 0.0607 | | 186.3685 | 186.3685 | 4.1600e-003 | | 186.4725 |
| **Total** | **0.0777** | **0.0446** | **0.5391** | **1.8700e-003** | **0.2236** | **1.5400e-003** | **0.2251** | **0.0593** | **1.4200e-003** | **0.0607** | | **186.3685** | **186.3685** | **4.1600e-003** | | **186.4725** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,009.7487 | 6,009.7487 | 1.9437 | | 6,058.3405 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,009.7487** | **6,009.7487** | **1.9437** | | **6,058.3405** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0777 | 0.0446 | 0.5391 | 1.8700e-003 | 0.0438 | 1.5400e-003 | 0.0453 | 0.0152 | 1.4200e-003 | 0.0166 | | 186.3685 | 186.3685 | 4.1600e-003 | | 186.4725 |
| **Total** | **0.0777** | **0.0446** | **0.5391** | **1.8700e-003** | **0.0438** | **1.5400e-003** | **0.0453** | **0.0152** | **1.4200e-003** | **0.0166** | | **186.3685** | **186.3685** | **4.1600e-003** | | **186.4725** |

## 3.2 Grading - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0740 | 0.0408 | 0.5006 | 1.7900e-003 | 0.2236 | 1.5100e-003 | 0.2251 | 0.0593 | 1.3900e-003 | 0.0607 | | 179.0352 | 179.0352 | 3.7900e-003 | | 179.1300 |
| **Total** | **0.0740** | **0.0408** | **0.5006** | **1.7900e-003** | **0.2236** | **1.5100e-003** | **0.2251** | **0.0593** | **1.3900e-003** | **0.0607** | | **179.0352** | **179.0352** | **3.7900e-003** | | **179.1300** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0740 | 0.0408 | 0.5006 | 1.7900e-003 | 0.0438 | 1.5100e-003 | 0.0453 | 0.0152 | 1.3900e-003 | 0.0166 | | 179.0352 | 179.0352 | 3.7900e-003 | | 179.1300 |
| **Total** | **0.0740** | **0.0408** | **0.5006** | **1.7900e-003** | **0.0438** | **1.5100e-003** | **0.0453** | **0.0152** | **1.3900e-003** | **0.0166** | | **179.0352** | **179.0352** | **3.7900e-003** | | **179.1300** |

## 3.2 Grading - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0708 | 0.0376 | 0.4678 | 1.7300e-003 | 0.2236 | 1.4600e-003 | 0.2250 | 0.0593 | 1.3500e-003 | 0.0606 | | 172.6947 | 172.6947 | 3.4700e-003 | | 172.7815 |
| **Total** | **0.0708** | **0.0376** | **0.4678** | **1.7300e-003** | **0.2236** | **1.4600e-003** | **0.2250** | **0.0593** | **1.3500e-003** | **0.0606** | | **172.6947** | **172.6947** | **3.4700e-003** | | **172.7815** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0708 | 0.0376 | 0.4678 | 1.7300e-003 | 0.0438 | 1.4600e-003 | 0.0452 | 0.0152 | 1.3500e-003 | 0.0165 | | 172.6947 | 172.6947 | 3.4700e-003 | | 172.7815 |
| **Total** | **0.0708** | **0.0376** | **0.4678** | **1.7300e-003** | **0.0438** | **1.4600e-003** | **0.0452** | **0.0152** | **1.3500e-003** | **0.0165** | | **172.6947** | **172.6947** | **3.4700e-003** | | **172.7815** |

## 3.2 Grading - 2027

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0677 | 0.0346 | 0.4385 | 1.6700e-003 | 0.2236 | 1.3800e-003 | 0.2249 | 0.0593 | 1.2700e-003 | 0.0606 | | 167.1009 | 167.1009 | 3.1800e-003 | | 167.1806 |
| **Total** | **0.0677** | **0.0346** | **0.4385** | **1.6700e-003** | **0.2236** | **1.3800e-003** | **0.2249** | **0.0593** | **1.2700e-003** | **0.0606** | | **167.1009** | **167.1009** | **3.1800e-003** | | **167.1806** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0677 | 0.0346 | 0.4385 | 1.6700e-003 | 0.0438 | 1.3800e-003 | 0.0452 | 0.0152 | 1.2700e-003 | 0.0164 | | 167.1009 | 167.1009 | 3.1800e-003 | | 167.1806 |
| **Total** | **0.0677** | **0.0346** | **0.4385** | **1.6700e-003** | **0.0438** | **1.3800e-003** | **0.0452** | **0.0152** | **1.2700e-003** | **0.0164** | | **167.1009** | **167.1009** | **3.1800e-003** | | **167.1806** |

## 3.2 Grading - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0644 | 0.0320 | 0.4128 | 1.6300e-003 | 0.2236 | 1.2800e-003 | 0.2248 | 0.0593 | 1.1800e-003 | 0.0605 | | 162.1726 | 162.1726 | 2.9400e-003 | | 162.2460 |
| **Total** | **0.0644** | **0.0320** | **0.4128** | **1.6300e-003** | **0.2236** | **1.2800e-003** | **0.2248** | **0.0593** | **1.1800e-003** | **0.0605** | | **162.1726** | **162.1726** | **2.9400e-003** | | **162.2460** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.8752 | 0.0000 | 2.8752 | 1.1922 | 0.0000 | 1.1922 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **2.8752** | **0.1949** | **3.0701** | **1.1922** | **0.1949** | **1.3872** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0644 | 0.0320 | 0.4128 | 1.6300e-003 | 0.0438 | 1.2800e-003 | 0.0451 | 0.0152 | 1.1800e-003 | 0.0163 | | 162.1726 | 162.1726 | 2.9400e-003 | | 162.2460 |
| **Total** | **0.0644** | **0.0320** | **0.4128** | **1.6300e-003** | **0.0438** | **1.2800e-003** | **0.0451** | **0.0152** | **1.1800e-003** | **0.0163** | | **162.1726** | **162.1726** | **2.9400e-003** | | **162.2460** |

## 3.3 Building Construction - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.6117 | 128.4881 | 38.2324 | 0.4498 | 12.5164 | 0.1466 | 12.6630 | 3.6032 | 0.1401 | 3.7433 | | 48,368.1875 | 48,368.1875 | 2.7408 | | 48,436.7072 |
| Worker | 16.7907 | 8.3469 | 107.6017 | 0.4236 | 58.2691 | 0.3344 | 58.6034 | 15.4532 | 0.3076 | 15.7609 | | 42,270.2776 | 42,270.2776 | 0.7655 | | 42,289.4153 |
| **Total** | **20.4024** | **136.8350** | **145.8341** | **0.8734** | **70.7854** | **0.4810** | **71.2664** | **19.0564** | **0.4477** | **19.5041** | | **90,638.4652** | **90,638.4652** | **3.5063** | | **90,726.1224** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.6117 | 128.4881 | 38.2324 | 0.4498 | 4.2637 | 0.1466 | 4.4102 | 1.5775 | 0.1401 | 1.7176 | | 48,368.1875 | 48,368.1875 | 2.7408 | | 48,436.7072 |
| Worker | 16.7907 | 8.3469 | 107.6017 | 0.4236 | 11.4109 | 0.3344 | 11.7453 | 3.9517 | 0.3076 | 4.2593 | | 42,270.2776 | 42,270.2776 | 0.7655 | | 42,289.4153 |
| **Total** | **20.4024** | **136.8350** | **145.8341** | **0.8734** | **15.6746** | **0.4810** | **16.1555** | **5.5292** | **0.4477** | **5.9769** | | **90,638.4652** | **90,638.4652** | **3.5063** | | **90,726.1224** |

## 3.3 Building Construction - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.5533 | 127.4902 | 37.7544 | 0.4480 | 12.5165 | 0.1436 | 12.6601 | 3.6032 | 0.1372 | 3.7405 | | 48,190.3395 | 48,190.3395 | 2.7035 | | 48,257.9277 |
| Worker | 15.8205 | 7.6861 | 100.9973 | 0.4121 | 58.2691 | 0.3107 | 58.5798 | 15.4532 | 0.2858 | 15.7391 | | 41,130.5127 | 41,130.5127 | 0.7022 | | 41,148.0687 |
| **Total** | **19.3738** | **135.1763** | **138.7517** | **0.8601** | **70.7856** | **0.4543** | **71.2399** | **19.0565** | **0.4231** | **19.4795** | | **89,320.8522** | **89,320.8522** | **3.4058** | | **89,405.9964** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.5533 | 127.4902 | 37.7544 | 0.4480 | 4.2638 | 0.1436 | 4.4073 | 1.5776 | 0.1372 | 1.7148 | | 48,190.3395 | 48,190.3395 | 2.7035 | | 48,257.9277 |
| Worker | 15.8205 | 7.6861 | 100.9973 | 0.4121 | 11.4109 | 0.3107 | 11.7217 | 3.9517 | 0.2858 | 4.2375 | | 41,130.5127 | 41,130.5127 | 0.7022 | | 41,148.0687 |
| **Total** | **19.3738** | **135.1763** | **138.7517** | **0.8601** | **15.6747** | **0.4543** | **16.1290** | **5.5293** | **0.4231** | **5.9523** | | **89,320.8522** | **89,320.8522** | **3.4058** | | **89,405.9964** |

## 3.3 Building Construction - 2030

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.5030 | 126.5227 | 37.3891 | 0.4463 | 12.5166 | 0.1407 | 12.6573 | 3.6033 | 0.1345 | 3.7378 | | 48,028.8513 | 48,028.8513 | 2.6691 | | 48,095.5780 |
| Worker | 14.8245 | 7.0606 | 94.8891 | 0.4019 | 58.2691 | 0.2893 | 58.5584 | 15.4532 | 0.2661 | 15.7194 | | 40,118.9554 | 40,118.9554 | 0.6440 | | 40,135.0553 |
| **Total** | **18.3275** | **133.5833** | **132.2782** | **0.8483** | **70.7857** | **0.4300** | **71.2157** | **19.0565** | **0.4006** | **19.4571** | | **88,147.8067** | **88,147.8067** | **3.3131** | | **88,230.6333** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.5030 | 126.5227 | 37.3891 | 0.4463 | 4.2639 | 0.1407 | 4.4046 | 1.5776 | 0.1345 | 1.7121 | | 48,028.8513 | 48,028.8513 | 2.6691 | | 48,095.5780 |
| Worker | 14.8245 | 7.0606 | 94.8891 | 0.4019 | 11.4109 | 0.2893 | 11.7003 | 3.9517 | 0.2661 | 4.2178 | | 40,118.9554 | 40,118.9554 | 0.6440 | | 40,135.0553 |
| **Total** | **18.3275** | **133.5833** | **132.2782** | **0.8483** | **15.6748** | **0.4300** | **16.1049** | **5.5293** | **0.4006** | **5.9299** | | **88,147.8067** | **88,147.8067** | **3.3131** | | **88,230.6333** |

## 3.3 Building Construction - 2031

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.4788 | 125.8837 | 37.2447 | 0.4456 | 12.5167 | 0.1385 | 12.6552 | 3.6033 | 0.1324 | 3.7357 | | 47,958.0680 | 47,958.0680 | 2.6425 | | 48,024.1303 |
| Worker | 13.7289 | 6.4432 | 89.0846 | 0.3933 | 58.2691 | 0.2704 | 58.5395 | 15.4532 | 0.2487 | 15.7019 | | 39,265.8594 | 39,265.8594 | 0.5895 | | 39,280.5959 |
| **Total** | **17.2077** | **132.3270** | **126.3292** | **0.8389** | **70.7857** | **0.4089** | **71.1947** | **19.0565** | **0.3811** | **19.4376** | | **87,223.9274** | **87,223.9274** | **3.2320** | | **87,304.7263** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.4788 | 125.8837 | 37.2447 | 0.4456 | 4.2640 | 0.1385 | 4.4025 | 1.5776 | 0.1324 | 1.7100 | | 47,958.0680 | 47,958.0680 | 2.6425 | | 48,024.1303 |
| Worker | 13.7289 | 6.4432 | 89.0846 | 0.3933 | 11.4109 | 0.2704 | 11.6813 | 3.9517 | 0.2487 | 4.2004 | | 39,265.8594 | 39,265.8594 | 0.5895 | | 39,280.5959 |
| **Total** | **17.2077** | **132.3270** | **126.3292** | **0.8389** | **15.6749** | **0.4089** | **16.0838** | **5.5293** | **0.3811** | **5.9104** | | **87,223.9274** | **87,223.9274** | **3.2320** | | **87,304.7263** |

## 3.3 Building Construction - 2032

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.4473 | 125.0424 | 37.0789 | 0.4445 | 12.5168 | 0.1365 | 12.6532 | 3.6033 | 0.1304 | 3.7337 | | 47,856.6005 | 47,856.6005 | 2.6185 | | 47,922.0633 |
| Worker | 12.7500 | 5.9060 | 83.7564 | 0.3853 | 58.2691 | 0.2521 | 58.5212 | 15.4532 | 0.2319 | 15.6851 | | 38,475.8502 | 38,475.8502 | 0.5399 | | 38,489.3481 |
| **Total** | **16.1972** | **130.9485** | **120.8353** | **0.8298** | **70.7858** | **0.3886** | **71.1744** | **19.0565** | **0.3623** | **19.4189** | | **86,332.4507** | **86,332.4507** | **3.1584** | | **86,411.4114** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.4473 | 125.0424 | 37.0789 | 0.4445 | 4.2640 | 0.1365 | 4.4005 | 1.5776 | 0.1304 | 1.7081 | | 47,856.6005 | 47,856.6005 | 2.6185 | | 47,922.0633 |
| Worker | 12.7500 | 5.9060 | 83.7564 | 0.3853 | 11.4109 | 0.2521 | 11.6631 | 3.9517 | 0.2319 | 4.1836 | | 38,475.8502 | 38,475.8502 | 0.5399 | | 38,489.3481 |
| **Total** | **16.1972** | **130.9485** | **120.8353** | **0.8298** | **15.6749** | **0.3886** | **16.0635** | **5.5293** | **0.3623** | **5.8917** | | **86,332.4507** | **86,332.4507** | **3.1584** | | **86,411.4114** |

## 3.3 Building Construction - 2033

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.4243 | 124.2809 | 36.9639 | 0.4436 | 12.5168 | 0.1346 | 12.6514 | 3.6033 | 0.1287 | 3.7320 | | 47,773.7338 | 47,773.7338 | 2.5975 | | 47,838.6713 |
| Worker | 11.9142 | 5.4517 | 79.1995 | 0.3784 | 58.2691 | 0.2356 | 58.5047 | 15.4532 | 0.2167 | 15.6700 | | 37,786.0869 | 37,786.0869 | 0.4976 | | 37,798.5272 |
| **Total** | **15.3385** | **129.7326** | **116.1634** | **0.8220** | **70.7859** | **0.3702** | **71.1561** | **19.0566** | **0.3454** | **19.4019** | | **85,559.8207** | **85,559.8207** | **3.0951** | | **85,637.1985** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.4243 | 124.2809 | 36.9639 | 0.4436 | 4.2641 | 0.1346 | 4.3987 | 1.5777 | 0.1287 | 1.7063 | | 47,773.7338 | 47,773.7338 | 2.5975 | | 47,838.6713 |
| Worker | 11.9142 | 5.4517 | 79.1995 | 0.3784 | 11.4109 | 0.2356 | 11.6466 | 3.9517 | 0.2167 | 4.1684 | | 37,786.0869 | 37,786.0869 | 0.4976 | | 37,798.5272 |
| **Total** | **15.3385** | **129.7326** | **116.1634** | **0.8220** | **15.6750** | **0.3702** | **16.0452** | **5.5293** | **0.3454** | **5.8747** | | **85,559.8207** | **85,559.8207** | **3.0951** | | **85,637.1985** |

## 3.3 Building Construction - 2034

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3091 | 7.9346 | 16.1570 | 0.0310 | | 0.1481 | 0.1481 | | 0.1481 | 0.1481 | | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.3091** | **7.9346** | **16.1570** | **0.0310** | | **0.1481** | **0.1481** | | **0.1481** | **0.1481** | | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.4037 | 123.5932 | 36.8413 | 0.4430 | 12.5169 | 0.1328 | 12.6497 | 3.6034 | 0.1269 | 3.7303 | | 47,709.0068 | 47,709.0068 | 2.5796 | | 47,773.4961 |
| Worker | 11.2080 | 5.0712 | 74.8036 | 0.3723 | 58.2691 | 0.2200 | 58.4891 | 15.4532 | 0.2024 | 15.6556 | | 37,182.0534 | 37,182.0534 | 0.4573 | | 37,193.4868 |
| **Total** | **14.6116** | **128.6644** | **111.6449** | **0.8152** | **70.7859** | **0.3528** | **71.1387** | **19.0566** | **0.3293** | **19.3858** | | **84,891.0601** | **84,891.0601** | **3.0369** | | **84,966.9829** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1162 | | 2,900.4529 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1162** | | **2,900.4529** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.4037 | 123.5932 | 36.8413 | 0.4430 | 4.2641 | 0.1328 | 4.3969 | 1.5777 | 0.1269 | 1.7046 | | 47,709.0068 | 47,709.0068 | 2.5796 | | 47,773.4961 |
| Worker | 11.2080 | 5.0712 | 74.8036 | 0.3723 | 11.4109 | 0.2200 | 11.6309 | 3.9517 | 0.2024 | 4.1540 | | 37,182.0534 | 37,182.0534 | 0.4573 | | 37,193.4868 |
| **Total** | **14.6116** | **128.6644** | **111.6449** | **0.8152** | **15.6751** | **0.3528** | **16.0278** | **5.5294** | **0.3293** | **5.8586** | | **84,891.0601** | **84,891.0601** | **3.0369** | | **84,966.9829** |

## 3.3 Building Construction - 2035

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.2168 | 7.1613 | 16.1178 | 0.0310 | | 0.0904 | 0.0904 | | 0.0904 | 0.0904 | | 2,897.5468 | 2,897.5468 | 0.1079 | | 2,900.2448 |
| **Total** | **1.2168** | **7.1613** | **16.1178** | **0.0310** | | **0.0904** | **0.0904** | | **0.0904** | **0.0904** | | **2,897.5468** | **2,897.5468** | **0.1079** | | **2,900.2448** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.3862 | 123.0386 | 36.7245 | 0.4425 | 12.5169 | 0.1313 | 12.6483 | 3.6034 | 0.1255 | 3.7289 | | 47,659.1460 | 47,659.1460 | 2.5637 | | 47,723.2394 |
| Worker | 10.6225 | 4.7926 | 71.1781 | 0.3671 | 58.2691 | 0.2061 | 58.4752 | 15.4532 | 0.1896 | 15.6428 | | 36,664.8047 | 36,664.8047 | 0.4244 | | 36,675.4149 |
| **Total** | **14.0087** | **127.8312** | **107.9026** | **0.8095** | **70.7860** | **0.3374** | **71.1234** | **19.0566** | **0.3151** | **19.3717** | | **84,323.9507** | **84,323.9507** | **2.9881** | | **84,398.6543** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0310 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,897.5468 | 2,897.5468 | 0.1079 | | 2,900.2448 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0310** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,897.5468** | **2,897.5468** | **0.1079** | | **2,900.2448** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 3.3862 | 123.0386 | 36.7245 | 0.4425 | 4.2642 | 0.1313 | 4.3955 | 1.5777 | 0.1255 | 1.7032 | | 47,659.1460 | 47,659.1460 | 2.5637 | | 47,723.2394 |
| Worker | 10.6225 | 4.7926 | 71.1781 | 0.3671 | 11.4109 | 0.2061 | 11.6170 | 3.9517 | 0.1896 | 4.1413 | | 36,664.8047 | 36,664.8047 | 0.4244 | | 36,675.4149 |
| **Total** | **14.0087** | **127.8312** | **107.9026** | **0.8095** | **15.6751** | **0.3374** | **16.0126** | **5.5294** | **0.3151** | **5.8445** | | **84,323.9507** | **84,323.9507** | **2.9881** | | **84,398.6543** |

## 3.4 Architectural Coating - 2032

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **70.0345** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.5510 | 1.1817 | 16.7577 | 0.0771 | 11.6583 | 0.0505 | 11.7087 | 3.0918 | 0.0464 | 3.1382 | | 7,698.1223 | 7,698.1223 | 0.1080 | | 7,700.8230 |
| **Total** | **2.5510** | **1.1817** | **16.7577** | **0.0771** | **11.6583** | **0.0505** | **11.7087** | **3.0918** | **0.0464** | **3.1382** | | **7,698.1223** | **7,698.1223** | **0.1080** | | **7,700.8230** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **69.9632** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.5510 | 1.1817 | 16.7577 | 0.0771 | 2.2831 | 0.0505 | 2.3335 | 0.7906 | 0.0464 | 0.8370 | | 7,698.1223 | 7,698.1223 | 0.1080 | | 7,700.8230 |
| **Total** | **2.5510** | **1.1817** | **16.7577** | **0.0771** | **2.2831** | **0.0505** | **2.3335** | **0.7906** | **0.0464** | **0.8370** | | **7,698.1223** | **7,698.1223** | **0.1080** | | **7,700.8230** |

## 3.4 Architectural Coating - 2033

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **70.0345** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.3838 | 1.0908 | 15.8460 | 0.0757 | 11.6583 | 0.0471 | 11.7054 | 3.0918 | 0.0434 | 3.1352 | | 7,560.1168 | 7,560.1168 | 0.0996 | | 7,562.6058 |
| **Total** | **2.3838** | **1.0908** | **15.8460** | **0.0757** | **11.6583** | **0.0471** | **11.7054** | **3.0918** | **0.0434** | **3.1352** | | **7,560.1168** | **7,560.1168** | **0.0996** | | **7,562.6058** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **69.9632** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.3838 | 1.0908 | 15.8460 | 0.0757 | 2.2831 | 0.0471 | 2.3302 | 0.7906 | 0.0434 | 0.8340 | | 7,560.1168 | 7,560.1168 | 0.0996 | | 7,562.6058 |
| **Total** | **2.3838** | **1.0908** | **15.8460** | **0.0757** | **2.2831** | **0.0471** | **2.3302** | **0.7906** | **0.0434** | **0.8340** | | **7,560.1168** | **7,560.1168** | **0.0996** | | **7,562.6058** |

## 3.4 Architectural Coating - 2034

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1308 | 0.8563 | 1.7977 | 2.9700e-003 | | 0.0203 | 0.0203 | | 0.0203 | 0.0203 | | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **70.0345** | **0.8563** | **1.7977** | **2.9700e-003** | | **0.0203** | **0.0203** | | **0.0203** | **0.0203** | | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.2425 | 1.0146 | 14.9665 | 0.0745 | 11.6583 | 0.0440 | 11.7023 | 3.0918 | 0.0405 | 3.1323 | | 7,439.2637 | 7,439.2637 | 0.0915 | | 7,441.5513 |
| **Total** | **2.2425** | **1.0146** | **14.9665** | **0.0745** | **11.6583** | **0.0440** | **11.7023** | **3.0918** | **0.0405** | **3.1323** | | **7,439.2637** | **7,439.2637** | **0.0915** | | **7,441.5513** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0114 | | 281.7328 |
| **Total** | **69.9632** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0114** | | **281.7328** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.2425 | 1.0146 | 14.9665 | 0.0745 | 2.2831 | 0.0440 | 2.3271 | 0.7906 | 0.0405 | 0.8311 | | 7,439.2637 | 7,439.2637 | 0.0915 | | 7,441.5513 |
| **Total** | **2.2425** | **1.0146** | **14.9665** | **0.0745** | **2.2831** | **0.0440** | **2.3271** | **0.7906** | **0.0405** | **0.8311** | | **7,439.2637** | **7,439.2637** | **0.0915** | | **7,441.5513** |

## 3.4 Architectural Coating - 2035

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1179 | 0.7577 | 1.7943 | 2.9700e-003 | | 9.9000e-003 | 9.9000e-003 | | 9.9000e-003 | 9.9000e-003 | | 281.4481 | 281.4481 | 0.0104 | | 281.7081 |
| **Total** | **70.0216** | **0.7577** | **1.7943** | **2.9700e-003** | | **9.9000e-003** | **9.9000e-003** | | **9.9000e-003** | **9.9000e-003** | | **281.4481** | **281.4481** | **0.0104** | | **281.7081** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.1253 | 0.9589 | 14.2411 | 0.0734 | 11.6583 | 0.0412 | 11.6995 | 3.0918 | 0.0379 | 3.1298 | | 7,335.7743 | 7,335.7743 | 0.0849 | | 7,337.8971 |
| **Total** | **2.1253** | **0.9589** | **14.2411** | **0.0734** | **11.6583** | **0.0412** | **11.6995** | **3.0918** | **0.0379** | **3.1298** | | **7,335.7743** | **7,335.7743** | **0.0849** | | **7,337.8971** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 69.9038 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0104 | | 281.7081 |
| **Total** | **69.9632** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0104** | | **281.7081** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 2.1253 | 0.9589 | 14.2411 | 0.0734 | 2.2831 | 0.0412 | 2.3243 | 0.7906 | 0.0379 | 0.8286 | | 7,335.7743 | 7,335.7743 | 0.0849 | | 7,337.8971 |
| **Total** | **2.1253** | **0.9589** | **14.2411** | **0.0734** | **2.2831** | **0.0412** | **2.3243** | **0.7906** | **0.0379** | **0.8286** | | **7,335.7743** | **7,335.7743** | **0.0849** | | **7,337.8971** |

## 3.5 Paving - 2035

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1405 | 4.8761 | 15.8203 | 0.0281 | | 0.1874 | 0.1874 | | 0.1874 | 0.1874 | | 2,656.5168 | 2,656.5168 | 0.1022 | | 2,659.0727 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.1405** | **4.8761** | **15.8203** | **0.0281** | | **0.1874** | **0.1874** | | **0.1874** | **0.1874** | | **2,656.5168** | **2,656.5168** | **0.1022** | | **2,659.0727** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0306 | 0.0138 | 0.2048 | 1.0600e-003 | 0.1677 | 5.9000e-004 | 0.1683 | 0.0445 | 5.5000e-004 | 0.0450 | | 105.5001 | 105.5001 | 1.2200e-003 | | 105.5306 |
| **Total** | **0.0306** | **0.0138** | **0.2048** | **1.0600e-003** | **0.1677** | **5.9000e-004** | **0.1683** | **0.0445** | **5.5000e-004** | **0.0450** | | **105.5001** | **105.5001** | **1.2200e-003** | | **105.5306** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0281 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,656.5168 | 2,656.5168 | 0.1022 | | 2,659.0726 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0281** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,656.5168** | **2,656.5168** | **0.1022** | | **2,659.0726** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0306 | 0.0138 | 0.2048 | 1.0600e-003 | 0.0328 | 5.9000e-004 | 0.0334 | 0.0114 | 5.5000e-004 | 0.0119 | | 105.5001 | 105.5001 | 1.2200e-003 | | 105.5306 |
| **Total** | **0.0306** | **0.0138** | **0.2048** | **1.0600e-003** | **0.0328** | **5.9000e-004** | **0.0334** | **0.0114** | **5.5000e-004** | **0.0119** | | **105.5001** | **105.5001** | **1.2200e-003** | | **105.5306** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Increase Transit Accessibility

Improve Pedestrian Network

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 29.7024 | 196.9137 | 400.2641 | 2.3517 | 272.9892 | 0.9829 | 273.9721 | 73.0099 | 0.9155 | 73.9254 | | 242,033.6080 | 242,033.6080 | 8.9808 | | 242,258.1268 |
| Unmitigated | 28.7937 | 192.4236 | 381.0911 | 2.2268 | 257.5736 | 0.9324 | 258.5060 | 68.8871 | 0.8685 | 69.7555 | | 229,211.6653 | 229,211.6653 | 8.5667 | | 229,425.8320 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| High School | 0.00 | 0.00 | 0.00 | | |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Regional Shopping Center | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 35,460.00 | 35,460.00 | 35460.00 | 121,172,207 | 128,424,287 |
| Total | 35,460.00 | 35,460.00 | 35,460.00 | 121,172,207 | 128,424,287 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| High School | 16.60 | 8.40 | 6.90 | 77.80 | 17.20 | 5.00 | 75 | 19 | 6 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Other Non-Asphalt Surfaces | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Regional Shopping Center | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |
| Single Family Housing | 0.552848 | 0.041144 | 0.205921 | 0.110574 | 0.011987 | 0.005763 | 0.023182 | 0.038654 | 0.002242 | 0.001394 | 0.004854 | 0.000710 | 0.000727 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 2.5964 | 22.3026 | 10.2857 | 0.1416 | | 1.7939 | 1.7939 | | 1.7939 | 1.7939 | | 28,324.4237 | 28,324.4237 | 0.5429 | 0.5193 | 28,492.7416 |
| NaturalGas Unmitigated | 2.9521 | 25.3577 | 11.6951 | 0.1610 | | 2.0396 | 2.0396 | | 2.0396 | 2.0396 | | 32,204.3954 | 32,204.3954 | 0.6173 | 0.5904 | 32,395.7701 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| High School | 18817.9 | 0.2029 | 1.8449 | 1.5497 | 0.0111 | | 0.1402 | 0.1402 | | 0.1402 | 0.1402 | | 2,213.8729 | 2,213.8729 | 0.0424 | 0.0406 | 2,227.0289 |
| 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 |
| Regional Shopping Center | 3444.24 | 0.0371 | 0.3377 | 0.2836 | 2.0300e-003 | | 0.0257 | 0.0257 | | 0.0257 | 0.0257 | | 405.2042 | 405.2042 | 7.7700e-003 | 7.4300e-003 | 407.6121 |
| Single Family Housing | 251475 | 2.7120 | 23.1752 | 9.8618 | 0.1479 | | 1.8737 | 1.8737 | | 1.8737 | 1.8737 | | 29,585.3183 | 29,585.3183 | 0.5671 | 0.5424 | 29,761.1291 |
| **Total** | | **2.9521** | **25.3577** | **11.6951** | **0.1610** | | **2.0396** | **2.0396** | | **2.0396** | **2.0396** | | **32,204.3954** | **32,204.3954** | **0.6173** | **0.5904** | **32,395.7701** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| High School | 16.572 | 0.1787 | 1.6247 | 1.3648 | 9.7500e-003 | | 0.1235 | 0.1235 | | 0.1235 | 0.1235 | | 1,949.6487 | 1,949.6487 | 0.0374 | 0.0357 | 1,961.2345 |
| 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 |
| Regional Shopping Center | 2.99742 | 0.0323 | 0.2939 | 0.2469 | 1.7600e-003 | | 0.0223 | 0.0223 | | 0.0223 | 0.0223 | | 352.6372 | 352.6372 | 6.7600e-003 | 6.4700e-003 | 354.7327 |
| Single Family Housing | 221.188 | 2.3854 | 20.3840 | 8.6741 | 0.1301 | | 1.6481 | 1.6481 | | 1.6481 | 1.6481 | | 26,022.1378 | 26,022.1378 | 0.4988 | 0.4771 | 26,176.7744 |
| **Total** | | **2.5964** | **22.3026** | **10.2857** | **0.1416** | | **1.7939** | **1.7939** | | **1.7939** | **1.7939** | | **28,324.4237** | **28,324.4237** | **0.5429** | **0.5193** | **28,492.7416** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mitigated | 210.8955 | 44.5637 | 205.2968 | 0.2785 | | 4.4442 | 4.4442 | | 4.4442 | 4.4442 | 0.0000 | 54,312.0106 | 54,312.0106 | 1.2573 | 0.9900 | 54,638.4637 |
| Unmitigated | 214.3641 | 45.1455 | 264.5549 | 0.2831 | | 4.7930 | 4.7930 | | 4.7930 | 4.7930 | 0.0000 | 54,445.9555 | 54,445.9555 | 1.4600 | 0.9900 | 54,777.4745 |

## 6.2 Area by SubCategory

### Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 17.4855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 184.5458 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 4.9500 | 42.3000 | 18.0000 | 0.2700 | | 3.4200 | 3.4200 | | 3.4200 | 3.4200 | 0.0000 | 54,000.0000 | 54,000.0000 | 1.0350 | 0.9900 | 54,320.8950 |
| Landscaping | 7.3828 | 2.8455 | 246.5549 | 0.0131 | | 1.3730 | 1.3730 | | 1.3730 | 1.3730 | | 445.9555 | 445.9555 | 0.4250 | | 456.5795 |
| **Total** | **214.3641** | **45.1455** | **264.5549** | **0.2831** | | **4.7930** | **4.7930** | | **4.7930** | **4.7930** | **0.0000** | **54,445.9555** | **54,445.9555** | **1.4600** | **0.9900** | **54,777.4745** |

### Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 17.4855 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 184.5458 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 4.9500 | 42.3000 | 18.0000 | 0.2700 | | 3.4200 | 3.4200 | | 3.4200 | 3.4200 | 0.0000 | 54,000.0000 | 54,000.0000 | 1.0350 | 0.9900 | 54,320.8950 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landscaping | 3.9142 | 2.2637 | 187.2968 | 8.4900e-003 | | 1.0242 | 1.0242 | | 1.0242 | 1.0242 | | 312.0106 | 312.0106 | 0.2223 | | 317.5687 |
| **Total** | **210.8955** | **44.5637** | **205.2968** | **0.2785** | | **4.4442** | **4.4442** | | **4.4442** | **4.4442** | **0.0000** | **54,312.0106** | **54,312.0106** | **1.2573** | **0.9900** | **54,638.4637** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

EHNCPT (Proposed Project) - South Coast Air Basin, Annual

# EHNCPT (Proposed Project)

**South Coast Air Basin, Annual**

FOR GHG: MOBILE EMISSIONS ONLY

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 18.00 | 1000sqft | 0.41 | 18,000.00 | 0 |
| High School | 600.00 | Student | 1.83 | 79,596.59 | 0 |
| City Park | 18.00 | Acre | 18.00 | 784,080.00 | 0 |
| Single Family Housing | 3,000.00 | Dwelling Unit | 974.03 | 5,400,000.00 | 8580 |
| Regional Shopping Center | 162.00 | 1000sqft | 3.72 | 162,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2034 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use -

Trips and VMT - Default assumptions

Vehicle Trips - Based on a VMT of 373,060 daily (includes internal and external trips)

Mobile Land Use Mitigation - Milliken & Baseline Station
Metrolink station located further south

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 22.75 | 0.00 |
| tblVehicleTrips | ST_TR | 2.46 | 0.00 |
| tblVehicleTrips | ST_TR | 0.61 | 0.00 |
| tblVehicleTrips | ST_TR | 49.97 | 0.00 |
| tblVehicleTrips | ST_TR | 9.91 | 13.28 |
| tblVehicleTrips | SU_TR | 16.74 | 0.00 |
| tblVehicleTrips | SU_TR | 1.05 | 0.00 |
| tblVehicleTrips | SU_TR | 0.25 | 0.00 |
| tblVehicleTrips | SU_TR | 25.24 | 0.00 |
| tblVehicleTrips | SU_TR | 8.62 | 13.28 |
| tblVehicleTrips | WD_TR | 1.89 | 0.00 |
| tblVehicleTrips | WD_TR | 11.03 | 0.00 |
| tblVehicleTrips | WD_TR | 1.71 | 0.00 |
| tblVehicleTrips | WD_TR | 42.70 | 0.00 |
| tblVehicleTrips | WD_TR | 9.52 | 13.28 |

## 2.0 Emissions Summary

### 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 | | | | | |
| Mobile | 6.6583 | 40.1989 | 90.2369 | 0.4739 | 51.6927 | 0.2438 | 51.9365 | 13.8446 | 0.2265 | 14.0711 | 0.0000 | 44,152.6348 | 44,152.6348 | 1.6793 | 0.0000 | 44,194.6165 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **6.6583** | **40.1989** | **90.2369** | **0.4739** | **51.6927** | **0.2438** | **51.9365** | **13.8446** | **0.2265** | **14.0711** | **0.0000** | **44,152.6348** | **44,152.6348** | **1.6793** | **0.0000** | **44,194.6165** |

**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 | | | | | |
| Mobile | 5.5745 | 34.7315 | 65.4968 | 0.3296 | 34.9042 | 0.1726 | 35.0768 | 9.3482 | 0.1603 | 9.5085 | 0.0000 | 30,739.7034 | 30,739.7034 | 1.2293 | 0.0000 | 30,770.4362 |
| **Total** | **5.5745** | **34.7315** | **65.4968** | **0.3296** | **34.9042** | **0.1726** | **35.0768** | **9.3482** | **0.1603** | **9.5085** | **0.0000** | **30,739.7034** | **30,739.7034** | **1.2293** | **0.0000** | **30,770.4362** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Implement NEV Network

| | ROG | NOx | CO | SO2 | Fugitive 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 | 5.5745 | 34.7315 | 65.4968 | 0.3296 | 34.9042 | 0.1726 | 35.0768 | 9.3482 | 0.1603 | 9.5085 | 0.0000 | 30,739.7034 | 30,739.7034 | 1.2293 | 0.0000 | 30,770.4362 |
| Unmitigated | 6.6583 | 40.1989 | 90.2369 | 0.4739 | 51.6927 | 0.2438 | 51.9365 | 13.8446 | 0.2265 | 14.0711 | 0.0000 | 44,152.6348 | 44,152.6348 | 1.6793 | 0.0000 | 44,194.6165 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| City Park | 0.00 | 0.00 | 0.00 | | |
| General Office Building | 0.00 | 0.00 | 0.00 | | |
| High School | 0.00 | 0.00 | 0.00 | | |
| Regional Shopping Center | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 39,840.00 | 39,840.00 | 39840.00 | 136,139,332 | 91,924,780 |
| Total | 39,840.00 | 39,840.00 | 39,840.00 | 136,139,332 | 91,924,780 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| City Park | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 66 | 28 | 6 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High School | 16.60 | 8.40 | 6.90 | 77.80 | 17.20 | 5.00 | 75 | 19 | 6 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| City Park | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |
| General Office Building | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |
| High School | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |
| Regional Shopping Center | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |
| Single Family Housing | 0.554393 | 0.041327 | 0.206724 | 0.110706 | 0.012317 | 0.005778 | 0.022589 | 0.036237 | 0.002196 | 0.001425 | 0.004854 | 0.000717 | 0.000738 |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase II Construction - South Coast Air Basin, Annual

# Phase II Construction

**South Coast Air Basin, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| High School | 130.68 | 1000sqft | 3.00 | 130,680.00 | 0 |
| Other Non-Asphalt Surfaces | 7.00 | Acre | 7.00 | 304,920.00 | 0 |
| Single Family Housing | 144.00 | Dwelling Unit | 21.00 | 483,609.00 | 412 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 35.00 | 67.00 |
| tblConstructionPhase | NumDays | 500.00 | 328.00 |
| tblLandUse | LandUseSquareFeet | 259,200.00 | 483,609.00 |
| tblLandUse | LotAcreage | 46.75 | 21.00 |

## 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 | | | | | |
| 2024 | 0.1908 | 1.6792 | 1.7971 | 4.7700e-003 | 0.3486 | 0.0604 | 0.4090 | 0.1223 | 0.0562 | 0.1785 | 0.0000 | 428.5494 | 428.5494 | 0.0734 | 0.0000 | 430.3835 |
| 2025 | 2.4583 | 2.3965 | 3.1414 | 8.7100e-003 | 0.3844 | 0.0735 | 0.4579 | 0.1036 | 0.0691 | 0.1726 | 0.0000 | 789.0105 | 789.0105 | 0.0935 | 0.0000 | 791.3483 |
| **Maximum** | **2.4583** | **2.3965** | **3.1414** | **8.7100e-003** | **0.3844** | **0.0735** | **0.4579** | **0.1223** | **0.0691** | **0.1785** | **0.0000** | **789.0105** | **789.0105** | **0.0935** | **0.0000** | **791.3483** |

**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 | | | | | |
| 2024 | 0.1148 | 1.3923 | 2.0807 | 4.7700e-003 | 0.2296 | 0.0121 | 0.2416 | 0.0729 | 0.0120 | 0.0849 | 0.0000 | 428.5491 | 428.5491 | 0.0734 | 0.0000 | 430.3832 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 2.3675 | 2.2756 | 3.3981 | 8.7100e-003 | 0.3844 | 0.0209 | 0.4053 | 0.1036 | 0.0207 | 0.1242 | 0.0000 | 789.0102 | 789.0102 | 0.0935 | 0.0000 | 791.3479 |
| **Maximum** | **2.3675** | **2.2756** | **3.3981** | **8.7100e-003** | **0.3844** | **0.0209** | **0.4053** | **0.1036** | **0.0207** | **0.1242** | **0.0000** | **789.0102** | **789.0102** | **0.0935** | **0.0000** | **791.3479** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **6.29** | **10.00** | **-10.94** | **0.00** | **16.24** | **75.42** | **25.38** | **21.86** | **73.96** | **40.44** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **6-18-2024** | **9-17-2024** | 1.0267 | 0.7711 |
| **2** | **9-18-2024** | **12-17-2024** | 0.7290 | 0.6360 |
| **3** | **12-18-2024** | **3-17-2025** | 0.6883 | 0.6257 |
| **4** | **3-18-2025** | **6-17-2025** | 0.6943 | 0.6358 |
| **5** | **6-18-2025** | **9-17-2025** | 1.3545 | 1.2942 |
| **6** | **9-18-2025** | **9-30-2025** | 0.4048 | 0.3957 |
| | | **Highest** | 1.3545 | 1.2942 |

## 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 | 2.9719 | 0.0545 | 2.4008 | 2.4100e-003 | | 0.1457 | 0.1457 | | 0.1457 | 0.1457 | 15.2956 | 31.8220 | 47.1175 | 0.0480 | 1.0400e-003 | 48.6255 |
| Energy | 0.0299 | 0.2591 | 0.1335 | 1.6300e-003 | | 0.0207 | 0.0207 | | 0.0207 | 0.0207 | 0.0000 | 1,000.0797 | 1,000.0797 | 0.0347 | 0.0114 | 1,004.3580 |
| Mobile | 0.6480 | 3.2774 | 9.2210 | 0.0406 | 3.9028 | 0.0291 | 3.9319 | 1.0454 | 0.0270 | 1.0724 | 0.0000 | 3,759.2511 | 3,759.2511 | 0.1575 | 0.0000 | 3,763.1879 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 68.7733 | 0.0000 | 68.7733 | 4.0644 | 0.0000 | 170.3830 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 4.3532 | 117.3623 | 121.7155 | 0.4520 | 0.0116 | 136.4592 |
| **Total** | **3.6499** | **3.5909** | **11.7553** | **0.0446** | **3.9028** | **0.1955** | **4.0983** | **1.0454** | **0.1934** | **1.2389** | **88.4221** | **4,908.5151** | **4,996.9371** | **4.7565** | **0.0240** | **5,123.0136** |

**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 | 2.9719 | 0.0545 | 2.4008 | 2.4100e-003 | | 0.1457 | 0.1457 | | 0.1457 | 0.1457 | 15.2956 | 31.8220 | 47.1175 | 0.0480 | 1.0400e-003 | 48.6255 |
| Energy | 0.0299 | 0.2591 | 0.1335 | 1.6300e-003 | | 0.0207 | 0.0207 | | 0.0207 | 0.0207 | 0.0000 | 1,000.0797 | 1,000.0797 | 0.0347 | 0.0114 | 1,004.3580 |
| Mobile | 0.6480 | 3.2774 | 9.2210 | 0.0406 | 3.9028 | 0.0291 | 3.9319 | 1.0454 | 0.0270 | 1.0724 | 0.0000 | 3,759.2511 | 3,759.2511 | 0.1575 | 0.0000 | 3,763.1879 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 68.7733 | 0.0000 | 68.7733 | 4.0644 | 0.0000 | 170.3830 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3.4825 | 102.2904 | 105.7729 | 0.3619 | 9.3200e-003 | 117.5979 |
| **Total** | **3.6499** | **3.5909** | **11.7553** | **0.0446** | **3.9028** | **0.1955** | **4.0983** | **1.0454** | **0.1934** | **1.2389** | **87.5514** | **4,893.4432** | **4,980.9946** | **4.6665** | **0.0218** | **5,104.1524** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.98** | **0.31** | **0.32** | **1.89** | **9.32** | **0.37** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 6/19/2024 | 8/20/2024 | 5 | 45 | |
| 2 | Building Construction | Building Construction | 8/21/2024 | 11/21/2025 | 5 | 328 | |
| 3 | Architectural Coating | Architectural Coating | 8/21/2025 | 11/21/2025 | 5 | 67 | |
| 4 | Paving | Paving | 10/5/2025 | 11/21/2025 | 5 | 35 | |

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

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 7**

**Residential Indoor: 979,308; Residential Outdoor: 326,436; Non-Residential Indoor: 196,020; Non-Residential Outdoor: 65,340; Striped**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 235.00 | 87.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 47.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

### 3.2 Grading - 2024

**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 | | | | | 0.1952 | 0.0000 | 0.1952 | 0.0809 | 0.0000 | 0.0809 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0724 | 0.7285 | 0.6238 | 1.4000e-003 | | 0.0301 | 0.0301 | | 0.0276 | 0.0276 | 0.0000 | 122.6689 | 122.6689 | 0.0397 | 0.0000 | 123.6608 |
| **Total** | **0.0724** | **0.7285** | **0.6238** | **1.4000e-003** | **0.1952** | **0.0301** | **0.2252** | **0.0809** | **0.0276** | **0.1086** | **0.0000** | **122.6689** | **122.6689** | **0.0397** | **0.0000** | **123.6608** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.5700e-003 | 1.0300e-003 | 0.0125 | 4.0000e-005 | 4.9400e-003 | 3.0000e-005 | 4.9700e-003 | 1.3100e-003 | 3.0000e-005 | 1.3400e-003 | 0.0000 | 3.8641 | 3.8641 | 9.0000e-005 | 0.0000 | 3.8662 |
| **Total** | **1.5700e-003** | **1.0300e-003** | **0.0125** | **4.0000e-005** | **4.9400e-003** | **3.0000e-005** | **4.9700e-003** | **1.3100e-003** | **3.0000e-005** | **1.3400e-003** | **0.0000** | **3.8641** | **3.8641** | **9.0000e-005** | **0.0000** | **3.8662** |

## 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 | | | | | 0.0761 | 0.0000 | 0.0761 | 0.0316 | 0.0000 | 0.0316 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0343 | 0.5396 | 0.8263 | 1.4000e-003 | | 4.3900e-003 | 4.3900e-003 | | 4.3900e-003 | 4.3900e-003 | 0.0000 | 122.6688 | 122.6688 | 0.0397 | 0.0000 | 123.6606 |
| **Total** | **0.0343** | **0.5396** | **0.8263** | **1.4000e-003** | **0.0761** | **4.3900e-003** | **0.0805** | **0.0316** | **4.3900e-003** | **0.0360** | **0.0000** | **122.6688** | **122.6688** | **0.0397** | **0.0000** | **123.6606** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.5700e-003 | 1.0300e-003 | 0.0125 | 4.0000e-005 | 4.9400e-003 | 3.0000e-005 | 4.9700e-003 | 1.3100e-003 | 3.0000e-005 | 1.3400e-003 | 0.0000 | 3.8641 | 3.8641 | 9.0000e-005 | 0.0000 | 3.8662 |
| **Total** | **1.5700e-003** | **1.0300e-003** | **0.0125** | **4.0000e-005** | **4.9400e-003** | **3.0000e-005** | **4.9700e-003** | **1.3100e-003** | **3.0000e-005** | **1.3400e-003** | **0.0000** | **3.8641** | **3.8641** | **9.0000e-005** | **0.0000** | **3.8662** |

## 3.3 Building Construction - 2024

### 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 | 0.0699 | 0.6386 | 0.7679 | 1.2800e-003 | | 0.0291 | 0.0291 | | 0.0274 | 0.0274 | 0.0000 | 110.1283 | 110.1283 | 0.0260 | 0.0000 | 110.7794 |
| **Total** | **0.0699** | **0.6386** | **0.7679** | **1.2800e-003** | | **0.0291** | **0.0291** | | **0.0274** | **0.0274** | **0.0000** | **110.1283** | **110.1283** | **0.0260** | **0.0000** | **110.7794** |

## 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 | 8.0900e-003 | 0.2854 | 0.0837 | 9.9000e-004 | 0.0260 | 3.3000e-004 | 0.0264 | 7.5100e-003 | 3.1000e-004 | 7.8300e-003 | 0.0000 | 96.0374 | 96.0374 | 5.4200e-003 | 0.0000 | 96.1729 |
| Worker | 0.0389 | 0.0256 | 0.3093 | 1.0600e-003 | 0.1225 | 8.6000e-004 | 0.1233 | 0.0325 | 7.9000e-004 | 0.0333 | 0.0000 | 95.8507 | 95.8507 | 2.1400e-003 | 0.0000 | 95.9042 |
| **Total** | **0.0470** | **0.3111** | **0.3930** | **2.0500e-003** | **0.1485** | **1.1900e-003** | **0.1497** | **0.0400** | **1.1000e-003** | **0.0412** | **0.0000** | **191.8881** | **191.8881** | **7.5600e-003** | **0.0000** | **192.0771** |

## 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 | 0.0320 | 0.5406 | 0.8490 | 1.2800e-003 | | 6.4400e-003 | 6.4400e-003 | | 6.4400e-003 | 6.4400e-003 | 0.0000 | 110.1282 | 110.1282 | 0.0260 | 0.0000 | 110.7793 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0320** | **0.5406** | **0.8490** | **1.2800e-003** | | **6.4400e-003** | **6.4400e-003** | | **6.4400e-003** | **6.4400e-003** | **0.0000** | **110.1282** | **110.1282** | **0.0260** | **0.0000** | **110.7793** |

**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 | 8.0900e-003 | 0.2854 | 0.0837 | 9.9000e-004 | 0.0260 | 3.3000e-004 | 0.0264 | 7.5100e-003 | 3.1000e-004 | 7.8300e-003 | 0.0000 | 96.0374 | 96.0374 | 5.4200e-003 | 0.0000 | 96.1729 |
| Worker | 0.0389 | 0.0256 | 0.3093 | 1.0600e-003 | 0.1225 | 8.6000e-004 | 0.1233 | 0.0325 | 7.9000e-004 | 0.0333 | 0.0000 | 95.8507 | 95.8507 | 2.1400e-003 | 0.0000 | 95.9042 |
| **Total** | **0.0470** | **0.3111** | **0.3930** | **2.0500e-003** | **0.1485** | **1.1900e-003** | **0.1497** | **0.0400** | **1.1000e-003** | **0.0412** | **0.0000** | **191.8881** | **191.8881** | **7.5600e-003** | **0.0000** | **192.0771** |

## 3.3 Building Construction - 2025

**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 | 0.1593 | 1.4527 | 1.8739 | 3.1400e-003 | | 0.0615 | 0.0615 | | 0.0578 | 0.0578 | 0.0000 | 270.1862 | 270.1862 | 0.0635 | 0.0000 | 271.7740 |
| **Total** | **0.1593** | **1.4527** | **1.8739** | **3.1400e-003** | | **0.0615** | **0.0615** | | **0.0578** | **0.0578** | **0.0000** | **270.1862** | **270.1862** | **0.0635** | **0.0000** | **271.7740** |

**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 | 0.0193 | 0.6939 | 0.2001 | 2.4000e-003 | 0.0639 | 7.9000e-004 | 0.0647 | 0.0184 | 7.5000e-004 | 0.0192 | 0.0000 | 234.2509 | 234.2509 | 0.0131 | 0.0000 | 234.5782 |
| Worker | 0.0907 | 0.0575 | 0.7045 | 2.5000e-003 | 0.3004 | 2.0700e-003 | 0.3024 | 0.0798 | 1.9100e-003 | 0.0817 | 0.0000 | 225.8332 | 225.8332 | 4.7900e-003 | 0.0000 | 225.9529 |
| **Total** | **0.1100** | **0.7514** | **0.9045** | **4.9000e-003** | **0.3642** | **2.8600e-003** | **0.3671** | **0.0982** | **2.6600e-003** | **0.1009** | **0.0000** | **460.0841** | **460.0841** | **0.0179** | **0.0000** | **460.5311** |

## 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 | 0.0785 | 1.3259 | 2.0823 | 3.1400e-003 | | 0.0158 | 0.0158 | | 0.0158 | 0.0158 | 0.0000 | 270.1858 | 270.1858 | 0.0635 | 0.0000 | 271.7737 |
| **Total** | **0.0785** | **1.3259** | **2.0823** | **3.1400e-003** | | **0.0158** | **0.0158** | | **0.0158** | **0.0158** | **0.0000** | **270.1858** | **270.1858** | **0.0635** | **0.0000** | **271.7737** |

## 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 | 0.0193 | 0.6939 | 0.2001 | 2.4000e-003 | 0.0639 | 7.9000e-004 | 0.0647 | 0.0184 | 7.5000e-004 | 0.0192 | 0.0000 | 234.2509 | 234.2509 | 0.0131 | 0.0000 | 234.5782 |
| Worker | 0.0907 | 0.0575 | 0.7045 | 2.5000e-003 | 0.3004 | 2.0700e-003 | 0.3024 | 0.0798 | 1.9100e-003 | 0.0817 | 0.0000 | 225.8332 | 225.8332 | 4.7900e-003 | 0.0000 | 225.9529 |
| **Total** | **0.1100** | **0.7514** | **0.9045** | **4.9000e-003** | **0.3642** | **2.8600e-003** | **0.3671** | **0.0982** | **2.6600e-003** | **0.1009** | **0.0000** | **460.0841** | **460.0841** | **0.0179** | **0.0000** | **460.5311** |

## 3.4 Architectural Coating - 2025

### 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 | 2.1611 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 5.7200e-003 | 0.0384 | 0.0606 | 1.0000e-004 | | 1.7300e-003 | 1.7300e-003 | | 1.7300e-003 | 1.7300e-003 | 0.0000 | 8.5534 | 8.5534 | 4.7000e-004 | 0.0000 | 8.5651 |
| **Total** | **2.1669** | **0.0384** | **0.0606** | **1.0000e-004** | | **1.7300e-003** | **1.7300e-003** | | **1.7300e-003** | **1.7300e-003** | **0.0000** | **8.5534** | **8.5534** | **4.7000e-004** | **0.0000** | **8.5651** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.2100e-003 | 3.3100e-003 | 0.0405 | 1.4000e-004 | 0.0173 | 1.2000e-004 | 0.0174 | 4.5900e-003 | 1.1000e-004 | 4.7000e-003 | 0.0000 | 12.9878 | 12.9878 | 2.8000e-004 | 0.0000 | 12.9947 |
| **Total** | **5.2100e-003** | **3.3100e-003** | **0.0405** | **1.4000e-004** | **0.0173** | **1.2000e-004** | **0.0174** | **4.5900e-003** | **1.1000e-004** | **4.7000e-003** | **0.0000** | **12.9878** | **12.9878** | **2.8000e-004** | **0.0000** | **12.9947** |

## 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 | 2.1611 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.9900e-003 | 0.0364 | 0.0614 | 1.0000e-004 | | 4.8000e-004 | 4.8000e-004 | | 4.8000e-004 | 4.8000e-004 | 0.0000 | 8.5534 | 8.5534 | 4.7000e-004 | 0.0000 | 8.5651 |
| **Total** | **2.1631** | **0.0364** | **0.0614** | **1.0000e-004** | | **4.8000e-004** | **4.8000e-004** | | **4.8000e-004** | **4.8000e-004** | **0.0000** | **8.5534** | **8.5534** | **4.7000e-004** | **0.0000** | **8.5651** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.2100e-003 | 3.3100e-003 | 0.0405 | 1.4000e-004 | 0.0173 | 1.2000e-004 | 0.0174 | 4.5900e-003 | 1.1000e-004 | 4.7000e-003 | 0.0000 | 12.9878 | 12.9878 | 2.8000e-004 | 0.0000 | 12.9947 |
| **Total** | **5.2100e-003** | **3.3100e-003** | **0.0405** | **1.4000e-004** | **0.0173** | **1.2000e-004** | **0.0174** | **4.5900e-003** | **1.1000e-004** | **4.7000e-003** | **0.0000** | **12.9878** | **12.9878** | **2.8000e-004** | **0.0000** | **12.9947** |

## 3.5 Paving - 2025

### 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 | 0.0160 | 0.1502 | 0.2551 | 4.0000e-004 | | 7.3200e-003 | 7.3200e-003 | | 6.7400e-003 | 6.7400e-003 | 0.0000 | 35.0337 | 35.0337 | 0.0113 | 0.0000 | 35.3170 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0160** | **0.1502** | **0.2551** | **4.0000e-004** | | **7.3200e-003** | **7.3200e-003** | | **6.7400e-003** | **6.7400e-003** | **0.0000** | **35.0337** | **35.0337** | **0.0113** | **0.0000** | **35.3170** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.7000e-004 | 5.5000e-004 | 6.7500e-003 | 2.0000e-005 | 2.8800e-003 | 2.0000e-005 | 2.9000e-003 | 7.6000e-004 | 2.0000e-005 | 7.8000e-004 | 0.0000 | 2.1653 | 2.1653 | 5.0000e-005 | 0.0000 | 2.1665 |
| **Total** | **8.7000e-004** | **5.5000e-004** | **6.7500e-003** | **2.0000e-005** | **2.8800e-003** | **2.0000e-005** | **2.9000e-003** | **7.6000e-004** | **2.0000e-005** | **7.8000e-004** | **0.0000** | **2.1653** | **2.1653** | **5.0000e-005** | **0.0000** | **2.1665** |

## 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 | 9.8200e-003 | 0.1581 | 0.3027 | 4.0000e-004 | | 1.6000e-003 | 1.6000e-003 | | 1.6000e-003 | 1.6000e-003 | 0.0000 | 35.0337 | 35.0337 | 0.0113 | 0.0000 | 35.3169 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **9.8200e-003** | **0.1581** | **0.3027** | **4.0000e-004** | | **1.6000e-003** | **1.6000e-003** | | **1.6000e-003** | **1.6000e-003** | **0.0000** | **35.0337** | **35.0337** | **0.0113** | **0.0000** | **35.3169** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.7000e-004 | 5.5000e-004 | 6.7500e-003 | 2.0000e-005 | 2.8800e-003 | 2.0000e-005 | 2.9000e-003 | 7.6000e-004 | 2.0000e-005 | 7.8000e-004 | 0.0000 | 2.1653 | 2.1653 | 5.0000e-005 | 0.0000 | 2.1665 |
| **Total** | **8.7000e-004** | **5.5000e-004** | **6.7500e-003** | **2.0000e-005** | **2.8800e-003** | **2.0000e-005** | **2.9000e-003** | **7.6000e-004** | **2.0000e-005** | **7.8000e-004** | **0.0000** | **2.1653** | **2.1653** | **5.0000e-005** | **0.0000** | **2.1665** |

## 4.0 Operational Detail - Mobile

### 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 | 0.6480 | 3.2774 | 9.2210 | 0.0406 | 3.9028 | 0.0291 | 3.9319 | 1.0454 | 0.0270 | 1.0724 | 0.0000 | 3,759.2511 | 3,759.2511 | 0.1575 | 0.0000 | 3,763.1879 |
| Unmitigated | 0.6480 | 3.2774 | 9.2210 | 0.0406 | 3.9028 | 0.0291 | 3.9319 | 1.0454 | 0.0270 | 1.0724 | 0.0000 | 3,759.2511 | 3,759.2511 | 0.1575 | 0.0000 | 3,763.1879 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| High School | 1,684.47 | 571.07 | 233.92 | 5,629,693 | 5,629,693 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 1,370.88 | 1,427.04 | 1241.28 | 4,648,654 | 4,648,654 |
| Total | 3,055.35 | 1,998.11 | 1,475.20 | 10,278,348 | 10,278,348 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| High School | 16.60 | 8.40 | 6.90 | 77.80 | 17.20 | 5.00 | 75 | 19 | 6 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 0.554129 | 0.042164 | 0.205182 | 0.113554 | 0.013848 | 0.005806 | 0.021992 | 0.033191 | 0.002140 | 0.001609 | 0.004858 | 0.000715 | 0.000811 |
| Other Non-Asphalt Surfaces | 0.554129 | 0.042164 | 0.205182 | 0.113554 | 0.013848 | 0.005806 | 0.021992 | 0.033191 | 0.002140 | 0.001609 | 0.004858 | 0.000715 | 0.000811 |
| Single Family Housing | 0.554129 | 0.042164 | 0.205182 | 0.113554 | 0.013848 | 0.005806 | 0.021992 | 0.033191 | 0.002140 | 0.001609 | 0.004858 | 0.000715 | 0.000811 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 703.8784 | 703.8784 | 0.0291 | 6.0100e-003 | 706.3966 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 703.8784 | 703.8784 | 0.0291 | 6.0100e-003 | 706.3966 |
| NaturalGas Mitigated | 0.0299 | 0.2591 | 0.1335 | 1.6300e-003 | | 0.0207 | 0.0207 | | 0.0207 | 0.0207 | 0.0000 | 296.2013 | 296.2013 | 5.6800e-003 | 5.4300e-003 | 297.9615 |
| NaturalGas Unmitigated | 0.0299 | 0.2591 | 0.1335 | 1.6300e-003 | | 0.0207 | 0.0207 | | 0.0207 | 0.0207 | 0.0000 | 296.2013 | 296.2013 | 5.6800e-003 | 5.4300e-003 | 297.9615 |

## 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 | | | | | |
| High School | 1.14476e+006 | 6.1700e-003 | 0.0561 | 0.0471 | 3.4000e-004 | | 4.2600e-003 | 4.2600e-003 | | 4.2600e-003 | 4.2600e-003 | 0.0000 | 61.0886 | 61.0886 | 1.1700e-003 | 1.1200e-003 | 61.4516 |
| 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 |
| Single Family Housing | 4.40585e+006 | 0.0238 | 0.2030 | 0.0864 | 1.3000e-003 | | 0.0164 | 0.0164 | | 0.0164 | 0.0164 | 0.0000 | 235.1127 | 235.1127 | 4.5100e-003 | 4.3100e-003 | 236.5099 |
| **Total** | | **0.0299** | **0.2591** | **0.1335** | **1.6400e-003** | | **0.0207** | **0.0207** | | **0.0207** | **0.0207** | **0.0000** | **296.2013** | **296.2013** | **5.6800e-003** | **5.4300e-003** | **297.9615** |

### 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 | | | | | |
| High School | 1.14476e+006 | 6.1700e-003 | 0.0561 | 0.0471 | 3.4000e-004 | | 4.2600e-003 | 4.2600e-003 | | 4.2600e-003 | 4.2600e-003 | 0.0000 | 61.0886 | 61.0886 | 1.1700e-003 | 1.1200e-003 | 61.4516 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Single Family Housing | 4.40585e+006 | 0.0238 | 0.2030 | 0.0864 | 1.3000e-003 | | 0.0164 | 0.0164 | | 0.0164 | 0.0164 | 0.0000 | 235.1127 | 235.1127 | 4.5100e-003 | 4.3100e-003 | 236.5099 |
| **Total** | | **0.0299** | **0.2591** | **0.1335** | **1.6400e-003** | | **0.0207** | **0.0207** | | **0.0207** | **0.0207** | **0.0000** | **296.2013** | **296.2013** | **5.6800e-003** | **5.4300e-003** | **297.9615** |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| High School | 953964 | 303.9534 | 0.0126 | 2.6000e-003 | 305.0408 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.25517e+006 | 399.9251 | 0.0165 | 3.4200e-003 | 401.3558 |
| **Total** | | **703.8784** | **0.0291** | **6.0200e-003** | **706.3966** |

### Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| High School | 953964 | 303.9534 | 0.0126 | 2.6000e-003 | 305.0408 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.25517e+006 | 399.9251 | 0.0165 | 3.4200e-003 | 401.3558 |
| **Total** | | **703.8784** | **0.0291** | **6.0200e-003** | **706.3966** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 2.9719 | 0.0545 | 2.4008 | 2.4100e-003 | | 0.1457 | 0.1457 | | 0.1457 | 0.1457 | 15.2956 | 31.8220 | 47.1175 | 0.0480 | 1.0400e-003 | 48.6255 |
| Unmitigated | 2.9719 | 0.0545 | 2.4008 | 2.4100e-003 | | 0.1457 | 0.1457 | | 0.1457 | 0.1457 | 15.2956 | 31.8220 | 47.1175 | 0.0480 | 1.0400e-003 | 48.6255 |

### 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 | 0.2161 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.2394 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hearth | 0.4717 | 0.0374 | 0.9154 | 2.3400e-003 | | 0.1375 | 0.1375 | | 0.1375 | 0.1375 | 15.2956 | 29.3928 | 44.6883 | 0.0456 | 1.0400e-003 | 46.1381 |
| Landscaping | 0.0447 | 0.0171 | 1.4854 | 8.0000e-005 | | 8.2400e-003 | 8.2400e-003 | | 8.2400e-003 | 8.2400e-003 | 0.0000 | 2.4292 | 2.4292 | 2.3300e-003 | 0.0000 | 2.4875 |
| **Total** | **2.9719** | **0.0545** | **2.4008** | **2.4200e-003** | | **0.1457** | **0.1457** | | **0.1457** | **0.1457** | **15.2956** | **31.8220** | **47.1175** | **0.0479** | **1.0400e-003** | **48.6255** |

**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 | 0.2161 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.2394 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.4717 | 0.0374 | 0.9154 | 2.3400e-003 | | 0.1375 | 0.1375 | | 0.1375 | 0.1375 | 15.2956 | 29.3928 | 44.6883 | 0.0456 | 1.0400e-003 | 46.1381 |
| Landscaping | 0.0447 | 0.0171 | 1.4854 | 8.0000e-005 | | 8.2400e-003 | 8.2400e-003 | | 8.2400e-003 | 8.2400e-003 | 0.0000 | 2.4292 | 2.4292 | 2.3300e-003 | 0.0000 | 2.4875 |
| **Total** | **2.9719** | **0.0545** | **2.4008** | **2.4200e-003** | | **0.1457** | **0.1457** | | **0.1457** | **0.1457** | **15.2956** | **31.8220** | **47.1175** | **0.0479** | **1.0400e-003** | **48.6255** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 105.7729 | 0.3619 | 9.3200e-003 | 117.5979 |
| Unmitigated | 121.7155 | 0.4520 | 0.0116 | 136.4592 |

## 7.2 Water by Land Use

### Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| High School | 4.33918 / 11.1579 | 58.8766 | 0.1438 | 3.8300e-003 | 63.6120 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 9.38218 / 5.91485 | 62.8389 | 0.3082 | 7.7300e-003 | 72.8472 |
| **Total** | | **121.7155** | **0.4520** | **0.0116** | **136.4592** |

### Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|

| Land Use | Mgal | MT/yr | | | |
|---|---|---|---|---|---|
| High School | 3.47135 / 10.4773 | 52.5914 | 0.1152 | 3.1100e-003 | 56.3994 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 7.50574 / 5.55405 | 53.1815 | 0.2467 | 6.2100e-003 | 61.1986 |
| **Total** | | **105.7729** | **0.3619** | **9.3200e-003** | **117.5979** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 68.7733 | 4.0644 | 0.0000 | 170.3830 |
| Unmitigated | 68.7733 | 4.0644 | 0.0000 | 170.3830 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |

| | | | | | |
|---|---|---|---|---|---|
| High School | 169.88 | 34.4841 | 2.0380 | 0.0000 | 85.4329 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 168.92 | 34.2892 | 2.0264 | 0.0000 | 84.9501 |
| **Total** | | **68.7733** | **4.0644** | **0.0000** | **170.3830** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| High School | 169.88 | 34.4841 | 2.0380 | 0.0000 | 85.4329 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 168.92 | 34.2892 | 2.0264 | 0.0000 | 84.9501 |
| **Total** | | **68.7733** | **4.0644** | **0.0000** | **170.3830** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase II Construction - South Coast Air Basin, Summer

# Phase II Construction

**South Coast Air Basin, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| High School | 130.68 | 1000sqft | 3.00 | 130,680.00 | 0 |
| Other Non-Asphalt Surfaces | 7.00 | Acre | 7.00 | 304,920.00 | 0 |
| Single Family Housing | 144.00 | Dwelling Unit | 21.00 | 483,609.00 | 412 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 35.00 | 67.00 |
| tblConstructionPhase | NumDays | 500.00 | 328.00 |
| tblLandUse | LandUseSquareFeet | 259,200.00 | 483,609.00 |
| tblLandUse | LotAcreage | 46.75 | 21.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2024 | 3.2880 | 32.4176 | 28.3216 | 0.0714 | 8.8969 | 1.3369 | 10.2338 | 3.6558 | 1.2300 | 4.8858 | 0.0000 | 7,144.8110 | 7,144.8110 | 1.9481 | 0.0000 | 7,164.2929 |
| 2025 | 68.1130 | 28.6476 | 42.3738 | 0.1020 | 3.8765 | 1.0267 | 4.9032 | 1.0407 | 0.9599 | 2.0005 | 0.0000 | 10,121.2076 | 10,121.2076 | 1.5111 | 0.0000 | 10,158.9854 |
| **Maximum** | **68.1130** | **32.4176** | **42.3738** | **0.1020** | **8.8969** | **1.3369** | **10.2338** | **3.6558** | **1.2300** | **4.8858** | **0.0000** | **10,121.2076** | **10,121.2076** | **1.9481** | **0.0000** | **10,158.9854** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2024 | 1.6617 | 24.0232 | 37.3214 | 0.0714 | 3.6062 | 0.1965 | 3.8026 | 1.4619 | 0.1963 | 1.6583 | 0.0000 | 7,144.8110 | 7,144.8110 | 1.9481 | 0.0000 | 7,164.2929 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 66.9538 | 27.9534 | 46.9039 | 0.1020 | 3.8765 | 0.2703 | 4.1468 | 1.0407 | 0.2683 | 1.3089 | 0.0000 | 10,121.2076 | 10,121.2076 | 1.5111 | 0.0000 | 10,158.9854 |
| **Maximum** | **66.9538** | **27.9534** | **46.9039** | **0.1020** | **3.8765** | **0.2703** | **4.1468** | **1.4619** | **0.2683** | **1.6583** | **0.0000** | **10,121.2076** | **10,121.2076** | **1.9481** | **0.0000** | **10,158.9854** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.90** | **14.88** | **-19.14** | **0.00** | **41.42** | **80.25** | **47.48** | **46.71** | **78.78** | **56.91** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 51.5459 | 3.1246 | 85.1144 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.4217 | 3,962.2579 | 4.0431 | 0.0916 | 4,090.6160 |
| Energy | 0.1640 | 1.4199 | 0.7317 | 8.9500e-003 | | 0.1133 | 0.1133 | | 0.1133 | 0.1133 | | 1,789.0741 | 1,789.0741 | 0.0343 | 0.0328 | 1,799.7057 |
| Mobile | 4.4418 | 20.2678 | 62.6666 | 0.2719 | 25.6480 | 0.1875 | 25.8355 | 6.8599 | 0.1741 | 7.0340 | | 27,751.2529 | 27,751.2529 | 1.1265 | | 27,779.4162 |
| **Total** | **56.1518** | **24.8123** | **148.5126** | **0.4683** | **25.6480** | **11.3666** | **37.0146** | **6.8599** | **11.3532** | **18.2131** | **1,348.8363** | **32,153.7487** | **33,502.5849** | **5.2039** | **0.1244** | **33,669.7378** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 51.5459 | 3.1246 | 85.1144 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.4217 | 3,962.2579 | 4.0431 | 0.0916 | 4,090.6160 |
| Energy | 0.1640 | 1.4199 | 0.7317 | 8.9500e-003 | | 0.1133 | 0.1133 | | 0.1133 | 0.1133 | | 1,789.0741 | 1,789.0741 | 0.0343 | 0.0328 | 1,799.7057 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 4.4418 | 20.2678 | 62.6666 | 0.2719 | 25.6480 | 0.1875 | 25.8355 | 6.8599 | 0.1741 | 7.0340 | | 27,751.2529 | 27,751.2529 | 1.1265 | | 27,779.4162 |
| **Total** | **56.1518** | **24.8123** | **148.5126** | **0.4683** | **25.6480** | **11.3666** | **37.0146** | **6.8599** | **11.3532** | **18.2131** | **1,348.8363** | **32,153.7487** | **33,502.5849** | **5.2039** | **0.1244** | **33,669.7378** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 6/19/2024 | 8/20/2024 | 5 | 45 | |
| 2 | Building Construction | Building Construction | 8/21/2024 | 11/21/2025 | 5 | 328 | |
| 3 | Architectural Coating | Architectural Coating | 8/21/2025 | 11/21/2025 | 5 | 67 | |
| 4 | Paving | Paving | 10/5/2025 | 11/21/2025 | 5 | 35 | |

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

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 7**

**Residential Indoor: 979,308; Residential Outdoor: 326,436; Non-Residential Indoor: 196,020; Non-Residential Outdoor: 65,340; Striped**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 235.00 | 87.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 47.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2181 | 32.3770 | 27.7228 | 0.0621 | | 1.3354 | 1.3354 | | 1.2286 | 1.2286 | | 6,009.7487 | 6,009.7487 | 1.9437 | | 6,058.3405 |
| **Total** | **3.2181** | **32.3770** | **27.7228** | **0.0621** | **8.6733** | **1.3354** | **10.0087** | **3.5965** | **1.2286** | **4.8251** | | **6,009.7487** | **6,009.7487** | **1.9437** | | **6,058.3405** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0699 | 0.0407 | 0.5988 | 1.9900e-003 | 0.2236 | 1.5400e-003 | 0.2251 | 0.0593 | 1.4200e-003 | 0.0607 | | 198.7310 | 198.7310 | 4.4600e-003 | | 198.8425 |
| **Total** | **0.0699** | **0.0407** | **0.5988** | **1.9900e-003** | **0.2236** | **1.5400e-003** | **0.2251** | **0.0593** | **1.4200e-003** | **0.0607** | | **198.7310** | **198.7310** | **4.4600e-003** | | **198.8425** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,009.7487 | 6,009.7487 | 1.9437 | | 6,058.3405 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,009.7487** | **6,009.7487** | **1.9437** | | **6,058.3405** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0699 | 0.0407 | 0.5988 | 1.9900e-003 | 0.2236 | 1.5400e-003 | 0.2251 | 0.0593 | 1.4200e-003 | 0.0607 | | 198.7310 | 198.7310 | 4.4600e-003 | | 198.8425 |
| **Total** | **0.0699** | **0.0407** | **0.5988** | **1.9900e-003** | **0.2236** | **1.5400e-003** | **0.2251** | **0.0593** | **1.4200e-003** | **0.0607** | | **198.7310** | **198.7310** | **4.4600e-003** | | **198.8425** |

## 3.3 Building Construction - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1667 | 5.9503 | 1.6799 | 0.0210 | 0.5567 | 6.7600e-003 | 0.5635 | 0.1603 | 6.4600e-003 | 0.1667 | | 2,254.0226 | 2,254.0226 | 0.1225 | | 2,257.0857 |
| Worker | 0.8211 | 0.4779 | 7.0356 | 0.0234 | 2.6268 | 0.0181 | 2.6449 | 0.6966 | 0.0167 | 0.7133 | | 2,335.0895 | 2,335.0895 | 0.0524 | | 2,336.3995 |
| **Total** | **0.9878** | **6.4281** | **8.7155** | **0.0444** | **3.1834** | **0.0249** | **3.2083** | **0.8569** | **0.0232** | **0.8801** | | **4,589.1121** | **4,589.1121** | **0.1749** | | **4,593.4852** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1667 | 5.9503 | 1.6799 | 0.0210 | 0.5567 | 6.7600e-003 | 0.5635 | 0.1603 | 6.4600e-003 | 0.1667 | | 2,254.0226 | 2,254.0226 | 0.1225 | | 2,257.0857 |
| Worker | 0.8211 | 0.4779 | 7.0356 | 0.0234 | 2.6268 | 0.0181 | 2.6449 | 0.6966 | 0.0167 | 0.7133 | | 2,335.0895 | 2,335.0895 | 0.0524 | | 2,336.3995 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.9878** | **6.4281** | **8.7155** | **0.0444** | **3.1834** | **0.0249** | **3.2083** | **0.8569** | **0.0232** | **0.8801** | | **4,589.1121** | **4,589.1121** | **0.1749** | | **4,593.4852** |

## 3.3 Building Construction - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1625 | 5.8984 | 1.6371 | 0.0209 | 0.5567 | 6.6500e-003 | 0.5634 | 0.1603 | 6.3600e-003 | 0.1666 | | 2,241.5042 | 2,241.5042 | 0.1207 | | 2,244.5225 |
| Worker | 0.7799 | 0.4371 | 6.5396 | 0.0225 | 2.6268 | 0.0178 | 2.6445 | 0.6966 | 0.0164 | 0.7130 | | 2,243.2102 | 2,243.2102 | 0.0478 | | 2,244.4045 |
| **Total** | **0.9424** | **6.3354** | **8.1767** | **0.0434** | **3.1835** | **0.0245** | **3.2079** | **0.8569** | **0.0227** | **0.8796** | | **4,484.7144** | **4,484.7144** | **0.1685** | | **4,488.9270** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1625 | 5.8984 | 1.6371 | 0.0209 | 0.5567 | 6.6500e-003 | 0.5634 | 0.1603 | 6.3600e-003 | 0.1666 | | 2,241.5042 | 2,241.5042 | 0.1207 | | 2,244.5225 |
| Worker | 0.7799 | 0.4371 | 6.5396 | 0.0225 | 2.6268 | 0.0178 | 2.6445 | 0.6966 | 0.0164 | 0.7130 | | 2,243.2102 | 2,243.2102 | 0.0478 | | 2,244.4045 |
| **Total** | **0.9424** | **6.3354** | **8.1767** | **0.0434** | **3.1835** | **0.0245** | **3.2079** | **0.8569** | **0.0227** | **0.8796** | | **4,484.7144** | **4,484.7144** | **0.1685** | | **4,488.9270** |

## 3.4 Architectural Coating - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Archit. Coating | 64.5114 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **64.6822** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1560 | 0.0874 | 1.3079 | 4.5000e-003 | 0.5254 | 3.5600e-003 | 0.5289 | 0.1393 | 3.2800e-003 | 0.1426 | | 448.6420 | 448.6420 | 9.5500e-003 | | 448.8809 |
| **Total** | **0.1560** | **0.0874** | **1.3079** | **4.5000e-003** | **0.5254** | **3.5600e-003** | **0.5289** | **0.1393** | **3.2800e-003** | **0.1426** | | **448.6420** | **448.6420** | **9.5500e-003** | | **448.8809** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 64.5114 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **64.5708** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1560 | 0.0874 | 1.3079 | 4.5000e-003 | 0.5254 | 3.5600e-003 | 0.5289 | 0.1393 | 3.2800e-003 | 0.1426 | | 448.6420 | 448.6420 | 9.5500e-003 | | 448.8809 |
| **Total** | **0.1560** | **0.0874** | **1.3079** | **4.5000e-003** | **0.5254** | **3.5600e-003** | **0.5289** | **0.1393** | **3.2800e-003** | **0.1426** | | **448.6420** | **448.6420** | **9.5500e-003** | | **448.8809** |

## 3.5 Paving - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0498 | 0.0279 | 0.4174 | 1.4400e-003 | 0.1677 | 1.1400e-003 | 0.1688 | 0.0445 | 1.0500e-003 | 0.0455 | | 143.1836 | 143.1836 | 3.0500e-003 | | 143.2599 |
| **Total** | **0.0498** | **0.0279** | **0.4174** | **1.4400e-003** | **0.1677** | **1.1400e-003** | **0.1688** | **0.0445** | **1.0500e-003** | **0.0455** | | **143.1836** | **143.1836** | **3.0500e-003** | | **143.2599** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0498 | 0.0279 | 0.4174 | 1.4400e-003 | 0.1677 | 1.1400e-003 | 0.1688 | 0.0445 | 1.0500e-003 | 0.0455 | | 143.1836 | 143.1836 | 3.0500e-003 | | 143.2599 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0498** | **0.0279** | **0.4174** | **1.4400e-003** | **0.1677** | **1.1400e-003** | **0.1688** | **0.0445** | **1.0500e-003** | **0.0455** | | **143.1836** | **143.1836** | **3.0500e-003** | | **143.2599** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 4.4418 | 20.2678 | 62.6666 | 0.2719 | 25.6480 | 0.1875 | 25.8355 | 6.8599 | 0.1741 | 7.0340 | | 27,751.2529 | 27,751.2529 | 1.1265 | | 27,779.4162 |
| Unmitigated | 4.4418 | 20.2678 | 62.6666 | 0.2719 | 25.6480 | 0.1875 | 25.8355 | 6.8599 | 0.1741 | 7.0340 | | 27,751.2529 | 27,751.2529 | 1.1265 | | 27,779.4162 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| High School | 1,684.47 | 571.07 | 233.92 | 5,629,693 | 5,629,693 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 1,370.88 | 1,427.04 | 1241.28 | 4,648,654 | 4,648,654 |
| Total | 3,055.35 | 1,998.11 | 1,475.20 | 10,278,348 | 10,278,348 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| High School | 16.60 | 8.40 | 6.90 | 77.80 | 17.20 | 5.00 | 75 | 19 | 6 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 0.554129 | 0.042164 | 0.205182 | 0.113554 | 0.013848 | 0.005806 | 0.021992 | 0.033191 | 0.002140 | 0.001609 | 0.004858 | 0.000715 | 0.000811 |
| Other Non-Asphalt Surfaces | 0.554129 | 0.042164 | 0.205182 | 0.113554 | 0.013848 | 0.005806 | 0.021992 | 0.033191 | 0.002140 | 0.001609 | 0.004858 | 0.000715 | 0.000811 |
| Single Family Housing | 0.554129 | 0.042164 | 0.205182 | 0.113554 | 0.013848 | 0.005806 | 0.021992 | 0.033191 | 0.002140 | 0.001609 | 0.004858 | 0.000715 | 0.000811 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.1640 | 1.4199 | 0.7317 | 8.9500e-003 | | 0.1133 | 0.1133 | | 0.1133 | 0.1133 | | 1,789.0741 | 1,789.0741 | 0.0343 | 0.0328 | 1,799.7057 |
| NaturalGas Unmitigated | 0.1640 | 1.4199 | 0.7317 | 8.9500e-003 | | 0.1133 | 0.1133 | | 0.1133 | 0.1133 | | 1,789.0741 | 1,789.0741 | 0.0343 | 0.0328 | 1,799.7057 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 3136.32 | 0.0338 | 0.3075 | 0.2583 | 1.8400e-003 | | 0.0234 | 0.0234 | | 0.0234 | 0.0234 | | 368.9788 | 368.9788 | 7.0700e-003 | 6.7600e-003 | 371.1715 |
| 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 |
| Single Family Housing | 12070.8 | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| **Total** | | **0.1640** | **1.4199** | **0.7317** | **8.9400e-003** | | **0.1133** | **0.1133** | | **0.1133** | **0.1133** | | **1,789.0741** | **1,789.0741** | **0.0343** | **0.0328** | **1,799.7057** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| High School | 3.13632 | 0.0338 | 0.3075 | 0.2583 | 1.8400e-003 | | 0.0234 | 0.0234 | | 0.0234 | 0.0234 | | 368.9788 | 368.9788 | 7.0700e-003 | 6.7600e-003 | 371.1715 |
| 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 |
| Single Family Housing | 12.0708 | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| **Total** | | **0.1640** | **1.4199** | **0.7317** | **8.9400e-003** | | **0.1133** | **0.1133** | | **0.1133** | **0.1133** | | **1,789.0741** | **1,789.0741** | **0.0343** | **0.0328** | **1,799.7057** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 51.5459 | 3.1246 | 85.1144 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.4217 | 3,962.2579 | 4.0431 | 0.0916 | 4,090.6160 |
| Unmitigated | 51.5459 | 3.1246 | 85.1144 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.4217 | 3,962.2579 | 4.0431 | 0.0916 | 4,090.6160 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.1842 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 12.2709 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37.7332 | 2.9878 | 73.2315 | 0.1868 | | 10.9999 | 10.9999 | | 10.9999 | 10.9999 | 1,348.8363 | 2,592.0000 | 3,940.8363 | 4.0225 | 0.0916 | 4,068.6802 |
| Landscaping | 0.3577 | 0.1368 | 11.8830 | 6.3000e-004 | | 0.0659 | 0.0659 | | 0.0659 | 0.0659 | | 21.4217 | 21.4217 | 0.0206 | | 21.9357 |
| **Total** | **51.5459** | **3.1246** | **85.1144** | **0.1875** | | **11.0658** | **11.0658** | | **11.0658** | **11.0658** | **1,348.8363** | **2,613.4217** | **3,962.2579** | **4.0431** | **0.0916** | **4,090.6160** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.1842 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 12.2709 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37.7332 | 2.9878 | 73.2315 | 0.1868 | | 10.9999 | 10.9999 | | 10.9999 | 10.9999 | 1,348.8363 | 2,592.0000 | 3,940.8363 | 4.0225 | 0.0916 | 4,068.6802 |
| Landscaping | 0.3577 | 0.1368 | 11.8830 | 6.3000e-004 | | 0.0659 | 0.0659 | | 0.0659 | 0.0659 | | 21.4217 | 21.4217 | 0.0206 | | 21.9357 |
| **Total** | **51.5459** | **3.1246** | **85.1144** | **0.1875** | | **11.0658** | **11.0658** | | **11.0658** | **11.0658** | **1,348.8363** | **2,613.4217** | **3,962.2579** | **4.0431** | **0.0916** | **4,090.6160** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase II Construction - South Coast Air Basin, Winter

# Phase II Construction

**South Coast Air Basin, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| High School | 130.68 | 1000sqft | 3.00 | 130,680.00 | 0 |
| Other Non-Asphalt Surfaces | 7.00 | Acre | 7.00 | 304,920.00 | 0 |
| Single Family Housing | 144.00 | Dwelling Unit | 21.00 | 483,609.00 | 412 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Demolition - Vacant Site

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Vehicle Trips -

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 35.00 | 67.00 |
| tblConstructionPhase | NumDays | 500.00 | 328.00 |
| tblLandUse | LandUseSquareFeet | 259,200.00 | 483,609.00 |
| tblLandUse | LotAcreage | 46.75 | 21.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2024 | 3.2958 | 32.4216 | 28.2619 | 0.0694 | 8.8969 | 1.3369 | 10.2338 | 3.6558 | 1.2300 | 4.8858 | 0.0000 | 6,939.2518 | 6,939.2518 | 1.9478 | 0.0000 | 6,958.8287 |
| 2025 | 68.2343 | 28.6712 | 41.6938 | 0.0997 | 3.8765 | 1.0270 | 4.9035 | 1.0407 | 0.9601 | 2.0008 | 0.0000 | 9,885.2110 | 9,885.2110 | 1.5141 | 0.0000 | 9,923.0634 |
| **Maximum** | **68.2343** | **32.4216** | **41.6938** | **0.0997** | **8.8969** | **1.3369** | **10.2338** | **3.6558** | **1.2300** | **4.8858** | **0.0000** | **9,885.2110** | **9,885.2110** | **1.9478** | **0.0000** | **9,923.0634** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2024 | 1.7617 | 24.0272 | 37.2617 | 0.0694 | 3.6062 | 0.1965 | 3.8026 | 1.4619 | 0.1963 | 1.6583 | 0.0000 | 6,939.2518 | 6,939.2518 | 1.9478 | 0.0000 | 6,958.8287 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 67.0751 | 27.9770 | 46.2239 | 0.0997 | 3.8765 | 0.2706 | 4.1471 | 1.0407 | 0.2685 | 1.3092 | 0.0000 | 9,885.2110 | 9,885.2110 | 1.5141 | 0.0000 | 9,923.0634 |
| **Maximum** | **67.0751** | **27.9770** | **46.2239** | **0.0997** | **3.8765** | **0.2706** | **4.1471** | **1.4619** | **0.2685** | **1.6583** | **0.0000** | **9,885.2110** | **9,885.2110** | **1.9478** | **0.0000** | **9,923.0634** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.77** | **14.88** | **-19.34** | **0.00** | **41.42** | **80.24** | **47.48** | **46.71** | **78.77** | **56.91** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 51.5459 | 3.1246 | 85.1144 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.4217 | 3,962.2579 | 4.0431 | 0.0916 | 4,090.6160 |
| Energy | 0.1640 | 1.4199 | 0.7317 | 8.9500e-003 | | 0.1133 | 0.1133 | | 0.1133 | 0.1133 | | 1,789.0741 | 1,789.0741 | 0.0343 | 0.0328 | 1,799.7057 |
| Mobile | 4.2550 | 20.6856 | 58.4218 | 0.2583 | 25.6480 | 0.1881 | 25.8361 | 6.8599 | 0.1746 | 7.0345 | | 26,384.4340 | 26,384.4340 | 1.1235 | | 26,412.5221 |
| **Total** | **55.9649** | **25.2301** | **144.2678** | **0.4547** | **25.6480** | **11.3672** | **37.0152** | **6.8599** | **11.3538** | **18.2137** | **1,348.8363** | **30,786.9297** | **32,135.7660** | **5.2009** | **0.1244** | **32,302.8438** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 51.5459 | 3.1246 | 85.1144 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.4217 | 3,962.2579 | 4.0431 | 0.0916 | 4,090.6160 |
| Energy | 0.1640 | 1.4199 | 0.7317 | 8.9500e-003 | | 0.1133 | 0.1133 | | 0.1133 | 0.1133 | | 1,789.0741 | 1,789.0741 | 0.0343 | 0.0328 | 1,799.7057 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 4.2550 | 20.6856 | 58.4218 | 0.2583 | 25.6480 | 0.1881 | 25.8361 | 6.8599 | 0.1746 | 7.0345 | | 26,384.4340 | 26,384.4340 | 1.1235 | | 26,412.5221 |
| **Total** | **55.9649** | **25.2301** | **144.2678** | **0.4547** | **25.6480** | **11.3672** | **37.0152** | **6.8599** | **11.3538** | **18.2137** | **1,348.8363** | **30,786.9297** | **32,135.7660** | **5.2009** | **0.1244** | **32,302.8438** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 6/19/2024 | 8/20/2024 | 5 | 45 | |
| 2 | Building Construction | Building Construction | 8/21/2024 | 11/21/2025 | 5 | 328 | |
| 3 | Architectural Coating | Architectural Coating | 8/21/2025 | 11/21/2025 | 5 | 67 | |
| 4 | Paving | Paving | 10/5/2025 | 11/21/2025 | 5 | 35 | |

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

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 7**

**Residential Indoor: 979,308; Residential Outdoor: 326,436; Non-Residential Indoor: 196,020; Non-Residential Outdoor: 65,340; Striped**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 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 | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 235.00 | 87.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 47.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2181 | 32.3770 | 27.7228 | 0.0621 | | 1.3354 | 1.3354 | | 1.2286 | 1.2286 | | 6,009.7487 | 6,009.7487 | 1.9437 | | 6,058.3405 |
| **Total** | **3.2181** | **32.3770** | **27.7228** | **0.0621** | **8.6733** | **1.3354** | **10.0087** | **3.5965** | **1.2286** | **4.8251** | | **6,009.7487** | **6,009.7487** | **1.9437** | | **6,058.3405** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0777 | 0.0446 | 0.5391 | 1.8700e-003 | 0.2236 | 1.5400e-003 | 0.2251 | 0.0593 | 1.4200e-003 | 0.0607 | | 186.3685 | 186.3685 | 4.1600e-003 | | 186.4725 |
| **Total** | **0.0777** | **0.0446** | **0.5391** | **1.8700e-003** | **0.2236** | **1.5400e-003** | **0.2251** | **0.0593** | **1.4200e-003** | **0.0607** | | **186.3685** | **186.3685** | **4.1600e-003** | | **186.4725** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,009.7487 | 6,009.7487 | 1.9437 | | 6,058.3405 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,009.7487** | **6,009.7487** | **1.9437** | | **6,058.3405** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0777 | 0.0446 | 0.5391 | 1.8700e-003 | 0.2236 | 1.5400e-003 | 0.2251 | 0.0593 | 1.4200e-003 | 0.0607 | | 186.3685 | 186.3685 | 4.1600e-003 | | 186.4725 |
| **Total** | **0.0777** | **0.0446** | **0.5391** | **1.8700e-003** | **0.2236** | **1.5400e-003** | **0.2251** | **0.0593** | **1.4200e-003** | **0.0607** | | **186.3685** | **186.3685** | **4.1600e-003** | | **186.4725** |

## 3.3 Building Construction - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1752 | 5.9200 | 1.8352 | 0.0205 | 0.5567 | 7.0700e-003 | 0.5638 | 0.1603 | 6.7500e-003 | 0.1670 | | 2,193.7230 | 2,193.7230 | 0.1298 | | 2,196.9691 |
| Worker | 0.9126 | 0.5243 | 6.3343 | 0.0220 | 2.6268 | 0.0181 | 2.6449 | 0.6966 | 0.0167 | 0.7133 | | 2,189.8299 | 2,189.8299 | 0.0489 | | 2,191.0520 |
| **Total** | **1.0878** | **6.4443** | **8.1695** | **0.0424** | **3.1834** | **0.0252** | **3.2087** | **0.8569** | **0.0235** | **0.8803** | | **4,383.5529** | **4,383.5529** | **0.1787** | | **4,388.0210** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1752 | 5.9200 | 1.8352 | 0.0205 | 0.5567 | 7.0700e-003 | 0.5638 | 0.1603 | 6.7500e-003 | 0.1670 | | 2,193.7230 | 2,193.7230 | 0.1298 | | 2,196.9691 |
| Worker | 0.9126 | 0.5243 | 6.3343 | 0.0220 | 2.6268 | 0.0181 | 2.6449 | 0.6966 | 0.0167 | 0.7133 | | 2,189.8299 | 2,189.8299 | 0.0489 | | 2,191.0520 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.0878** | **6.4443** | **8.1695** | **0.0424** | **3.1834** | **0.0252** | **3.2087** | **0.8569** | **0.0235** | **0.8803** | | **4,383.5529** | **4,383.5529** | **0.1787** | | **4,388.0210** |

## 3.3 Building Construction - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1707 | 5.8685 | 1.7886 | 0.0203 | 0.5567 | 6.9300e-003 | 0.5636 | 0.1603 | 6.6300e-003 | 0.1669 | | 2,181.8701 | 2,181.8701 | 0.1278 | | 2,185.0653 |
| Worker | 0.8694 | 0.4794 | 5.8817 | 0.0211 | 2.6268 | 0.0178 | 2.6445 | 0.6966 | 0.0164 | 0.7130 | | 2,103.6641 | 2,103.6641 | 0.0445 | | 2,104.7774 |
| **Total** | **1.0401** | **6.3479** | **7.6703** | **0.0414** | **3.1835** | **0.0247** | **3.2082** | **0.8569** | **0.0230** | **0.8799** | | **4,285.5342** | **4,285.5342** | **0.1723** | | **4,289.8427** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1707 | 5.8685 | 1.7886 | 0.0203 | 0.5567 | 6.9300e-003 | 0.5636 | 0.1603 | 6.6300e-003 | 0.1669 | | 2,181.8701 | 2,181.8701 | 0.1278 | | 2,185.0653 |
| Worker | 0.8694 | 0.4794 | 5.8817 | 0.0211 | 2.6268 | 0.0178 | 2.6445 | 0.6966 | 0.0164 | 0.7130 | | 2,103.6641 | 2,103.6641 | 0.0445 | | 2,104.7774 |
| **Total** | **1.0401** | **6.3479** | **7.6703** | **0.0414** | **3.1835** | **0.0247** | **3.2082** | **0.8569** | **0.0230** | **0.8799** | | **4,285.5342** | **4,285.5342** | **0.1723** | | **4,289.8427** |

## 3.4 Architectural Coating - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Archit. Coating | 64.5114 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **64.6822** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1739 | 0.0959 | 1.1763 | 4.2200e-003 | 0.5254 | 3.5600e-003 | 0.5289 | 0.1393 | 3.2800e-003 | 0.1426 | | 420.7328 | 420.7328 | 8.9100e-003 | | 420.9555 |
| **Total** | **0.1739** | **0.0959** | **1.1763** | **4.2200e-003** | **0.5254** | **3.5600e-003** | **0.5289** | **0.1393** | **3.2800e-003** | **0.1426** | | **420.7328** | **420.7328** | **8.9100e-003** | | **420.9555** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 64.5114 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **64.5708** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1739 | 0.0959 | 1.1763 | 4.2200e-003 | 0.5254 | 3.5600e-003 | 0.5289 | 0.1393 | 3.2800e-003 | 0.1426 | | 420.7328 | 420.7328 | 8.9100e-003 | | 420.9555 |
| **Total** | **0.1739** | **0.0959** | **1.1763** | **4.2200e-003** | **0.5254** | **3.5600e-003** | **0.5289** | **0.1393** | **3.2800e-003** | **0.1426** | | **420.7328** | **420.7328** | **8.9100e-003** | | **420.9555** |

## 3.5 Paving - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**Unmitigated Construction Off-Site**

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0555 | 0.0306 | 0.3754 | 1.3500e-003 | 0.1677 | 1.1400e-003 | 0.1688 | 0.0445 | 1.0500e-003 | 0.0455 | | 134.2764 | 134.2764 | 2.8400e-003 | | 134.3475 |
| **Total** | **0.0555** | **0.0306** | **0.3754** | **1.3500e-003** | **0.1677** | **1.1400e-003** | **0.1688** | **0.0445** | **1.0500e-003** | **0.0455** | | **134.2764** | **134.2764** | **2.8400e-003** | | **134.3475** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0555 | 0.0306 | 0.3754 | 1.3500e-003 | 0.1677 | 1.1400e-003 | 0.1688 | 0.0445 | 1.0500e-003 | 0.0455 | | 134.2764 | 134.2764 | 2.8400e-003 | | 134.3475 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0555** | **0.0306** | **0.3754** | **1.3500e-003** | **0.1677** | **1.1400e-003** | **0.1688** | **0.0445** | **1.0500e-003** | **0.0455** | | **134.2764** | **134.2764** | **2.8400e-003** | | **134.3475** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 4.2550 | 20.6856 | 58.4218 | 0.2583 | 25.6480 | 0.1881 | 25.8361 | 6.8599 | 0.1746 | 7.0345 | | 26,384.4340 | 26,384.4340 | 1.1235 | | 26,412.5221 |
| Unmitigated | 4.2550 | 20.6856 | 58.4218 | 0.2583 | 25.6480 | 0.1881 | 25.8361 | 6.8599 | 0.1746 | 7.0345 | | 26,384.4340 | 26,384.4340 | 1.1235 | | 26,412.5221 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| High School | 1,684.47 | 571.07 | 233.92 | 5,629,693 | 5,629,693 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 1,370.88 | 1,427.04 | 1241.28 | 4,648,654 | 4,648,654 |
| Total | 3,055.35 | 1,998.11 | 1,475.20 | 10,278,348 | 10,278,348 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| High School | 16.60 | 8.40 | 6.90 | 77.80 | 17.20 | 5.00 | 75 | 19 | 6 |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 0.554129 | 0.042164 | 0.205182 | 0.113554 | 0.013848 | 0.005806 | 0.021992 | 0.033191 | 0.002140 | 0.001609 | 0.004858 | 0.000715 | 0.000811 |
| Other Non-Asphalt Surfaces | 0.554129 | 0.042164 | 0.205182 | 0.113554 | 0.013848 | 0.005806 | 0.021992 | 0.033191 | 0.002140 | 0.001609 | 0.004858 | 0.000715 | 0.000811 |
| Single Family Housing | 0.554129 | 0.042164 | 0.205182 | 0.113554 | 0.013848 | 0.005806 | 0.021992 | 0.033191 | 0.002140 | 0.001609 | 0.004858 | 0.000715 | 0.000811 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.1640 | 1.4199 | 0.7317 | 8.9500e-003 | | 0.1133 | 0.1133 | | 0.1133 | 0.1133 | | 1,789.0741 | 1,789.0741 | 0.0343 | 0.0328 | 1,799.7057 |
| NaturalGas Unmitigated | 0.1640 | 1.4199 | 0.7317 | 8.9500e-003 | | 0.1133 | 0.1133 | | 0.1133 | 0.1133 | | 1,789.0741 | 1,789.0741 | 0.0343 | 0.0328 | 1,799.7057 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | 3136.32 | 0.0338 | 0.3075 | 0.2583 | 1.8400e-003 | | 0.0234 | 0.0234 | | 0.0234 | 0.0234 | | 368.9788 | 368.9788 | 7.0700e-003 | 6.7600e-003 | 371.1715 |
| 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 |
| Single Family Housing | 12070.8 | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| **Total** | | **0.1640** | **1.4199** | **0.7317** | **8.9400e-003** | | **0.1133** | **0.1133** | | **0.1133** | **0.1133** | | **1,789.0741** | **1,789.0741** | **0.0343** | **0.0328** | **1,799.7057** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| High School | 3.13632 | 0.0338 | 0.3075 | 0.2583 | 1.8400e-003 | | 0.0234 | 0.0234 | | 0.0234 | 0.0234 | | 368.9788 | 368.9788 | 7.0700e-003 | 6.7600e-003 | 371.1715 |
| 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 |
| Single Family Housing | 12.0708 | 0.1302 | 1.1124 | 0.4734 | 7.1000e-003 | | 0.0899 | 0.0899 | | 0.0899 | 0.0899 | | 1,420.0953 | 1,420.0953 | 0.0272 | 0.0260 | 1,428.5342 |
| **Total** | | **0.1640** | **1.4199** | **0.7317** | **8.9400e-003** | | **0.1133** | **0.1133** | | **0.1133** | **0.1133** | | **1,789.0741** | **1,789.0741** | **0.0343** | **0.0328** | **1,799.7057** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 51.5459 | 3.1246 | 85.1144 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.4217 | 3,962.2579 | 4.0431 | 0.0916 | 4,090.6160 |
| Unmitigated | 51.5459 | 3.1246 | 85.1144 | 0.1875 | | 11.0658 | 11.0658 | | 11.0658 | 11.0658 | 1,348.8363 | 2,613.4217 | 3,962.2579 | 4.0431 | 0.0916 | 4,090.6160 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.1842 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 12.2709 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37.7332 | 2.9878 | 73.2315 | 0.1868 | | 10.9999 | 10.9999 | | 10.9999 | 10.9999 | 1,348.8363 | 2,592.0000 | 3,940.8363 | 4.0225 | 0.0916 | 4,068.6802 |
| Landscaping | 0.3577 | 0.1368 | 11.8830 | 6.3000e-004 | | 0.0659 | 0.0659 | | 0.0659 | 0.0659 | | 21.4217 | 21.4217 | 0.0206 | | 21.9357 |
| **Total** | **51.5459** | **3.1246** | **85.1144** | **0.1875** | | **11.0658** | **11.0658** | | **11.0658** | **11.0658** | **1,348.8363** | **2,613.4217** | **3,962.2579** | **4.0431** | **0.0916** | **4,090.6160** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.1842 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 12.2709 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 37.7332 | 2.9878 | 73.2315 | 0.1868 | | 10.9999 | 10.9999 | | 10.9999 | 10.9999 | 1,348.8363 | 2,592.0000 | 3,940.8363 | 4.0225 | 0.0916 | 4,068.6802 |
| Landscaping | 0.3577 | 0.1368 | 11.8830 | 6.3000e-004 | | 0.0659 | 0.0659 | | 0.0659 | 0.0659 | | 21.4217 | 21.4217 | 0.0206 | | 21.9357 |
| **Total** | **51.5459** | **3.1246** | **85.1144** | **0.1875** | | **11.0658** | **11.0658** | | **11.0658** | **11.0658** | **1,348.8363** | **2,613.4217** | **3,962.2579** | **4.0431** | **0.0916** | **4,090.6160** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase III Construction - South Coast Air Basin, Annual

# Phase III Construction

**South Coast Air Basin, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 155.00 | Dwelling Unit | 69.00 | 615,399.00 | 443 |
| Other Non-Asphalt Surfaces | 35.00 | Acre | 35.00 | 1,524,600.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Demolition - Vacant Site

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4
Area Mitigation -

Water Mitigation -

Vehicle Trips -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 220.00 | 131.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 262.00 |
| tblConstructionPhase | NumDays | 220.00 | 108.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 8/24/2040 | 4/21/2027 |
| tblConstructionPhase | PhaseEndDate | 12/17/2038 | 4/21/2027 |
| tblConstructionPhase | PhaseEndDate | 10/21/2039 | 4/21/2027 |
| tblConstructionPhase | PhaseStartDate | 10/22/2039 | 10/21/2026 |
| tblConstructionPhase | PhaseStartDate | 1/30/2027 | 4/21/2026 |
| tblConstructionPhase | PhaseStartDate | 12/18/2038 | 11/21/2026 |
| tblLandUse | LandUseSquareFeet | 279,000.00 | 615,399.00 |
| tblLandUse | LotAcreage | 50.32 | 69.00 |

# 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 | | | | | |
| 2025 | 0.0415 | 0.3918 | 0.3758 | 8.9000e-004 | 0.4983 | 0.0159 | 0.5142 | 0.0915 | 0.0146 | 0.1061 | 0.0000 | 78.6184 | 78.6184 | 0.0247 | 0.0000 | 79.2366 |
| 2026 | 1.6372 | 6.7276 | 7.3235 | 0.0229 | 2.1196 | 0.2103 | 2.3298 | 0.7249 | 0.1946 | 0.9195 | 0.0000 | 2,076.6749 | 2,076.6749 | 0.3319 | 0.0000 | 2,084.9717 |
| 2027 | 1.5376 | 1.9362 | 2.5207 | 8.0700e-003 | 0.9111 | 0.0544 | 0.9655 | 0.1967 | 0.0507 | 0.2474 | 0.0000 | 738.4947 | 738.4947 | 0.0843 | 0.0000 | 740.6019 |
| **Maximum** | **1.6372** | **6.7276** | **7.3235** | **0.0229** | **2.1196** | **0.2103** | **2.3298** | **0.7249** | **0.1946** | **0.9195** | **0.0000** | **2,076.6749** | **2,076.6749** | **0.3319** | **0.0000** | **2,084.9717** |

### 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 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 0.0223 | 0.3363 | 0.5213 | 8.9000e-004 | 0.1962 | 2.7500e-003 | 0.1990 | 0.0362 | 2.7500e-003 | 0.0389 | 0.0000 | 78.6183 | 78.6183 | 0.0247 | 0.0000 | 79.2365 |
| 2026 | 1.3858 | 6.1162 | 8.8833 | 0.0229 | 1.3895 | 0.0465 | 1.4360 | 0.4344 | 0.0460 | 0.4804 | 0.0000 | 2,076.6738 | 2,076.6738 | 0.3319 | 0.0000 | 2,084.9705 |
| 2027 | 1.4773 | 1.8672 | 2.8088 | 8.0700e-003 | 0.6218 | 0.0147 | 0.6365 | 0.1484 | 0.0145 | 0.1629 | 0.0000 | 738.4944 | 738.4944 | 0.0843 | 0.0000 | 740.6016 |
| **Maximum** | **1.4773** | **6.1162** | **8.8833** | **0.0229** | **1.3895** | **0.0465** | **1.4360** | **0.4344** | **0.0460** | **0.4804** | **0.0000** | **2,076.6738** | **2,076.6738** | **0.3319** | **0.0000** | **2,084.9705** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **10.29** | **8.13** | **-19.50** | **0.00** | **37.44** | **77.19** | **40.37** | **38.91** | **75.66** | **46.41** | **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** | **11-22-2025** | **2-21-2026** | 1.0171 | 0.8417 |
| **2** | **2-22-2026** | **5-21-2026** | 1.3776 | 1.1882 |
| **3** | **5-22-2026** | **8-21-2026** | 2.1858 | 1.9519 |
| **4** | **8-22-2026** | **11-21-2026** | 2.5918 | 2.3559 |
| **5** | **11-22-2026** | **2-21-2027** | 3.3889 | 3.1965 |
| **6** | **2-22-2027** | **5-21-2027** | 1.6775 | 1.6384 |
| | | **Highest** | 3.3889 | 3.1965 |

## 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 | 3.0917 | 0.0586 | 2.5827 | 2.6000e-003 | | 0.1569 | 0.1569 | | 0.1569 | 0.1569 | 16.4640 | 34.2500 | 50.7140 | 0.0516 | 1.1200e-003 | 52.3370 |
| Energy | 0.0256 | 0.2185 | 0.0930 | 1.3900e-003 | | 0.0177 | 0.0177 | | 0.0177 | 0.0177 | 0.0000 | 683.5476 | 683.5476 | 0.0226 | 8.3200e-003 | 686.5915 |
| Mobile | 0.3079 | 1.6135 | 4.1582 | 0.0190 | 1.8999 | 0.0127 | 1.9126 | 0.5089 | 0.0118 | 0.5207 | 0.0000 | 1,761.5094 | 1,761.5094 | 0.0723 | 0.0000 | 1,763.3164 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 36.8693 | 0.0000 | 36.8693 | 2.1789 | 0.0000 | 91.3420 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3.2039 | 64.4352 | 67.6391 | 0.3317 | 8.3200e-003 | 78.4119 |
| **Total** | **3.4252** | **1.8906** | **6.8339** | **0.0230** | **1.8999** | **0.1873** | **2.0871** | **0.5089** | **0.1864** | **0.6952** | **56.5371** | **2,543.7422** | **2,600.2793** | **2.6571** | **0.0178** | **2,671.9988** |

### 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 | 3.0917 | 0.0586 | 2.5827 | 2.6000e-003 | | 0.1569 | 0.1569 | | 0.1569 | 0.1569 | 16.4640 | 34.2500 | 50.7140 | 0.0516 | 1.1200e-003 | 52.3370 |
| Energy | 0.0256 | 0.2185 | 0.0930 | 1.3900e-003 | | 0.0177 | 0.0177 | | 0.0177 | 0.0177 | 0.0000 | 683.5476 | 683.5476 | 0.0226 | 8.3200e-003 | 686.5915 |
| Mobile | 0.3079 | 1.6135 | 4.1582 | 0.0190 | 1.8999 | 0.0127 | 1.9126 | 0.5089 | 0.0118 | 0.5207 | 0.0000 | 1,761.5094 | 1,761.5094 | 0.0723 | 0.0000 | 1,763.3164 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 36.8693 | 0.0000 | 36.8693 | 2.1789 | 0.0000 | 91.3420 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 2.5631 | 54.6809 | 57.2440 | 0.2655 | 6.6800e-003 | 65.8734 |
| **Total** | **3.4252** | **1.8906** | **6.8339** | **0.0230** | **1.8999** | **0.1873** | **2.0871** | **0.5089** | **0.1864** | **0.6952** | **55.8963** | **2,533.9879** | **2,589.8842** | **2.5909** | **0.0161** | **2,659.4604** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **1.13** | **0.38** | **0.40** | **2.49** | **9.23** | **0.47** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 11/22/2025 | 1/29/2027 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 4/21/2026 | 4/21/2027 | 5 | 262 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3 | Paving | Paving | 11/21/2026 | 4/21/2027 | 5 | 108 | |
| 4 | Architectural Coating | Architectural Coating | 10/21/2026 | 4/21/2027 | 5 | 131 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 35**

**Residential Indoor: 1,246,183; Residential Outdoor: 415,394; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| 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 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 696.00 | 266.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 139.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2025

**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 | | | | | 0.4953 | 0.0000 | 0.4953 | 0.0907 | 0.0000 | 0.0907 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0406 | 0.3912 | 0.3686 | 8.7000e-004 | | 0.0158 | 0.0158 | | 0.0146 | 0.0146 | 0.0000 | 76.3087 | 76.3087 | 0.0247 | 0.0000 | 76.9257 |
| **Total** | **0.0406** | **0.3912** | **0.3686** | **8.7000e-004** | **0.4953** | **0.0158** | **0.5111** | **0.0907** | **0.0146** | **0.1053** | **0.0000** | **76.3087** | **76.3087** | **0.0247** | **0.0000** | **76.9257** |

**Unmitigated Construction Off-Site**

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.3000e-004 | 5.9000e-004 | 7.2000e-003 | 3.0000e-005 | 3.0700e-003 | 2.0000e-005 | 3.0900e-003 | 8.2000e-004 | 2.0000e-005 | 8.4000e-004 | 0.0000 | 2.3097 | 2.3097 | 5.0000e-005 | 0.0000 | 2.3109 |
| **Total** | **9.3000e-004** | **5.9000e-004** | **7.2000e-003** | **3.0000e-005** | **3.0700e-003** | **2.0000e-005** | **3.0900e-003** | **8.2000e-004** | **2.0000e-005** | **8.4000e-004** | **0.0000** | **2.3097** | **2.3097** | **5.0000e-005** | **0.0000** | **2.3109** |

## 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 | | | | | 0.1932 | 0.0000 | 0.1932 | 0.0354 | 0.0000 | 0.0354 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0213 | 0.3358 | 0.5141 | 8.7000e-004 | | 2.7300e-003 | 2.7300e-003 | | 2.7300e-003 | 2.7300e-003 | 0.0000 | 76.3086 | 76.3086 | 0.0247 | 0.0000 | 76.9256 |
| **Total** | **0.0213** | **0.3358** | **0.5141** | **8.7000e-004** | **0.1932** | **2.7300e-003** | **0.1959** | **0.0354** | **2.7300e-003** | **0.0381** | **0.0000** | **76.3086** | **76.3086** | **0.0247** | **0.0000** | **76.9256** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.3000e-004 | 5.9000e-004 | 7.2000e-003 | 3.0000e-005 | 3.0700e-003 | 2.0000e-005 | 3.0900e-003 | 8.2000e-004 | 2.0000e-005 | 8.4000e-004 | 0.0000 | 2.3097 | 2.3097 | 5.0000e-005 | 0.0000 | 2.3109 |
| **Total** | **9.3000e-004** | **5.9000e-004** | **7.2000e-003** | **3.0000e-005** | **3.0700e-003** | **2.0000e-005** | **3.0900e-003** | **8.2000e-004** | **2.0000e-005** | **8.4000e-004** | **0.0000** | **2.3097** | **2.3097** | **5.0000e-005** | **0.0000** | **2.3109** |

## 3.2 Grading - 2026

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 1.1968 | 0.0000 | 1.1968 | 0.4764 | 0.0000 | 0.4764 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3786 | 3.6466 | 3.4362 | 8.1000e-003 | | 0.1476 | 0.1476 | | 0.1358 | 0.1358 | 0.0000 | 711.3061 | 711.3061 | 0.2301 | 0.0000 | 717.0573 |
| **Total** | **0.3786** | **3.6466** | **3.4362** | **8.1000e-003** | **1.1968** | **0.1476** | **1.3444** | **0.4764** | **0.1358** | **0.6121** | **0.0000** | **711.3061** | **711.3061** | **0.2301** | **0.0000** | **717.0573** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.2600e-003 | 5.0500e-003 | 0.0628 | 2.3000e-004 | 0.0286 | 1.9000e-004 | 0.0288 | 7.6000e-003 | 1.8000e-004 | 7.7800e-003 | 0.0000 | 20.7670 | 20.7670 | 4.2000e-004 | 0.0000 | 20.7774 |
| **Total** | **8.2600e-003** | **5.0500e-003** | **0.0628** | **2.3000e-004** | **0.0286** | **1.9000e-004** | **0.0288** | **7.6000e-003** | **1.8000e-004** | **7.7800e-003** | **0.0000** | **20.7670** | **20.7670** | **4.2000e-004** | **0.0000** | **20.7774** |

### 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 | | | | | 0.4668 | 0.0000 | 0.4668 | 0.1858 | 0.0000 | 0.1858 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1988 | 3.1297 | 4.7923 | 8.1000e-003 | | 0.0254 | 0.0254 | | 0.0254 | 0.0254 | 0.0000 | 711.3052 | 711.3052 | 0.2301 | 0.0000 | 717.0565 |
| **Total** | **0.1988** | **3.1297** | **4.7923** | **8.1000e-003** | **0.4668** | **0.0254** | **0.4922** | **0.1858** | **0.0254** | **0.2112** | **0.0000** | **711.3052** | **711.3052** | **0.2301** | **0.0000** | **717.0565** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.2600e-003 | 5.0500e-003 | 0.0628 | 2.3000e-004 | 0.0286 | 1.9000e-004 | 0.0288 | 7.6000e-003 | 1.8000e-004 | 7.7800e-003 | 0.0000 | 20.7670 | 20.7670 | 4.2000e-004 | 0.0000 | 20.7774 |
| **Total** | **8.2600e-003** | **5.0500e-003** | **0.0628** | **2.3000e-004** | **0.0286** | **1.9000e-004** | **0.0288** | **7.6000e-003** | **1.8000e-004** | **7.7800e-003** | **0.0000** | **20.7670** | **20.7670** | **4.2000e-004** | **0.0000** | **20.7774** |

## 3.2 Grading - 2027

**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 | | | | | 0.4742 | 0.0000 | 0.4742 | 0.0791 | 0.0000 | 0.0791 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0305 | 0.2934 | 0.2765 | 6.5000e-004 | | 0.0119 | 0.0119 | | 0.0109 | 0.0109 | 0.0000 | 57.2315 | 57.2315 | 0.0185 | 0.0000 | 57.6943 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0305** | **0.2934** | **0.2765** | **6.5000e-004** | **0.4742** | **0.0119** | **0.4861** | **0.0791** | **0.0109** | **0.0901** | **0.0000** | **57.2315** | **57.2315** | **0.0185** | **0.0000** | **57.6943** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.3000e-004 | 3.7000e-004 | 4.7400e-003 | 2.0000e-005 | 2.3000e-003 | 1.0000e-005 | 2.3200e-003 | 6.1000e-004 | 1.0000e-005 | 6.3000e-004 | 0.0000 | 1.6168 | 1.6168 | 3.0000e-005 | 0.0000 | 1.6176 |
| **Total** | **6.3000e-004** | **3.7000e-004** | **4.7400e-003** | **2.0000e-005** | **2.3000e-003** | **1.0000e-005** | **2.3200e-003** | **6.1000e-004** | **1.0000e-005** | **6.3000e-004** | **0.0000** | **1.6168** | **1.6168** | **3.0000e-005** | **0.0000** | **1.6176** |

## 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 | | | | | 0.1849 | 0.0000 | 0.1849 | 0.0309 | 0.0000 | 0.0309 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0160 | 0.2518 | 0.3856 | 6.5000e-004 | | 2.0500e-003 | 2.0500e-003 | | 2.0500e-003 | 2.0500e-003 | 0.0000 | 57.2315 | 57.2315 | 0.0185 | 0.0000 | 57.6942 |
| **Total** | **0.0160** | **0.2518** | **0.3856** | **6.5000e-004** | **0.1849** | **2.0500e-003** | **0.1870** | **0.0309** | **2.0500e-003** | **0.0329** | **0.0000** | **57.2315** | **57.2315** | **0.0185** | **0.0000** | **57.6942** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.3000e-004 | 3.7000e-004 | 4.7400e-003 | 2.0000e-005 | 2.3000e-003 | 1.0000e-005 | 2.3200e-003 | 6.1000e-004 | 1.0000e-005 | 6.3000e-004 | 0.0000 | 1.6168 | 1.6168 | 3.0000e-005 | 0.0000 | 1.6176 |
| **Total** | **6.3000e-004** | **3.7000e-004** | **4.7400e-003** | **2.0000e-005** | **2.3000e-003** | **1.0000e-005** | **2.3200e-003** | **6.1000e-004** | **1.0000e-005** | **6.3000e-004** | **0.0000** | **1.6168** | **1.6168** | **3.0000e-005** | **0.0000** | **1.6176** |

## 3.3 Building Construction - 2026

### 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 | 0.1251 | 1.1410 | 1.4718 | 2.4700e-003 | | 0.0483 | 0.0483 | | 0.0454 | 0.0454 | 0.0000 | 212.2063 | 212.2063 | 0.0499 | 0.0000 | 213.4534 |
| **Total** | **0.1251** | **1.1410** | **1.4718** | **2.4700e-003** | | **0.0483** | **0.0483** | | **0.0454** | **0.0454** | **0.0000** | **212.2063** | **212.2063** | **0.0499** | **0.0000** | **213.4534** |

### 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 | 0.0454 | 1.6503 | 0.4706 | 5.7400e-003 | 0.1534 | 1.8600e-003 | 0.1552 | 0.0443 | 1.7700e-003 | 0.0460 | 0.0000 | 559.5297 | 559.5297 | 0.0310 | 0.0000 | 560.3037 |
| Worker | 0.2015 | 0.1232 | 1.5315 | 5.6000e-003 | 0.6987 | 4.6600e-003 | 0.7034 | 0.1856 | 4.2900e-003 | 0.1899 | 0.0000 | 506.7135 | 506.7135 | 0.0102 | 0.0000 | 506.9684 |
| **Total** | **0.2469** | **1.7734** | **2.0022** | **0.0113** | **0.8521** | **6.5200e-003** | **0.8586** | **0.2298** | **6.0600e-003** | **0.2359** | **0.0000** | **1,066.2432** | **1,066.2432** | **0.0412** | **0.0000** | **1,067.2721** |

## 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 | 0.0617 | 1.0414 | 1.6355 | 2.4700e-003 | | 0.0124 | 0.0124 | | 0.0124 | 0.0124 | 0.0000 | 212.2061 | 212.2061 | 0.0499 | 0.0000 | 213.4531 |
| **Total** | **0.0617** | **1.0414** | **1.6355** | **2.4700e-003** | | **0.0124** | **0.0124** | | **0.0124** | **0.0124** | **0.0000** | **212.2061** | **212.2061** | **0.0499** | **0.0000** | **213.4531** |

## 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 | 0.0454 | 1.6503 | 0.4706 | 5.7400e-003 | 0.1534 | 1.8600e-003 | 0.1552 | 0.0443 | 1.7700e-003 | 0.0460 | 0.0000 | 559.5297 | 559.5297 | 0.0310 | 0.0000 | 560.3037 |
| Worker | 0.2015 | 0.1232 | 1.5315 | 5.6000e-003 | 0.6987 | 4.6600e-003 | 0.7034 | 0.1856 | 4.2900e-003 | 0.1899 | 0.0000 | 506.7135 | 506.7135 | 0.0102 | 0.0000 | 506.9684 |
| **Total** | **0.2469** | **1.7734** | **2.0022** | **0.0113** | **0.8521** | **6.5200e-003** | **0.8586** | **0.2298** | **6.0600e-003** | **0.2359** | **0.0000** | **1,066.2432** | **1,066.2432** | **0.0412** | **0.0000** | **1,067.2721** |

## 3.3 Building Construction - 2027

### 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 | 0.0540 | 0.4926 | 0.6353 | 1.0600e-003 | | 0.0208 | 0.0208 | | 0.0196 | 0.0196 | 0.0000 | 91.6082 | 91.6082 | 0.0215 | 0.0000 | 92.1465 |
| **Total** | **0.0540** | **0.4926** | **0.6353** | **1.0600e-003** | | **0.0208** | **0.0208** | | **0.0196** | **0.0196** | **0.0000** | **91.6082** | **91.6082** | **0.0215** | **0.0000** | **92.1465** |

### 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 | 0.0192 | 0.7057 | 0.1998 | 2.4600e-003 | 0.0662 | 7.9000e-004 | 0.0670 | 0.0191 | 7.5000e-004 | 0.0199 | 0.0000 | 240.3838 | 240.3838 | 0.0132 | 0.0000 | 240.7127 |
| Worker | 0.0830 | 0.0490 | 0.6199 | 2.3400e-003 | 0.3016 | 1.9000e-003 | 0.3035 | 0.0801 | 1.7500e-003 | 0.0819 | 0.0000 | 211.6601 | 211.6601 | 4.0400e-003 | 0.0000 | 211.7611 |
| **Total** | **0.1022** | **0.7548** | **0.8197** | **4.8000e-003** | **0.3678** | **2.6900e-003** | **0.3705** | **0.0992** | **2.5000e-003** | **0.1017** | **0.0000** | **452.0439** | **452.0439** | **0.0172** | **0.0000** | **452.4738** |

### 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 | 0.0266 | 0.4495 | 0.7060 | 1.0600e-003 | | 5.3500e-003 | 5.3500e-003 | | 5.3500e-003 | 5.3500e-003 | 0.0000 | 91.6081 | 91.6081 | 0.0215 | 0.0000 | 92.1464 |
| **Total** | **0.0266** | **0.4495** | **0.7060** | **1.0600e-003** | | **5.3500e-003** | **5.3500e-003** | | **5.3500e-003** | **5.3500e-003** | **0.0000** | **91.6081** | **91.6081** | **0.0215** | **0.0000** | **92.1464** |

**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 | 0.0192 | 0.7057 | 0.1998 | 2.4600e-003 | 0.0662 | 7.9000e-004 | 0.0670 | 0.0191 | 7.5000e-004 | 0.0199 | 0.0000 | 240.3838 | 240.3838 | 0.0132 | 0.0000 | 240.7127 |
| Worker | 0.0830 | 0.0490 | 0.6199 | 2.3400e-003 | 0.3016 | 1.9000e-003 | 0.3035 | 0.0801 | 1.7500e-003 | 0.0819 | 0.0000 | 211.6601 | 211.6601 | 4.0400e-003 | 0.0000 | 211.7611 |
| **Total** | **0.1022** | **0.7548** | **0.8197** | **4.8000e-003** | **0.3678** | **2.6900e-003** | **0.3705** | **0.0992** | **2.5000e-003** | **0.1017** | **0.0000** | **452.0439** | **452.0439** | **0.0172** | **0.0000** | **452.4738** |

## 3.4 Paving - 2026

**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 | 0.0133 | 0.1244 | 0.2114 | 3.3000e-004 | | 6.0700e-003 | 6.0700e-003 | | 5.5800e-003 | 5.5800e-003 | 0.0000 | 29.0279 | 29.0279 | 9.3900e-003 | 0.0000 | 29.2626 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0133** | **0.1244** | **0.2114** | **3.3000e-004** | | **6.0700e-003** | **6.0700e-003** | | **5.5800e-003** | **5.5800e-003** | **0.0000** | **29.0279** | **29.0279** | **9.3900e-003** | **0.0000** | **29.2626** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.9000e-004 | 4.2000e-004 | 5.2300e-003 | 2.0000e-005 | 2.3900e-003 | 2.0000e-005 | 2.4000e-003 | 6.3000e-004 | 1.0000e-005 | 6.5000e-004 | 0.0000 | 1.7306 | 1.7306 | 3.0000e-005 | 0.0000 | 1.7315 |
| **Total** | **6.9000e-004** | **4.2000e-004** | **5.2300e-003** | **2.0000e-005** | **2.3900e-003** | **2.0000e-005** | **2.4000e-003** | **6.3000e-004** | **1.0000e-005** | **6.5000e-004** | **0.0000** | **1.7306** | **1.7306** | **3.0000e-005** | **0.0000** | **1.7315** |

## 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 | 8.1300e-003 | 0.1310 | 0.2508 | 3.3000e-004 | | 1.3300e-003 | 1.3300e-003 | | 1.3300e-003 | 1.3300e-003 | 0.0000 | 29.0279 | 29.0279 | 9.3900e-003 | 0.0000 | 29.2626 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **8.1300e-003** | **0.1310** | **0.2508** | **3.3000e-004** | | **1.3300e-003** | **1.3300e-003** | | **1.3300e-003** | **1.3300e-003** | **0.0000** | **29.0279** | **29.0279** | **9.3900e-003** | **0.0000** | **29.2626** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.9000e-004 | 4.2000e-004 | 5.2300e-003 | 2.0000e-005 | 2.3900e-003 | 2.0000e-005 | 2.4000e-003 | 6.3000e-004 | 1.0000e-005 | 6.5000e-004 | 0.0000 | 1.7306 | 1.7306 | 3.0000e-005 | 0.0000 | 1.7315 |
| **Total** | **6.9000e-004** | **4.2000e-004** | **5.2300e-003** | **2.0000e-005** | **2.3900e-003** | **2.0000e-005** | **2.4000e-003** | **6.3000e-004** | **1.0000e-005** | **6.5000e-004** | **0.0000** | **1.7306** | **1.7306** | **3.0000e-005** | **0.0000** | **1.7315** |

## 3.4 Paving - 2027

### 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 | 0.0362 | 0.3390 | 0.5758 | 9.0000e-004 | | 0.0165 | 0.0165 | | 0.0152 | 0.0152 | 0.0000 | 79.0761 | 79.0761 | 0.0256 | 0.0000 | 79.7154 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0362** | **0.3390** | **0.5758** | **9.0000e-004** | | **0.0165** | **0.0165** | | **0.0152** | **0.0152** | **0.0000** | **79.0761** | **79.0761** | **0.0256** | **0.0000** | **79.7154** |

### Unmitigated Construction Off-Site

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.7900e-003 | 1.0600e-003 | 0.0134 | 5.0000e-005 | 6.5000e-003 | 4.0000e-005 | 6.5400e-003 | 1.7300e-003 | 4.0000e-005 | 1.7600e-003 | 0.0000 | 4.5616 | 4.5616 | 9.0000e-005 | 0.0000 | 4.5638 |
| **Total** | **1.7900e-003** | **1.0600e-003** | **0.0134** | **5.0000e-005** | **6.5000e-003** | **4.0000e-005** | **6.5400e-003** | **1.7300e-003** | **4.0000e-005** | **1.7600e-003** | **0.0000** | **4.5616** | **4.5616** | **9.0000e-005** | **0.0000** | **4.5638** |

## 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 | 0.0222 | 0.3569 | 0.6832 | 9.0000e-004 | | 3.6100e-003 | 3.6100e-003 | | 3.6100e-003 | 3.6100e-003 | 0.0000 | 79.0760 | 79.0760 | 0.0256 | 0.0000 | 79.7153 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0222** | **0.3569** | **0.6832** | **9.0000e-004** | | **3.6100e-003** | **3.6100e-003** | | **3.6100e-003** | **3.6100e-003** | **0.0000** | **79.0760** | **79.0760** | **0.0256** | **0.0000** | **79.7153** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.7900e-003 | 1.0600e-003 | 0.0134 | 5.0000e-005 | 6.5000e-003 | 4.0000e-005 | 6.5400e-003 | 1.7300e-003 | 4.0000e-005 | 1.7600e-003 | 0.0000 | 4.5616 | 4.5616 | 9.0000e-005 | 0.0000 | 4.5638 |
| **Total** | **1.7900e-003** | **1.0600e-003** | **0.0134** | **5.0000e-005** | **6.5000e-003** | **4.0000e-005** | **6.5400e-003** | **1.7300e-003** | **4.0000e-005** | **1.7600e-003** | **0.0000** | **4.5616** | **4.5616** | **9.0000e-005** | **0.0000** | **4.5638** |

## 3.5 Architectural Coating - 2026

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.8484 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.4400e-003 | 0.0298 | 0.0470 | 8.0000e-005 | | 1.3400e-003 | 1.3400e-003 | | 1.3400e-003 | 1.3400e-003 | 0.0000 | 6.6385 | 6.6385 | 3.6000e-004 | 0.0000 | 6.6475 |
| **Total** | **0.8529** | **0.0298** | **0.0470** | **8.0000e-005** | | **1.3400e-003** | **1.3400e-003** | | **1.3400e-003** | **1.3400e-003** | **0.0000** | **6.6385** | **6.6385** | **3.6000e-004** | **0.0000** | **6.6475** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0114 | 6.9900e-003 | 0.0869 | 3.2000e-004 | 0.0397 | 2.6000e-004 | 0.0399 | 0.0105 | 2.4000e-004 | 0.0108 | 0.0000 | 28.7555 | 28.7555 | 5.8000e-004 | 0.0000 | 28.7699 |
| **Total** | **0.0114** | **6.9900e-003** | **0.0869** | **3.2000e-004** | **0.0397** | **2.6000e-004** | **0.0399** | **0.0105** | **2.4000e-004** | **0.0108** | **0.0000** | **28.7555** | **28.7555** | **5.8000e-004** | **0.0000** | **28.7699** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.8484 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.5500e-003 | 0.0282 | 0.0476 | 8.0000e-005 | | 3.7000e-004 | 3.7000e-004 | | 3.7000e-004 | 3.7000e-004 | 0.0000 | 6.6385 | 6.6385 | 3.6000e-004 | 0.0000 | 6.6475 |
| **Total** | **0.8500** | **0.0282** | **0.0476** | **8.0000e-005** | | **3.7000e-004** | **3.7000e-004** | | **3.7000e-004** | **3.7000e-004** | **0.0000** | **6.6385** | **6.6385** | **3.6000e-004** | **0.0000** | **6.6475** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0114 | 6.9900e-003 | 0.0869 | 3.2000e-004 | 0.0397 | 2.6000e-004 | 0.0399 | 0.0105 | 2.4000e-004 | 0.0108 | 0.0000 | 28.7555 | 28.7555 | 5.8000e-004 | 0.0000 | 28.7699 |
| **Total** | **0.0114** | **6.9900e-003** | **0.0869** | **3.2000e-004** | **0.0397** | **2.6000e-004** | **0.0399** | **0.0105** | **2.4000e-004** | **0.0108** | **0.0000** | **28.7555** | **28.7555** | **5.8000e-004** | **0.0000** | **28.7699** |

## 3.5 Architectural Coating - 2027

**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 | 1.2889 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 6.7500e-003 | 0.0453 | 0.0715 | 1.2000e-004 | | 2.0300e-003 | 2.0300e-003 | | 2.0300e-003 | 2.0300e-003 | 0.0000 | 10.0854 | 10.0854 | 5.5000e-004 | 0.0000 | 10.0991 |
| **Total** | **1.2957** | **0.0453** | **0.0715** | **1.2000e-004** | | **2.0300e-003** | **2.0300e-003** | | **2.0300e-003** | **2.0300e-003** | **0.0000** | **10.0854** | **10.0854** | **5.5000e-004** | **0.0000** | **10.0991** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0166 | 9.7900e-003 | 0.1238 | 4.7000e-004 | 0.0602 | 3.8000e-004 | 0.0606 | 0.0160 | 3.5000e-004 | 0.0164 | 0.0000 | 42.2712 | 42.2712 | 8.1000e-004 | 0.0000 | 42.2914 |
| **Total** | **0.0166** | **9.7900e-003** | **0.1238** | **4.7000e-004** | **0.0602** | **3.8000e-004** | **0.0606** | **0.0160** | **3.5000e-004** | **0.0164** | **0.0000** | **42.2712** | **42.2712** | **8.1000e-004** | **0.0000** | **42.2914** |

## 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 | 1.2889 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 2.3500e-003 | 0.0429 | 0.0724 | 1.2000e-004 | | 5.6000e-004 | 5.6000e-004 | | 5.6000e-004 | 5.6000e-004 | 0.0000 | 10.0853 | 10.0853 | 5.5000e-004 | 0.0000 | 10.0991 |
| **Total** | **1.2913** | **0.0429** | **0.0724** | **1.2000e-004** | | **5.6000e-004** | **5.6000e-004** | | **5.6000e-004** | **5.6000e-004** | **0.0000** | **10.0853** | **10.0853** | **5.5000e-004** | **0.0000** | **10.0991** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0166 | 9.7900e-003 | 0.1238 | 4.7000e-004 | 0.0602 | 3.8000e-004 | 0.0606 | 0.0160 | 3.5000e-004 | 0.0164 | 0.0000 | 42.2712 | 42.2712 | 8.1000e-004 | 0.0000 | 42.2914 |
| **Total** | **0.0166** | **9.7900e-003** | **0.1238** | **4.7000e-004** | **0.0602** | **3.8000e-004** | **0.0606** | **0.0160** | **3.5000e-004** | **0.0164** | **0.0000** | **42.2712** | **42.2712** | **8.1000e-004** | **0.0000** | **42.2914** |

## 4.0 Operational Detail - Mobile

### 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 | 0.3079 | 1.6135 | 4.1582 | 0.0190 | 1.8999 | 0.0127 | 1.9126 | 0.5089 | 0.0118 | 0.5207 | 0.0000 | 1,761.5094 | 1,761.5094 | 0.0723 | 0.0000 | 1,763.3164 |
| Unmitigated | 0.3079 | 1.6135 | 4.1582 | 0.0190 | 1.8999 | 0.0127 | 1.9126 | 0.5089 | 0.0118 | 0.5207 | 0.0000 | 1,761.5094 | 1,761.5094 | 0.0723 | 0.0000 | 1,763.3164 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |

| | | | | | |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 1,475.60 | 1,536.05 | 1336.10 | 5,003,760 | 5,003,760 |
| Total | 1,475.60 | 1,536.05 | 1,336.10 | 5,003,760 | 5,003,760 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-... | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554500 | 0.041901 | 0.206158 | 0.112158 | 0.013256 | 0.005781 | 0.022151 | 0.034039 | 0.002155 | 0.001547 | 0.004857 | 0.000717 | 0.000782 |
| Single Family Housing | 0.554500 | 0.041901 | 0.206158 | 0.112158 | 0.013256 | 0.005781 | 0.022151 | 0.034039 | 0.002155 | 0.001547 | 0.004857 | 0.000717 | 0.000782 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 430.4749 | 430.4749 | 0.0178 | 3.6800e-003 | 432.0149 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 430.4749 | 430.4749 | 0.0178 | 3.6800e-003 | 432.0149 |
| NaturalGas Mitigated | 0.0256 | 0.2185 | 0.0930 | 1.3900e-003 | | 0.0177 | 0.0177 | | 0.0177 | 0.0177 | 0.0000 | 253.0727 | 253.0727 | 4.8500e-003 | 4.6400e-003 | 254.5766 |
| NaturalGas Unmitigated | 0.0256 | 0.2185 | 0.0930 | 1.3900e-003 | | 0.0177 | 0.0177 | | 0.0177 | 0.0177 | 0.0000 | 253.0727 | 253.0727 | 4.8500e-003 | 4.6400e-003 | 254.5766 |

## 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 | | | | | |
| 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 |
| Single Family Housing | 4.7424e+006 | 0.0256 | 0.2185 | 0.0930 | 1.3900e-003 | | 0.0177 | 0.0177 | | 0.0177 | 0.0177 | 0.0000 | 253.0727 | 253.0727 | 4.8500e-003 | 4.6400e-003 | 254.5766 |
| **Total** | | **0.0256** | **0.2185** | **0.0930** | **1.3900e-003** | | **0.0177** | **0.0177** | | **0.0177** | **0.0177** | **0.0000** | **253.0727** | **253.0727** | **4.8500e-003** | **4.6400e-003** | **254.5766** |

### 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 | | | | | |
| 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 |
| Single Family Housing | 4.7424e+006 | 0.0256 | 0.2185 | 0.0930 | 1.3900e-003 | | 0.0177 | 0.0177 | | 0.0177 | 0.0177 | 0.0000 | 253.0727 | 253.0727 | 4.8500e-003 | 4.6400e-003 | 254.5766 |
| **Total** | | **0.0256** | **0.2185** | **0.0930** | **1.3900e-003** | | **0.0177** | **0.0177** | | **0.0177** | **0.0177** | **0.0000** | **253.0727** | **253.0727** | **4.8500e-003** | **4.6400e-003** | **254.5766** |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|

| Land Use | kWh/yr | MT/yr | | | |
|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.35105e+006 | 430.4749 | 0.0178 | 3.6800e-003 | 432.0149 |
| **Total** | | **430.4749** | **0.0178** | **3.6800e-003** | **432.0149** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 1.35105e+006 | 430.4749 | 0.0178 | 3.6800e-003 | 432.0149 |
| **Total** | | **430.4749** | **0.0178** | **3.6800e-003** | **432.0149** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 3.0917 | 0.0586 | 2.5827 | 2.6000e-003 | | 0.1569 | 0.1569 | | 0.1569 | 0.1569 | 16.4640 | 34.2500 | 50.7140 | 0.0516 | 1.1200e-003 | 52.3370 |
| Unmitigated | 3.0917 | 0.0586 | 2.5827 | 2.6000e-003 | | 0.1569 | 0.1569 | | 0.1569 | 0.1569 | 16.4640 | 34.2500 | 50.7140 | 0.0516 | 1.1200e-003 | 52.3370 |

## 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 | 0.2137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.3223 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.5077 | 0.0402 | 0.9853 | 2.5100e-003 | | 0.1480 | 0.1480 | | 0.1480 | 0.1480 | 16.4640 | 31.6381 | 48.1020 | 0.0491 | 1.1200e-003 | 49.6625 |
| Landscaping | 0.0480 | 0.0184 | 1.5974 | 8.0000e-005 | | 8.8600e-003 | 8.8600e-003 | | 8.8600e-003 | 8.8600e-003 | 0.0000 | 2.6119 | 2.6119 | 2.5000e-003 | 0.0000 | 2.6745 |
| **Total** | **3.0917** | **0.0586** | **2.5827** | **2.5900e-003** | | **0.1569** | **0.1569** | | **0.1569** | **0.1569** | **16.4640** | **34.2500** | **50.7140** | **0.0516** | **1.1200e-003** | **52.3370** |

**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 | 0.2137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 2.3223 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.5077 | 0.0402 | 0.9853 | 2.5100e-003 | | 0.1480 | 0.1480 | | 0.1480 | 0.1480 | 16.4640 | 31.6381 | 48.1020 | 0.0491 | 1.1200e-003 | 49.6625 |
| Landscaping | 0.0480 | 0.0184 | 1.5974 | 8.0000e-005 | | 8.8600e-003 | 8.8600e-003 | | 8.8600e-003 | 8.8600e-003 | 0.0000 | 2.6119 | 2.6119 | 2.5000e-003 | 0.0000 | 2.6745 |
| **Total** | **3.0917** | **0.0586** | **2.5827** | **2.5900e-003** | | **0.1569** | **0.1569** | | **0.1569** | **0.1569** | **16.4640** | **34.2500** | **50.7140** | **0.0516** | **1.1200e-003** | **52.3370** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 57.2440 | 0.2655 | 6.6800e-003 | 65.8734 |
| Unmitigated | 67.6391 | 0.3317 | 8.3200e-003 | 78.4119 |

## 7.2 Water by Land Use

### Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 10.0989 / 6.36668 | 67.6391 | 0.3317 | 8.3200e-003 | 78.4119 |
| **Total** | | **67.6391** | **0.3317** | **8.3200e-003** | **78.4119** |

### Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 8.0791 / 5.97831 | 57.2440 | 0.2655 | 6.6800e-003 | 65.8734 |
| **Total** | | **57.2440** | **0.2655** | **6.6800e-003** | **65.8734** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

### Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 36.8693 | 2.1789 | 0.0000 | 91.3420 |
| Unmitigated | 36.8693 | 2.1789 | 0.0000 | 91.3420 |

## 8.2 Waste by Land Use

### Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Single Family Housing | 181.63 | 36.8693 | 2.1789 | 0.0000 | 91.3420 |
| **Total** | | **36.8693** | **2.1789** | **0.0000** | **91.3420** |

### Mitigated

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

| | | | | | |
|---|---|---|---|---|---|
| Single Family Housing | 181.63 | 36.8693 | 2.1789 | 0.0000 | 91.3420 |
| **Total** | | **36.8693** | **2.1789** | **0.0000** | **91.3420** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase III Construction - South Coast Air Basin, Summer

# Phase III Construction

**South Coast Air Basin, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 155.00 | Dwelling Unit | 69.00 | 615,399.00 | 443 |
| Other Non-Asphalt Surfaces | 35.00 | Acre | 35.00 | 1,524,600.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Demolition - Vacant Site

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Vehicle Trips -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 220.00 | 131.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 262.00 |
| tblConstructionPhase | NumDays | 220.00 | 108.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 8/24/2040 | 4/21/2027 |
| tblConstructionPhase | PhaseEndDate | 12/17/2038 | 4/21/2027 |
| tblConstructionPhase | PhaseEndDate | 10/21/2039 | 4/21/2027 |
| tblConstructionPhase | PhaseStartDate | 10/22/2039 | 10/21/2026 |
| tblConstructionPhase | PhaseStartDate | 1/30/2027 | 4/21/2026 |
| tblConstructionPhase | PhaseStartDate | 12/18/2038 | 11/21/2026 |
| tblLandUse | LandUseSquareFeet | 279,000.00 | 615,399.00 |
| tblLandUse | LotAcreage | 50.32 | 69.00 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2025 | 2.9676 | 27.9801 | 26.8877 | 0.0640 | 8.8969 | 1.1324 | 10.0293 | 3.6558 | 1.0418 | 4.6976 | 0.0000 | 6,199.1929 | 6,199.1929 | 1.9473 | 0.0000 | 6,247.8746 |
| 2026 | 41.2269 | 69.4942 | 86.3543 | 0.2585 | 20.1000 | 2.2122 | 22.3121 | 6.6655 | 2.0509 | 8.7165 | 0.0000 | 25,880.1660 | 25,880.1660 | 3.7989 | 0.0000 | 25,975.1392 |
| 2027 | 41.0885 | 69.2152 | 84.8786 | 0.2556 | 20.1000 | 2.2083 | 22.3083 | 6.6655 | 2.0474 | 8.7129 | 0.0000 | 25,588.0514 | 25,588.0514 | 3.7802 | 0.0000 | 25,682.5557 |
| **Maximum** | **41.2269** | **69.4942** | **86.3543** | **0.2585** | **20.1000** | **2.2122** | **22.3121** | **6.6655** | **2.0509** | **8.7165** | **0.0000** | **25,880.1660** | **25,880.1660** | **3.7989** | **0.0000** | **25,975.1392** |

**Mitigated Construction**

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

| Year | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 1.5895 | 24.0198 | 37.2792 | 0.0640 | 3.6062 | 0.1964 | 3.8026 | 1.4619 | 0.1963 | 1.6582 | 0.0000 | 6,199.1929 | 6,199.1929 | 1.9473 | 0.0000 | 6,247.8746 |
| 2026 | 38.6896 | 64.8397 | 101.2758 | 0.2585 | 14.8092 | 0.5198 | 15.3290 | 4.4716 | 0.5138 | 4.9855 | 0.0000 | 25,880.1659 | 25,880.1659 | 3.7989 | 0.0000 | 25,975.1392 |
| 2027 | 38.5512 | 64.5607 | 99.8002 | 0.2556 | 14.8093 | 0.5160 | 15.3252 | 4.4717 | 0.5103 | 4.9819 | 0.0000 | 25,588.0514 | 25,588.0514 | 3.7802 | 0.0000 | 25,682.5557 |
| **Maximum** | **38.6896** | **64.8397** | **101.2758** | **0.2585** | **14.8093** | **0.5198** | **15.3290** | **4.4717** | **0.5138** | **4.9855** | **0.0000** | **25,880.1659** | **25,880.1659** | **3.7989** | **0.0000** | **25,975.1392** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **7.57** | **7.96** | **-20.31** | **0.00** | **32.33** | **77.81** | **36.95** | **38.75** | **76.26** | **47.46** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 54.8956 | 3.3632 | 91.6047 | 0.2018 | | 11.9111 | 11.9111 | | 11.9111 | 11.9111 | 1,451.8724 | 2,813.0333 | 4,264.9056 | 4.3518 | 0.0985 | 4,403.0672 |
| Energy | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |
| Mobile | 1.9022 | 9.0083 | 25.1905 | 0.1136 | 11.1527 | 0.0734 | 11.2260 | 2.9827 | 0.0681 | 3.0508 | | 11,616.7584 | 11,616.7584 | 0.4613 | | 11,628.2917 |
| **Total** | **56.9379** | **13.5688** | **117.3047** | **0.3230** | **11.1527** | **12.0813** | **23.2339** | **2.9827** | **12.0760** | **15.0587** | **1,451.8724** | **15,958.3664** | **17,410.2388** | **4.8425** | **0.1266** | **17,569.0172** |

### Mitigated Operational

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | 54.8956 | 3.3632 | 91.6047 | 0.2018 | | 11.9111 | 11.9111 | | 11.9111 | 11.9111 | 1,451.8724 | 2,813.0333 | 4,264.9056 | 4.3518 | 0.0985 | 4,403.0672 |
| Energy | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |
| Mobile | 1.9022 | 9.0083 | 25.1905 | 0.1136 | 11.1527 | 0.0734 | 11.2260 | 2.9827 | 0.0681 | 3.0508 | | 11,616.7584 | 11,616.7584 | 0.4613 | | 11,628.2917 |
| **Total** | **56.9379** | **13.5688** | **117.3047** | **0.3230** | **11.1527** | **12.0813** | **23.2339** | **2.9827** | **12.0760** | **15.0587** | **1,451.8724** | **15,958.3664** | **17,410.2388** | **4.8425** | **0.1266** | **17,569.0172** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 11/22/2025 | 1/29/2027 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 4/21/2026 | 4/21/2027 | 5 | 262 | |
| 3 | Paving | Paving | 11/21/2026 | 4/21/2027 | 5 | 108 | |
| 4 | Architectural Coating | Architectural Coating | 10/21/2026 | 4/21/2027 | 5 | 131 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 35**

**Residential Indoor: 1,246,183; Residential Outdoor: 415,394; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| 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 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 696.00 | 266.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 139.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0664 | 0.0372 | 0.5566 | 1.9100e-003 | 0.2236 | 1.5100e-003 | 0.2251 | 0.0593 | 1.3900e-003 | 0.0607 | | 190.9115 | 190.9115 | 4.0700e-003 | | 191.0132 |
| **Total** | **0.0664** | **0.0372** | **0.5566** | **1.9100e-003** | **0.2236** | **1.5100e-003** | **0.2251** | **0.0593** | **1.3900e-003** | **0.0607** | | **190.9115** | **190.9115** | **4.0700e-003** | | **191.0132** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0664 | 0.0372 | 0.5566 | 1.9100e-003 | 0.2236 | 1.5100e-003 | 0.2251 | 0.0593 | 1.3900e-003 | 0.0607 | | 190.9115 | 190.9115 | 4.0700e-003 | | 191.0132 |
| **Total** | **0.0664** | **0.0372** | **0.5566** | **1.9100e-003** | **0.2236** | **1.5100e-003** | **0.2251** | **0.0593** | **1.3900e-003** | **0.0607** | | **190.9115** | **190.9115** | **4.0700e-003** | | **191.0132** |

## 3.2 Grading - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0634 | 0.0343 | 0.5206 | 1.8500e-003 | 0.2236 | 1.4600e-003 | 0.2250 | 0.0593 | 1.3500e-003 | 0.0606 | | 184.1553 | 184.1553 | 3.7300e-003 | | 184.2485 |
| **Total** | **0.0634** | **0.0343** | **0.5206** | **1.8500e-003** | **0.2236** | **1.4600e-003** | **0.2250** | **0.0593** | **1.3500e-003** | **0.0606** | | **184.1553** | **184.1553** | **3.7300e-003** | | **184.2485** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Mitigated Construction Off-Site

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0634 | 0.0343 | 0.5206 | 1.8500e-003 | 0.2236 | 1.4600e-003 | 0.2250 | 0.0593 | 1.3500e-003 | 0.0606 | | 184.1553 | 184.1553 | 3.7300e-003 | | 184.2485 |
| **Total** | **0.0634** | **0.0343** | **0.5206** | **1.8500e-003** | **0.2236** | **1.4600e-003** | **0.2250** | **0.0593** | **1.3500e-003** | **0.0606** | | **184.1553** | **184.1553** | **3.7300e-003** | | **184.2485** |

## 3.2 Grading - 2027

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0604 | 0.0316 | 0.4886 | 1.7900e-003 | 0.2236 | 1.3800e-003 | 0.2249 | 0.0593 | 1.2700e-003 | 0.0606 | | 178.2011 | 178.2011 | 3.4200e-003 | | 178.2866 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0604** | **0.0316** | **0.4886** | **1.7900e-003** | **0.2236** | **1.3800e-003** | **0.2249** | **0.0593** | **1.2700e-003** | **0.0606** | | **178.2011** | **178.2011** | **3.4200e-003** | | **178.2866** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0604 | 0.0316 | 0.4886 | 1.7900e-003 | 0.2236 | 1.3800e-003 | 0.2249 | 0.0593 | 1.2700e-003 | 0.0606 | | 178.2011 | 178.2011 | 3.4200e-003 | | 178.2866 |
| **Total** | **0.0604** | **0.0316** | **0.4886** | **1.7900e-003** | **0.2236** | **1.3800e-003** | **0.2249** | **0.0593** | **1.2700e-003** | **0.0606** | | **178.2011** | **178.2011** | **3.4200e-003** | | **178.2866** |

## 3.3 Building Construction - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4855 | 17.8646 | 4.9049 | 0.0634 | 1.7021 | 0.0200 | 1.7221 | 0.4900 | 0.0191 | 0.5091 | | 6,816.4611 | 6,816.4611 | 0.3636 | | 6,825.5518 |
| Worker | 2.2044 | 1.1919 | 18.1172 | 0.0643 | 7.7796 | 0.0510 | 7.8306 | 2.0632 | 0.0469 | 2.1101 | | 6,408.6047 | 6,408.6047 | 0.1297 | | 6,411.8466 |
| **Total** | **2.6899** | **19.0565** | **23.0221** | **0.1277** | **9.4817** | **0.0710** | **9.5527** | **2.5532** | **0.0660** | **2.6192** | | **13,225.0658** | **13,225.0658** | **0.4933** | | **13,237.3984** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4855 | 17.8646 | 4.9049 | 0.0634 | 1.7021 | 0.0200 | 1.7221 | 0.4900 | 0.0191 | 0.5091 | | 6,816.4611 | 6,816.4611 | 0.3636 | | 6,825.5518 |
| Worker | 2.2044 | 1.1919 | 18.1172 | 0.0643 | 7.7796 | 0.0510 | 7.8306 | 2.0632 | 0.0469 | 2.1101 | | 6,408.6047 | 6,408.6047 | 0.1297 | | 6,411.8466 |
| **Total** | **2.6899** | **19.0565** | **23.0221** | **0.1277** | **9.4817** | **0.0710** | **9.5527** | **2.5532** | **0.0660** | **2.6192** | | **13,225.0658** | **13,225.0658** | **0.4933** | | **13,237.3984** |

## 3.3 Building Construction - 2027

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4760 | 17.7011 | 4.8237 | 0.0631 | 1.7021 | 0.0196 | 1.7217 | 0.4900 | 0.0188 | 0.5088 | | 6,783.3555 | 6,783.3555 | 0.3582 | | 6,792.3098 |
| Worker | 2.1013 | 1.0996 | 17.0017 | 0.0622 | 7.7796 | 0.0482 | 7.8278 | 2.0632 | 0.0443 | 2.1075 | | 6,201.3975 | 6,201.3975 | 0.1190 | | 6,204.3734 |
| **Total** | **2.5772** | **18.8006** | **21.8253** | **0.1253** | **9.4818** | **0.0678** | **9.5496** | **2.5532** | **0.0631** | **2.6163** | | **12,984.7530** | **12,984.7530** | **0.4772** | | **12,996.6832** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Mitigated Construction Off-Site

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4760 | 17.7011 | 4.8237 | 0.0631 | 1.7021 | 0.0196 | 1.7217 | 0.4900 | 0.0188 | 0.5088 | | 6,783.3555 | 6,783.3555 | 0.3582 | | 6,792.3098 |
| Worker | 2.1013 | 1.0996 | 17.0017 | 0.0622 | 7.7796 | 0.0482 | 7.8278 | 2.0632 | 0.0443 | 2.1075 | | 6,201.3975 | 6,201.3975 | 0.1190 | | 6,204.3734 |
| **Total** | **2.5772** | **18.8006** | **21.8253** | **0.1253** | **9.4818** | **0.0678** | **9.5496** | **2.5532** | **0.0631** | **2.6163** | | **12,984.7530** | **12,984.7530** | **0.4772** | | **12,996.6832** |

## 3.4 Paving - 2026

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0475 | 0.0257 | 0.3905 | 1.3800e-003 | 0.1677 | 1.1000e-003 | 0.1688 | 0.0445 | 1.0100e-003 | 0.0455 | | 138.1165 | 138.1165 | 2.7900e-003 | | 138.1864 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0475** | **0.0257** | **0.3905** | **1.3800e-003** | **0.1677** | **1.1000e-003** | **0.1688** | **0.0445** | **1.0100e-003** | **0.0455** | | **138.1165** | **138.1165** | **2.7900e-003** | | **138.1864** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0475 | 0.0257 | 0.3905 | 1.3800e-003 | 0.1677 | 1.1000e-003 | 0.1688 | 0.0445 | 1.0100e-003 | 0.0455 | | 138.1165 | 138.1165 | 2.7900e-003 | | 138.1864 |
| **Total** | **0.0475** | **0.0257** | **0.3905** | **1.3800e-003** | **0.1677** | **1.1000e-003** | **0.1688** | **0.0445** | **1.0100e-003** | **0.0455** | | **138.1165** | **138.1165** | **2.7900e-003** | | **138.1864** |

## 3.4 Paving - 2027

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0453 | 0.0237 | 0.3664 | 1.3400e-003 | 0.1677 | 1.0400e-003 | 0.1687 | 0.0445 | 9.6000e-004 | 0.0454 | | 133.6508 | 133.6508 | 2.5700e-003 | | 133.7149 |
| **Total** | **0.0453** | **0.0237** | **0.3664** | **1.3400e-003** | **0.1677** | **1.0400e-003** | **0.1687** | **0.0445** | **9.6000e-004** | **0.0454** | | **133.6508** | **133.6508** | **2.5700e-003** | | **133.7149** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0453 | 0.0237 | 0.3664 | 1.3400e-003 | 0.1677 | 1.0400e-003 | 0.1687 | 0.0445 | 9.6000e-004 | 0.0454 | | 133.6508 | 133.6508 | 2.5700e-003 | | 133.7149 |
| **Total** | **0.0453** | **0.0237** | **0.3664** | **1.3400e-003** | **0.1677** | **1.0400e-003** | **0.1687** | **0.0445** | **9.6000e-004** | **0.0454** | | **133.6508** | **133.6508** | **2.5700e-003** | | **133.7149** |

## 3.5 Architectural Coating - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 32.6313 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **32.8021** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4403 | 0.2380 | 3.6182 | 0.0128 | 1.5537 | 0.0102 | 1.5639 | 0.4121 | 9.3700e-003 | 0.4214 | | 1,279.8794 | 1,279.8794 | 0.0259 | | 1,280.5268 |
| **Total** | **0.4403** | **0.2380** | **3.6182** | **0.0128** | **1.5537** | **0.0102** | **1.5639** | **0.4121** | **9.3700e-003** | **0.4214** | | **1,279.8794** | **1,279.8794** | **0.0259** | | **1,280.5268** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 32.6313 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **32.6907** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

## Mitigated Construction Off-Site

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4403 | 0.2380 | 3.6182 | 0.0128 | 1.5537 | 0.0102 | 1.5639 | 0.4121 | 9.3700e-003 | 0.4214 | | 1,279.8794 | 1,279.8794 | 0.0259 | | 1,280.5268 |
| **Total** | **0.4403** | **0.2380** | **3.6182** | **0.0128** | **1.5537** | **0.0102** | **1.5639** | **0.4121** | **9.3700e-003** | **0.4214** | | **1,279.8794** | **1,279.8794** | **0.0259** | | **1,280.5268** |

## 3.5 Architectural Coating - 2027

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Archit. Coating | 32.6313 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **32.8021** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4197 | 0.2196 | 3.3955 | 0.0124 | 1.5537 | 9.6200e-003 | 1.5633 | 0.4121 | 8.8500e-003 | 0.4209 | | 1,238.4975 | 1,238.4975 | 0.0238 | | 1,239.0918 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.4197** | **0.2196** | **3.3955** | **0.0124** | **1.5537** | **9.6200e-003** | **1.5633** | **0.4121** | **8.8500e-003** | **0.4209** | | **1,238.4975** | **1,238.4975** | **0.0238** | | **1,239.0918** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 32.6313 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **32.6907** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4197 | 0.2196 | 3.3955 | 0.0124 | 1.5537 | 9.6200e-003 | 1.5633 | 0.4121 | 8.8500e-003 | 0.4209 | | 1,238.4975 | 1,238.4975 | 0.0238 | | 1,239.0918 |
| **Total** | **0.4197** | **0.2196** | **3.3955** | **0.0124** | **1.5537** | **9.6200e-003** | **1.5633** | **0.4121** | **8.8500e-003** | **0.4209** | | **1,238.4975** | **1,238.4975** | **0.0238** | | **1,239.0918** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1.9022 | 9.0083 | 25.1905 | 0.1136 | 11.1527 | 0.0734 | 11.2260 | 2.9827 | 0.0681 | 3.0508 | | 11,616.7584 | 11,616.7584 | 0.4613 | | 11,628.2917 |
| Unmitigated | 1.9022 | 9.0083 | 25.1905 | 0.1136 | 11.1527 | 0.0734 | 11.2260 | 2.9827 | 0.0681 | 3.0508 | | 11,616.7584 | 11,616.7584 | 0.4613 | | 11,628.2917 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 1,475.60 | 1,536.05 | 1336.10 | 5,003,760 | 5,003,760 |
| Total | 1,475.60 | 1,536.05 | 1,336.10 | 5,003,760 | 5,003,760 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-... | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554500 | 0.041901 | 0.206158 | 0.112158 | 0.013256 | 0.005781 | 0.022151 | 0.034039 | 0.002155 | 0.001547 | 0.004857 | 0.000717 | 0.000782 |
| Single Family Housing | 0.554500 | 0.041901 | 0.206158 | 0.112158 | 0.013256 | 0.005781 | 0.022151 | 0.034039 | 0.002155 | 0.001547 | 0.004857 | 0.000717 | 0.000782 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |
| NaturalGas Unmitigated | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 12992.9 | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |
| **Total** | | **0.1401** | **1.1974** | **0.5095** | **7.6400e-003** | | **0.0968** | **0.0968** | | **0.0968** | **0.0968** | | **1,528.5748** | **1,528.5748** | **0.0293** | **0.0280** | **1,537.6583** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 12.9929 | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |
| **Total** | | **0.1401** | **1.1974** | **0.5095** | **7.6400e-003** | | **0.0968** | **0.0968** | | **0.0968** | **0.0968** | | **1,528.5748** | **1,528.5748** | **0.0293** | **0.0280** | **1,537.6583** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 54.8956 | 3.3632 | 91.6047 | 0.2018 | | 11.9111 | 11.9111 | | 11.9111 | 11.9111 | 1,451.8724 | 2,813.0333 | 4,264.9056 | 4.3518 | 0.0985 | 4,403.0672 |
| Unmitigated | 54.8956 | 3.3632 | 91.6047 | 0.2018 | | 11.9111 | 11.9111 | | 11.9111 | 11.9111 | 1,451.8724 | 2,813.0333 | 4,264.9056 | 4.3518 | 0.0985 | 4,403.0672 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.1712 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 12.7249 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 40.6156 | 3.2160 | 78.8255 | 0.2011 | | 11.8402 | 11.8402 | | 11.8402 | 11.8402 | 1,451.8724 | 2,790.0000 | 4,241.8724 | 4.3298 | 0.0985 | 4,379.4822 |
| Landscaping | 0.3839 | 0.1472 | 12.7791 | 6.8000e-004 | | 0.0709 | 0.0709 | | 0.0709 | 0.0709 | | 23.0333 | 23.0333 | 0.0221 | | 23.5850 |
| **Total** | **54.8956** | **3.3632** | **91.6047** | **0.2018** | | **11.9111** | **11.9111** | | **11.9111** | **11.9111** | **1,451.8724** | **2,813.0333** | **4,264.9056** | **4.3518** | **0.0985** | **4,403.0672** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.1712 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 12.7249 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 40.6156 | 3.2160 | 78.8255 | 0.2011 | | 11.8402 | 11.8402 | | 11.8402 | 11.8402 | 1,451.8724 | 2,790.0000 | 4,241.8724 | 4.3298 | 0.0985 | 4,379.4822 |
| Landscaping | 0.3839 | 0.1472 | 12.7791 | 6.8000e-004 | | 0.0709 | 0.0709 | | 0.0709 | 0.0709 | | 23.0333 | 23.0333 | 0.0221 | | 23.5850 |
| **Total** | **54.8956** | **3.3632** | **91.6047** | **0.2018** | | **11.9111** | **11.9111** | | **11.9111** | **11.9111** | **1,451.8724** | **2,813.0333** | **4,264.9056** | **4.3518** | **0.0985** | **4,403.0672** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

Phase III Construction - South Coast Air Basin, Winter

# Phase III Construction

**South Coast Air Basin, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 155.00 | Dwelling Unit | 69.00 | 615,399.00 | 443 |
| Other Non-Asphalt Surfaces | 35.00 | Acre | 35.00 | 1,524,600.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 10 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

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

Project Characteristics -

Land Use - Based on Phasing Summary:
Other Non-Asphalt includes Internal and External Community Park and Utility Corridor/Bank Easement

Construction Phase - According to Phasing Plan

Grading - Estimate volume of basic grading of approximately 1.5 million cy of cut and 1.5 million cy of fill. No import or export of soil.

Demolition - Vacant Site

Construction Off-road Equipment Mitigation - SCAQMD staff recommends at the minimum Tier 3 Equipment with Level 3 DPF
SCAQMD Fugitive Dust Mitigation Measures Table 11-4

Area Mitigation -

Water Mitigation -

Vehicle Trips -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | DPF | No Change | Level 3 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | OxidationCatalyst | 0.00 | 20.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | NumDays | 220.00 | 131.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 262.00 |
| tblConstructionPhase | NumDays | 220.00 | 108.00 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 8/24/2040 | 4/21/2027 |
| tblConstructionPhase | PhaseEndDate | 12/17/2038 | 4/21/2027 |
| tblConstructionPhase | PhaseEndDate | 10/21/2039 | 4/21/2027 |
| tblConstructionPhase | PhaseStartDate | 10/22/2039 | 10/21/2026 |
| tblConstructionPhase | PhaseStartDate | 1/30/2027 | 4/21/2026 |
| tblConstructionPhase | PhaseStartDate | 12/18/2038 | 11/21/2026 |
| tblLandUse | LandUseSquareFeet | 279,000.00 | 615,399.00 |
| tblLandUse | LotAcreage | 50.32 | 69.00 |

# 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2025 | 2.9752 | 27.9837 | 26.8317 | 0.0639 | 8.8969 | 1.1324 | 10.0293 | 3.6558 | 1.0418 | 4.6976 | 0.0000 | 6,187.3167 | 6,187.3167 | 1.9470 | 0.0000 | 6,235.9914 |
| 2026 | 41.5769 | 69.5472 | 84.5082 | 0.2519 | 20.1000 | 2.2129 | 22.3129 | 6.6655 | 2.0517 | 8.7172 | 0.0000 | 25,201.2924 | 25,201.2924 | 3.8088 | 0.0000 | 25,296.5122 |
| 2027 | 41.4307 | 69.2564 | 83.1459 | 0.2491 | 20.1000 | 2.2090 | 22.3090 | 6.6655 | 2.0480 | 8.7135 | 0.0000 | 24,926.4816 | 24,926.4816 | 3.7902 | 0.0000 | 25,021.2357 |
| **Maximum** | **41.5769** | **69.5472** | **84.5082** | **0.2519** | **20.1000** | **2.2129** | **22.3129** | **6.6655** | **2.0517** | **8.7172** | **0.0000** | **25,201.2924** | **25,201.2924** | **3.8088** | **0.0000** | **25,296.5122** |

**Mitigated Construction**

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

| Year | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 | 1.5971 | 24.0234 | 37.2232 | 0.0639 | 3.6062 | 0.1964 | 3.8026 | 1.4619 | 0.1963 | 1.6582 | 0.0000 | 6,187.3167 | 6,187.3167 | 1.9470 | 0.0000 | 6,235.9914 |
| 2026 | 39.0396 | 64.8927 | 99.4298 | 0.2519 | 14.8092 | 0.5205 | 15.3298 | 4.4716 | 0.5146 | 4.9862 | 0.0000 | 25,201.2924 | 25,201.2924 | 3.8088 | 0.0000 | 25,296.5122 |
| 2027 | 38.8934 | 64.6019 | 98.0675 | 0.2491 | 14.8093 | 0.5166 | 15.3259 | 4.4717 | 0.5109 | 4.9825 | 0.0000 | 24,926.4816 | 24,926.4816 | 3.7902 | 0.0000 | 25,021.2357 |
| **Maximum** | **39.0396** | **64.8927** | **99.4298** | **0.2519** | **14.8093** | **0.5205** | **15.3298** | **4.4717** | **0.5146** | **4.9862** | **0.0000** | **25,201.2924** | **25,201.2924** | **3.8088** | **0.0000** | **25,296.5122** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **7.50** | **7.96** | **-20.69** | **0.00** | **32.33** | **77.79** | **36.95** | **38.75** | **76.24** | **47.46** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 54.8956 | 3.3632 | 91.6047 | 0.2018 | | 11.9111 | 11.9111 | | 11.9111 | 11.9111 | 1,451.8724 | 2,813.0333 | 4,264.9056 | 4.3518 | 0.0985 | 4,403.0672 |
| Energy | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |
| Mobile | 1.8196 | 9.1497 | 23.6062 | 0.1079 | 11.1527 | 0.0736 | 11.2262 | 2.9827 | 0.0683 | 3.0510 | | 11,046.7514 | 11,046.7514 | 0.4622 | | 11,058.3067 |
| **Total** | **56.8553** | **13.7102** | **115.7204** | **0.3174** | **11.1527** | **12.0815** | **23.2341** | **2.9827** | **12.0762** | **15.0589** | **1,451.8724** | **15,388.3595** | **16,840.2318** | **4.8433** | **0.1266** | **16,999.0323** |

### Mitigated Operational

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | 54.8956 | 3.3632 | 91.6047 | 0.2018 | | 11.9111 | 11.9111 | | 11.9111 | 11.9111 | 1,451.8724 | 2,813.0333 | 4,264.9056 | 4.3518 | 0.0985 | 4,403.0672 |
| Energy | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |
| Mobile | 1.8196 | 9.1497 | 23.6062 | 0.1079 | 11.1527 | 0.0736 | 11.2262 | 2.9827 | 0.0683 | 3.0510 | | 11,046.7514 | 11,046.7514 | 0.4622 | | 11,058.3067 |
| **Total** | **56.8553** | **13.7102** | **115.7204** | **0.3174** | **11.1527** | **12.0815** | **23.2341** | **2.9827** | **12.0762** | **15.0589** | **1,451.8724** | **15,388.3595** | **16,840.2318** | **4.8433** | **0.1266** | **16,999.0323** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 11/22/2025 | 1/29/2027 | 5 | 310 | |
| 2 | Building Construction | Building Construction | 4/21/2026 | 4/21/2027 | 5 | 262 | |
| 3 | Paving | Paving | 11/21/2026 | 4/21/2027 | 5 | 108 | |
| 4 | Architectural Coating | Architectural Coating | 10/21/2026 | 4/21/2027 | 5 | 131 | |

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

**Acres of Grading (Grading Phase): 775**

**Acres of Paving: 35**

**Residential Indoor: 1,246,183; Residential Outdoor: 415,394; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| 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 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 696.00 | 266.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 139.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Grading - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0740 | 0.0408 | 0.5006 | 1.7900e-003 | 0.2236 | 1.5100e-003 | 0.2251 | 0.0593 | 1.3900e-003 | 0.0607 | | 179.0352 | 179.0352 | 3.7900e-003 | | 179.1300 |
| **Total** | **0.0740** | **0.0408** | **0.5006** | **1.7900e-003** | **0.2236** | **1.5100e-003** | **0.2251** | **0.0593** | **1.3900e-003** | **0.0607** | | **179.0352** | **179.0352** | **3.7900e-003** | | **179.1300** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0740 | 0.0408 | 0.5006 | 1.7900e-003 | 0.2236 | 1.5100e-003 | 0.2251 | 0.0593 | 1.3900e-003 | 0.0607 | | 179.0352 | 179.0352 | 3.7900e-003 | | 179.1300 |
| **Total** | **0.0740** | **0.0408** | **0.5006** | **1.7900e-003** | **0.2236** | **1.5100e-003** | **0.2251** | **0.0593** | **1.3900e-003** | **0.0607** | | **179.0352** | **179.0352** | **3.7900e-003** | | **179.1300** |

## 3.2 Grading - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0708 | 0.0376 | 0.4678 | 1.7300e-003 | 0.2236 | 1.4600e-003 | 0.2250 | 0.0593 | 1.3500e-003 | 0.0606 | | 172.6947 | 172.6947 | 3.4700e-003 | | 172.7815 |
| **Total** | **0.0708** | **0.0376** | **0.4678** | **1.7300e-003** | **0.2236** | **1.4600e-003** | **0.2250** | **0.0593** | **1.3500e-003** | **0.0606** | | **172.6947** | **172.6947** | **3.4700e-003** | | **172.7815** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

## Mitigated Construction Off-Site

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0708 | 0.0376 | 0.4678 | 1.7300e-003 | 0.2236 | 1.4600e-003 | 0.2250 | 0.0593 | 1.3500e-003 | 0.0606 | | 172.6947 | 172.6947 | 3.4700e-003 | | 172.7815 |
| **Total** | **0.0708** | **0.0376** | **0.4678** | **1.7300e-003** | **0.2236** | **1.4600e-003** | **0.2250** | **0.0593** | **1.3500e-003** | **0.0606** | | **172.6947** | **172.6947** | **3.4700e-003** | | **172.7815** |

## 3.2 Grading - 2027

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.9012 | 27.9429 | 26.3311 | 0.0621 | | 1.1309 | 1.1309 | | 1.0404 | 1.0404 | | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **2.9012** | **27.9429** | **26.3311** | **0.0621** | **8.6733** | **1.1309** | **9.8042** | **3.5965** | **1.0404** | **4.6369** | | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0677 | 0.0346 | 0.4385 | 1.6700e-003 | 0.2236 | 1.3800e-003 | 0.2249 | 0.0593 | 1.2700e-003 | 0.0606 | | 167.1009 | 167.1009 | 3.1800e-003 | | 167.1806 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0677** | **0.0346** | **0.4385** | **1.6700e-003** | **0.2236** | **1.3800e-003** | **0.2249** | **0.0593** | **1.2700e-003** | **0.0606** | | **167.1009** | **167.1009** | **3.1800e-003** | | **167.1806** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3826 | 0.0000 | 3.3826 | 1.4026 | 0.0000 | 1.4026 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.5231 | 23.9826 | 36.7226 | 0.0621 | | 0.1949 | 0.1949 | | 0.1949 | 0.1949 | 0.0000 | 6,008.2814 | 6,008.2814 | 1.9432 | | 6,056.8614 |
| **Total** | **1.5231** | **23.9826** | **36.7226** | **0.0621** | **3.3826** | **0.1949** | **3.5775** | **1.4026** | **0.1949** | **1.5976** | **0.0000** | **6,008.2814** | **6,008.2814** | **1.9432** | | **6,056.8614** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0677 | 0.0346 | 0.4385 | 1.6700e-003 | 0.2236 | 1.3800e-003 | 0.2249 | 0.0593 | 1.2700e-003 | 0.0606 | | 167.1009 | 167.1009 | 3.1800e-003 | | 167.1806 |
| **Total** | **0.0677** | **0.0346** | **0.4385** | **1.6700e-003** | **0.2236** | **1.3800e-003** | **0.2249** | **0.0593** | **1.2700e-003** | **0.0606** | | **167.1009** | **167.1009** | **3.1800e-003** | | **167.1806** |

## 3.3 Building Construction - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.5099 | 17.7737 | 5.3581 | 0.0618 | 1.7021 | 0.0207 | 1.7228 | 0.4900 | 0.0198 | 0.5098 | | 6,636.1221 | 6,636.1221 | 0.3846 | | 6,645.7366 |
| Worker | 2.4648 | 1.3071 | 16.2778 | 0.0602 | 7.7796 | 0.0510 | 7.8306 | 2.0632 | 0.0469 | 2.1101 | | 6,009.7771 | 6,009.7771 | 0.1208 | | 6,012.7972 |
| **Total** | **2.9748** | **19.0808** | **21.6359** | **0.1220** | **9.4817** | **0.0717** | **9.5534** | **2.5532** | **0.0667** | **2.6199** | | **12,645.8992** | **12,645.8992** | **0.5054** | | **12,658.5338** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.5099 | 17.7737 | 5.3581 | 0.0618 | 1.7021 | 0.0207 | 1.7228 | 0.4900 | 0.0198 | 0.5098 | | 6,636.1221 | 6,636.1221 | 0.3846 | | 6,645.7366 |
| Worker | 2.4648 | 1.3071 | 16.2778 | 0.0602 | 7.7796 | 0.0510 | 7.8306 | 2.0632 | 0.0469 | 2.1101 | | 6,009.7771 | 6,009.7771 | 0.1208 | | 6,012.7972 |
| **Total** | **2.9748** | **19.0808** | **21.6359** | **0.1220** | **9.4817** | **0.0717** | **9.5534** | **2.5532** | **0.0667** | **2.6199** | | **12,645.8992** | **12,645.8992** | **0.5054** | | **12,658.5338** |

## 3.3 Building Construction - 2027

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4998 | 17.6097 | 5.2691 | 0.0615 | 1.7021 | 0.0203 | 1.7224 | 0.4900 | 0.0194 | 0.5094 | | 6,604.6417 | 6,604.6417 | 0.3784 | | 6,614.1027 |
| Worker | 2.3559 | 1.2056 | 15.2592 | 0.0583 | 7.7796 | 0.0482 | 7.8278 | 2.0632 | 0.0443 | 2.1075 | | 5,815.1127 | 5,815.1127 | 0.1108 | | 5,817.8831 |
| **Total** | **2.8558** | **18.8153** | **20.5282** | **0.1197** | **9.4818** | **0.0685** | **9.5502** | **2.5532** | **0.0637** | **2.6169** | | **12,419.7544** | **12,419.7544** | **0.4893** | | **12,431.9858** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6739 | 11.3809 | 17.8738 | 0.0270 | | 0.1355 | 0.1355 | | 0.1355 | 0.1355 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **0.6739** | **11.3809** | **17.8738** | **0.0270** | | **0.1355** | **0.1355** | | **0.1355** | **0.1355** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

## Mitigated Construction Off-Site

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4998 | 17.6097 | 5.2691 | 0.0615 | 1.7021 | 0.0203 | 1.7224 | 0.4900 | 0.0194 | 0.5094 | | 6,604.6417 | 6,604.6417 | 0.3784 | | 6,614.1027 |
| Worker | 2.3559 | 1.2056 | 15.2592 | 0.0583 | 7.7796 | 0.0482 | 7.8278 | 2.0632 | 0.0443 | 2.1075 | | 5,815.1127 | 5,815.1127 | 0.1108 | | 5,817.8831 |
| **Total** | **2.8558** | **18.8153** | **20.5282** | **0.1197** | **9.4818** | **0.0685** | **9.5502** | **2.5532** | **0.0637** | **2.6169** | | **12,419.7544** | **12,419.7544** | **0.4893** | | **12,431.9858** |

## 3.4 Paving - 2026

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0531 | 0.0282 | 0.3508 | 1.3000e-003 | 0.1677 | 1.1000e-003 | 0.1688 | 0.0445 | 1.0100e-003 | 0.0455 | | 129.5211 | 129.5211 | 2.6000e-003 | | 129.5862 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0531** | **0.0282** | **0.3508** | **1.3000e-003** | **0.1677** | **1.1000e-003** | **0.1688** | **0.0445** | **1.0100e-003** | **0.0455** | | **129.5211** | **129.5211** | **2.6000e-003** | | **129.5862** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0531 | 0.0282 | 0.3508 | 1.3000e-003 | 0.1677 | 1.1000e-003 | 0.1688 | 0.0445 | 1.0100e-003 | 0.0455 | | 129.5211 | 129.5211 | 2.6000e-003 | | 129.5862 |
| **Total** | **0.0531** | **0.0282** | **0.3508** | **1.3000e-003** | **0.1677** | **1.1000e-003** | **0.1688** | **0.0445** | **1.0100e-003** | **0.0455** | | **129.5211** | **129.5211** | **2.6000e-003** | | **129.5862** |

## 3.4 Paving - 2027

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9152** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0508 | 0.0260 | 0.3289 | 1.2600e-003 | 0.1677 | 1.0400e-003 | 0.1687 | 0.0445 | 9.6000e-004 | 0.0454 | | 125.3257 | 125.3257 | 2.3900e-003 | | 125.3854 |
| **Total** | **0.0508** | **0.0260** | **0.3289** | **1.2600e-003** | **0.1677** | **1.0400e-003** | **0.1687** | **0.0445** | **9.6000e-004** | **0.0454** | | **125.3257** | **125.3257** | **2.3900e-003** | | **125.3854** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.5609 | 9.0362 | 17.2957 | 0.0228 | | 0.0914 | 0.0914 | | 0.0914 | 0.0914 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5609** | **9.0362** | **17.2957** | **0.0228** | | **0.0914** | **0.0914** | | **0.0914** | **0.0914** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0508 | 0.0260 | 0.3289 | 1.2600e-003 | 0.1677 | 1.0400e-003 | 0.1687 | 0.0445 | 9.6000e-004 | 0.0454 | | 125.3257 | 125.3257 | 2.3900e-003 | | 125.3854 |
| **Total** | **0.0508** | **0.0260** | **0.3289** | **1.2600e-003** | **0.1677** | **1.0400e-003** | **0.1687** | **0.0445** | **9.6000e-004** | **0.0454** | | **125.3257** | **125.3257** | **2.3900e-003** | | **125.3854** |

## 3.5 Architectural Coating - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 32.6313 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **32.8021** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4923 | 0.2610 | 3.2509 | 0.0120 | 1.5537 | 0.0102 | 1.5639 | 0.4121 | 9.3700e-003 | 0.4214 | | 1,200.2285 | 1,200.2285 | 0.0241 | | 1,200.8316 |
| **Total** | **0.4923** | **0.2610** | **3.2509** | **0.0120** | **1.5537** | **0.0102** | **1.5639** | **0.4121** | **9.3700e-003** | **0.4214** | | **1,200.2285** | **1,200.2285** | **0.0241** | | **1,200.8316** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 32.6313 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **32.6907** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

## Mitigated Construction Off-Site

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

| Category | lb/day | | | | | | | | | | | lb/day | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4923 | 0.2610 | 3.2509 | 0.0120 | 1.5537 | 0.0102 | 1.5639 | 0.4121 | 9.3700e-003 | 0.4214 | | 1,200.2285 | 1,200.2285 | 0.0241 | | 1,200.8316 |
| **Total** | **0.4923** | **0.2610** | **3.2509** | **0.0120** | **1.5537** | **0.0102** | **1.5639** | **0.4121** | **9.3700e-003** | **0.4214** | | **1,200.2285** | **1,200.2285** | **0.0241** | | **1,200.8316** |

## 3.5 Architectural Coating - 2027

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Archit. Coating | 32.6313 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **32.8021** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4705 | 0.2408 | 3.0475 | 0.0116 | 1.5537 | 9.6200e-003 | 1.5633 | 0.4121 | 8.8500e-003 | 0.4209 | | 1,161.3515 | 1,161.3515 | 0.0221 | | 1,161.9048 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.4705** | **0.2408** | **3.0475** | **0.0116** | **1.5537** | **9.6200e-003** | **1.5633** | **0.4121** | **8.8500e-003** | **0.4209** | | **1,161.3515** | **1,161.3515** | **0.0221** | | **1,161.9048** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 32.6313 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0594 | 1.0856 | 1.8324 | 2.9700e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **32.6907** | **1.0856** | **1.8324** | **2.9700e-003** | | **0.0143** | **0.0143** | | **0.0143** | **0.0143** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4705 | 0.2408 | 3.0475 | 0.0116 | 1.5537 | 9.6200e-003 | 1.5633 | 0.4121 | 8.8500e-003 | 0.4209 | | 1,161.3515 | 1,161.3515 | 0.0221 | | 1,161.9048 |
| **Total** | **0.4705** | **0.2408** | **3.0475** | **0.0116** | **1.5537** | **9.6200e-003** | **1.5633** | **0.4121** | **8.8500e-003** | **0.4209** | | **1,161.3515** | **1,161.3515** | **0.0221** | | **1,161.9048** |

## 4.0 Operational Detail - Mobile

### 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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1.8196 | 9.1497 | 23.6062 | 0.1079 | 11.1527 | 0.0736 | 11.2262 | 2.9827 | 0.0683 | 3.0510 | | 11,046.7514 | 11,046.7514 | 0.4622 | | 11,058.3067 |
| Unmitigated | 1.8196 | 9.1497 | 23.6062 | 0.1079 | 11.1527 | 0.0736 | 11.2262 | 2.9827 | 0.0683 | 3.0510 | | 11,046.7514 | 11,046.7514 | 0.4622 | | 11,058.3067 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Single Family Housing | 1,475.60 | 1,536.05 | 1336.10 | 5,003,760 | 5,003,760 |
| Total | 1,475.60 | 1,536.05 | 1,336.10 | 5,003,760 | 5,003,760 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-... | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Other Non-Asphalt Surfaces | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | 0.554500 | 0.041901 | 0.206158 | 0.112158 | 0.013256 | 0.005781 | 0.022151 | 0.034039 | 0.002155 | 0.001547 | 0.004857 | 0.000717 | 0.000782 |
| Single Family Housing | 0.554500 | 0.041901 | 0.206158 | 0.112158 | 0.013256 | 0.005781 | 0.022151 | 0.034039 | 0.002155 | 0.001547 | 0.004857 | 0.000717 | 0.000782 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |
| NaturalGas Unmitigated | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 12992.9 | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |
| **Total** | | **0.1401** | **1.1974** | **0.5095** | **7.6400e-003** | | **0.0968** | **0.0968** | | **0.0968** | **0.0968** | | **1,528.5748** | **1,528.5748** | **0.0293** | **0.0280** | **1,537.6583** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| 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 |
| Single Family Housing | 12.9929 | 0.1401 | 1.1974 | 0.5095 | 7.6400e-003 | | 0.0968 | 0.0968 | | 0.0968 | 0.0968 | | 1,528.5748 | 1,528.5748 | 0.0293 | 0.0280 | 1,537.6583 |
| **Total** | | **0.1401** | **1.1974** | **0.5095** | **7.6400e-003** | | **0.0968** | **0.0968** | | **0.0968** | **0.0968** | | **1,528.5748** | **1,528.5748** | **0.0293** | **0.0280** | **1,537.6583** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 54.8956 | 3.3632 | 91.6047 | 0.2018 | | 11.9111 | 11.9111 | | 11.9111 | 11.9111 | 1,451.8724 | 2,813.0333 | 4,264.9056 | 4.3518 | 0.0985 | 4,403.0672 |
| Unmitigated | 54.8956 | 3.3632 | 91.6047 | 0.2018 | | 11.9111 | 11.9111 | | 11.9111 | 11.9111 | 1,451.8724 | 2,813.0333 | 4,264.9056 | 4.3518 | 0.0985 | 4,403.0672 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.1712 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 12.7249 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 40.6156 | 3.2160 | 78.8255 | 0.2011 | | 11.8402 | 11.8402 | | 11.8402 | 11.8402 | 1,451.8724 | 2,790.0000 | 4,241.8724 | 4.3298 | 0.0985 | 4,379.4822 |
| Landscaping | 0.3839 | 0.1472 | 12.7791 | 6.8000e-004 | | 0.0709 | 0.0709 | | 0.0709 | 0.0709 | | 23.0333 | 23.0333 | 0.0221 | | 23.5850 |
| **Total** | **54.8956** | **3.3632** | **91.6047** | **0.2018** | | **11.9111** | **11.9111** | | **11.9111** | **11.9111** | **1,451.8724** | **2,813.0333** | **4,264.9056** | **4.3518** | **0.0985** | **4,403.0672** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 1.1712 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 12.7249 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 40.6156 | 3.2160 | 78.8255 | 0.2011 | | 11.8402 | 11.8402 | | 11.8402 | 11.8402 | 1,451.8724 | 2,790.0000 | 4,241.8724 | 4.3298 | 0.0985 | 4,379.4822 |
| Landscaping | 0.3839 | 0.1472 | 12.7791 | 6.8000e-004 | | 0.0709 | 0.0709 | | 0.0709 | 0.0709 | | 23.0333 | 23.0333 | 0.0221 | | 23.5850 |
| **Total** | **54.8956** | **3.3632** | **91.6047** | **0.2018** | | **11.9111** | **11.9111** | | **11.9111** | **11.9111** | **1,451.8724** | **2,813.0333** | **4,264.9056** | **4.3518** | **0.0985** | **4,403.0672** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation