

Mt SAC Parking Structure R and Tennis Courts - Los Angeles-South Coast County, Annual

**Mt SAC Parking Structure R and Tennis Courts**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                        | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|----------------------------------|--------|----------|-------------|--------------------|------------|
| Racquet Club                     | 82.03  | 1000sqft | 1.88        | 82,030.00          | 0          |
| Unenclosed Parking with Elevator | 321.41 | 1000sqft | 4.30        | 321,407.00         | 0          |

**1.2 Other Project Characteristics**

|                                 |                            |                                 |       |                                  |       |
|---------------------------------|----------------------------|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                      | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 9                          |                                 |       | <b>Operational Year</b>          | 2020  |
| <b>Utility Company</b>          | Southern California Edison |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 702.44                     | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

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

- Project Characteristics -
- Land Use - Parking Structure R and Tennis Court (on top of Parking Lot)
- Construction Phase - .
- Off-road Equipment - .
- Off-road Equipment - .
- Off-road Equipment - .
- Trips and VMT - Defaults
- Architectural Coating - default



|                         |             |             |              |
|-------------------------|-------------|-------------|--------------|
| tblConstEquipMitigation | Tier        | No Change   | Tier 4 Final |
| tblConstEquipMitigation | Tier        | No Change   | Tier 4 Final |
| tblConstEquipMitigation | Tier        | No Change   | Tier 4 Final |
| tblConstructionPhase    | NumDays     | 20.00       | 21.00        |
| tblConstructionPhase    | NumDays     | 230.00      | 269.00       |
| tblConstructionPhase    | NumDays     | 20.00       | 27.00        |
| tblConstructionPhase    | NumDays     | 20.00       | 22.00        |
| tblConstructionPhase    | NumDaysWeek | 5.00        | 6.00         |
| tblConstructionPhase    | NumDaysWeek | 5.00        | 6.00         |
| tblConstructionPhase    | NumDaysWeek | 5.00        | 6.00         |
| tblConstructionPhase    | NumDaysWeek | 5.00        | 6.00         |
| tblFleetMix             | HHD         | 0.03        | 0.01         |
| tblFleetMix             | HHD         | 0.03        | 0.01         |
| tblFleetMix             | LDA         | 0.55        | 0.90         |
| tblFleetMix             | LDA         | 0.55        | 0.90         |
| tblFleetMix             | LDT1        | 0.05        | 0.01         |
| tblFleetMix             | LDT1        | 0.05        | 0.01         |
| tblFleetMix             | LDT2        | 0.20        | 0.01         |
| tblFleetMix             | LDT2        | 0.20        | 0.01         |
| tblFleetMix             | LHD1        | 0.02        | 0.01         |
| tblFleetMix             | LHD1        | 0.02        | 0.01         |
| tblFleetMix             | LHD2        | 6.0900e-003 | 7.6130e-003  |
| tblFleetMix             | LHD2        | 6.0900e-003 | 7.6130e-003  |
| tblFleetMix             | MCY         | 5.0050e-003 | 6.3610e-003  |
| tblFleetMix             | MCY         | 5.0050e-003 | 6.3610e-003  |
| tblFleetMix             | MDV         | 0.12        | 1.2050e-003  |
| tblFleetMix             | MDV         | 0.12        | 1.2050e-003  |
| tblFleetMix             | MH          | 9.0700e-004 | 9.9700e-004  |
| tblFleetMix             | MH          | 9.0700e-004 | 9.9700e-004  |
| tblFleetMix             | MHD         | 0.02        | 0.03         |

|                     |                            |             |             |
|---------------------|----------------------------|-------------|-------------|
| tblFleetMix         | MHD                        | 0.02        | 0.03        |
| tblFleetMix         | OBUS                       | 2.4380e-003 | 3.1350e-003 |
| tblFleetMix         | OBUS                       | 2.4380e-003 | 3.1350e-003 |
| tblFleetMix         | SBUS                       | 6.7700e-004 | 8.5500e-004 |
| tblFleetMix         | SBUS                       | 6.7700e-004 | 8.5500e-004 |
| tblFleetMix         | UBUS                       | 2.3590e-003 | 2.2440e-003 |
| tblFleetMix         | UBUS                       | 2.3590e-003 | 2.2440e-003 |
| tblLandUse          | LandUseSquareFeet          | 321,410.00  | 321,407.00  |
| tblLandUse          | LotAcreage                 | 7.38        | 4.30        |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00        | 2.00        |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00        | 2.00        |
| tblOffRoadEquipment | UsageHours                 | 7.00        | 8.00        |
| tblVehicleTrips     | ST_TR                      | 21.35       | 2.26        |
| tblVehicleTrips     | SU_TR                      | 17.40       | 1.85        |
| tblVehicleTrips     | WD_TR                      | 14.03       | 1.49        |

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

|                | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Year           | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| 2019           | 0.4031        | 3.6153        | 3.0930        | 7.0000e-003        | 0.3343        | 0.1658        | 0.5001        | 0.1072         | 0.1552        | 0.2623        | 0.0000        | 634.2930        | 634.2930        | 0.0973        | 0.0000        | 636.7264        |
| 2020           | 0.5772        | 1.3142        | 1.2995        | 2.9600e-003        | 0.0974        | 0.0598        | 0.1572        | 0.0263         | 0.0561        | 0.0824        | 0.0000        | 266.0643        | 266.0643        | 0.0389        | 0.0000        | 267.0355        |
| <b>Maximum</b> | <b>0.5772</b> | <b>3.6153</b> | <b>3.0930</b> | <b>7.0000e-003</b> | <b>0.3343</b> | <b>0.1658</b> | <b>0.5001</b> | <b>0.1072</b>  | <b>0.1552</b> | <b>0.2623</b> | <b>0.0000</b> | <b>634.2930</b> | <b>634.2930</b> | <b>0.0973</b> | <b>0.0000</b> | <b>636.7264</b> |

**Mitigated Construction**

|                | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Year           | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| 2019           | 0.1826        | 1.1247        | 3.1466        | 7.0000e-003        | 0.2699        | 0.0208        | 0.2907        | 0.0805         | 0.0204        | 0.1009        | 0.0000        | 634.2926        | 634.2926        | 0.0973        | 0.0000        | 636.7260        |
| 2020           | 0.4979        | 0.4446        | 1.3604        | 2.9600e-003        | 0.0974        | 7.5900e-003   | 0.1050        | 0.0263         | 7.4800e-003   | 0.0337        | 0.0000        | 266.0642        | 266.0642        | 0.0389        | 0.0000        | 267.0354        |
| <b>Maximum</b> | <b>0.4979</b> | <b>1.1247</b> | <b>3.1466</b> | <b>7.0000e-003</b> | <b>0.2699</b> | <b>0.0208</b> | <b>0.2907</b> | <b>0.0805</b>  | <b>0.0204</b> | <b>0.1009</b> | <b>0.0000</b> | <b>634.2926</b> | <b>634.2926</b> | <b>0.0973</b> | <b>0.0000</b> | <b>636.7260</b> |

|                          | ROG          | NOx          | CO           | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total   | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2    | NBio- CO2   | Total CO2   | CH4         | N2O         | CO2e        |
|--------------------------|--------------|--------------|--------------|-------------|---------------|--------------|--------------|----------------|---------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Percent Reduction</b> | <b>30.58</b> | <b>68.17</b> | <b>-2.61</b> | <b>0.00</b> | <b>14.92</b>  | <b>87.44</b> | <b>39.81</b> | <b>20.02</b>   | <b>86.79</b>  | <b>60.95</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

| Quarter | Start Date | End Date       | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|----------------|--|--|
| 1       | 5-15-2019  | 8-14-2019      | 1.9768                                       | 0.5123                                     |
| 2       | 8-15-2019  | 11-14-2019     | 1.3354                                       | 0.5152                                     |
| 3       | 11-15-2019 | 2-14-2020      | 1.2803                                       | 0.5012                                     |
| 4       | 2-15-2020  | 5-14-2020      | 0.9889                                       | 0.4129                                     |
| 5       | 5-15-2020  | 8-14-2020      | 0.2925                                       | 0.2804                                     |
|         |            | <b>Highest</b> | <b>1.9768</b>                                | <b>0.5152</b>                              |

**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         | 0.3602        | 5.0000e-005   | 5.1800e-003   | 0.0000             |               | 2.0000e-005        | 2.0000e-005   |               | 2.0000e-005        | 2.0000e-005   | 0.0000         | 0.0100          | 0.0100          | 3.0000e-005   | 0.0000             | 0.0107          |
| Energy       | 8.0100e-003   | 0.0728        | 0.0611        | 4.4000e-004        |               | 5.5300e-003        | 5.5300e-003   |               | 5.5300e-003        | 5.5300e-003   | 0.0000         | 568.0168        | 568.0168        | 0.0217        | 5.6300e-003        | 570.2362        |
| Mobile       | 0.0346        | 0.1220        | 0.3801        | 1.1200e-003        | 0.1048        | 1.3800e-003        | 0.1061        | 0.0281        | 1.3000e-003        | 0.0294        | 0.0000         | 103.0631        | 103.0631        | 5.9600e-003   | 0.0000             | 103.2122        |
| Waste        |               |               |               |                    |               | 0.0000             | 0.0000        |               | 0.0000             | 0.0000        | 94.9125        | 0.0000          | 94.9125         | 5.6092        | 0.0000             | 235.1417        |
| Water        |               |               |               |                    |               | 0.0000             | 0.0000        |               | 0.0000             | 0.0000        | 1.5392         | 30.6537         | 32.1928         | 0.1594        | 3.9900e-003        | 37.3670         |
| <b>Total</b> | <b>0.4028</b> | <b>0.1948</b> | <b>0.4464</b> | <b>1.5600e-003</b> | <b>0.1048</b> | <b>6.9300e-003</b> | <b>0.1117</b> | <b>0.0281</b> | <b>6.8500e-003</b> | <b>0.0349</b> | <b>96.4516</b> | <b>701.7435</b> | <b>798.1952</b> | <b>5.7962</b> | <b>9.6200e-003</b> | <b>945.9678</b> |

### 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         | 0.3602        | 5.0000e-005   | 5.1800e-003   | 0.0000             |               | 2.0000e-005        | 2.0000e-005   |                | 2.0000e-005        | 2.0000e-005   | 0.0000         | 0.0100          | 0.0100          | 3.0000e-005   | 0.0000             | 0.0107          |
| Energy       | 8.0100e-003   | 0.0728        | 0.0611        | 4.4000e-004        |               | 5.5300e-003        | 5.5300e-003   |                | 5.5300e-003        | 5.5300e-003   | 0.0000         | 568.0168        | 568.0168        | 0.0217        | 5.6300e-003        | 570.2362        |
| Mobile       | 0.0346        | 0.1220        | 0.3801        | 1.1200e-003        | 0.1048        | 1.3800e-003        | 0.1061        | 0.0281         | 1.3000e-003        | 0.0294        | 0.0000         | 103.0631        | 103.0631        | 5.9600e-003   | 0.0000             | 103.2122        |
| Waste        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 94.9125        | 0.0000          | 94.9125         | 5.6092        | 0.0000             | 235.1417        |
| Water        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 1.5392         | 30.6537         | 32.1928         | 0.1594        | 3.9900e-003        | 37.3670         |
| <b>Total</b> | <b>0.4028</b> | <b>0.1948</b> | <b>0.4464</b> | <b>1.5600e-003</b> | <b>0.1048</b> | <b>6.9300e-003</b> | <b>0.1117</b> | <b>0.0281</b>  | <b>6.8500e-003</b> | <b>0.0349</b> | <b>96.4516</b> | <b>701.7435</b> | <b>798.1952</b> | <b>5.7962</b> | <b>9.6200e-003</b> | <b>945.9678</b> |

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

### 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name                              | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|---|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Park R and Tennis Fine Grading          | Grading               | 5/15/2019  | 6/14/2019 | 6             | 27       |                   |
| 2            | Park R and Tennis Building Construction | Building Construction | 5/25/2019  | 4/2/2020  | 6             | 269      |                   |
| 3            | Park R and Tennis Paving                | Paving                | 4/11/2020  | 5/6/2020  | 6             | 22       |                   |
| 4            | Park R and Tennis Architectural Coating | Architectural Coating | 5/7/2020   | 5/30/2020 | 6             | 21       |                   |

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

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

**Acres of Paving: 4.3**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 123,045; Non-Residential Outdoor: 41,015; Striped Parking Area:**

**OffRoad Equipment**

| Phase Name                              | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|---|---------------------------|--------|-------------|-------------|-------------|
| Park R and Tennis Fine Grading          | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Park R and Tennis Fine Grading          | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Park R and Tennis Fine Grading          | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Park R and Tennis Fine Grading          | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Park R and Tennis Fine Grading          | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Park R and Tennis Building Construction | Cranes                    | 1      | 7.00        | 231         | 0.29        |
| Park R and Tennis Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Park R and Tennis Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Park R and Tennis Building Construction | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Park R and Tennis Building Construction | Welders                   | 1      | 8.00        | 46          | 0.45        |
| Park R and Tennis Paving                | Cement and Mortar Mixers  | 2      | 6.00        | 9           | 0.56        |
| Park R and Tennis Paving                | Pavers                    | 2      | 8.00        | 130         | 0.42        |
| Park R and Tennis Paving                | Paving Equipment          | 2      | 8.00        | 132         | 0.36        |
| Park R and Tennis Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Park R and Tennis Paving                | Tractors/Loaders/Backhoes | 1      | 8.00        | 97          | 0.37        |

|   |                 |   |      |    |      |
|---|-----------------|---|------|----|------|
| Park R and Tennis 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 |
|---|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Park R and Tennis Fine Grading          | 8                       | 20.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Park R and Tennis Building Construction | 9                       | 169.00             | 66.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Park R and Tennis Paving                | 9                       | 23.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Park R and Tennis Architectural Coating | 1                       | 34.00              | 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

Water Exposed Area

**3.2 Park R and Tennis Fine Grading - 2019**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.1171        | 0.0000        | 0.1171        | 0.0486         | 0.0000        | 0.0486        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0640        | 0.7360        | 0.4506        | 8.4000e-004        |               | 0.0322        | 0.0322        |                | 0.0296        | 0.0296        | 0.0000        | 75.1968        | 75.1968        | 0.0238        | 0.0000        | 75.7916        |
| <b>Total</b>  | <b>0.0640</b> | <b>0.7360</b> | <b>0.4506</b> | <b>8.4000e-004</b> | <b>0.1171</b> | <b>0.0322</b> | <b>0.1493</b> | <b>0.0486</b>  | <b>0.0296</b> | <b>0.0781</b> | <b>0.0000</b> | <b>75.1968</b> | <b>75.1968</b> | <b>0.0238</b> | <b>0.0000</b> | <b>75.7916</b> |

**Unmitigated Construction Off-Site**





|              |                    |                    |               |                    |                    |                    |                    |                    |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.3500e-003        | 1.1300e-003        | 0.0123        | 3.0000e-005        | 2.9600e-003        | 3.0000e-005        | 2.9800e-003        | 7.9000e-004        | 2.0000e-005        | 8.1000e-004        | 0.0000        | 2.8441        | 2.8441        | 1.0000e-004        | 0.0000        | 2.8465        |
| <b>Total</b> | <b>1.3500e-003</b> | <b>1.1300e-003</b> | <b>0.0123</b> | <b>3.0000e-005</b> | <b>2.9600e-003</b> | <b>3.0000e-005</b> | <b>2.9800e-003</b> | <b>7.9000e-004</b> | <b>2.0000e-005</b> | <b>8.1000e-004</b> | <b>0.0000</b> | <b>2.8441</b> | <b>2.8441</b> | <b>1.0000e-004</b> | <b>0.0000</b> | <b>2.8465</b> |

### 3.3 Park R and Tennis Building Construction - 2019

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.2314        | 2.0748        | 1.7036        | 2.6500e-003        |               | 0.1274        | 0.1274        |                | 0.1197        | 0.1197        | 0.0000        | 232.0604        | 232.0604        | 0.0573        | 0.0000        | 233.4917        |
| <b>Total</b> | <b>0.2314</b> | <b>2.0748</b> | <b>1.7036</b> | <b>2.6500e-003</b> |               | <b>0.1274</b> | <b>0.1274</b> |                | <b>0.1197</b> | <b>0.1197</b> | <b>0.0000</b> | <b>232.0604</b> | <b>232.0604</b> | <b>0.0573</b> | <b>0.0000</b> | <b>233.4917</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 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        | 0.7367        | 0.2015        | 1.6100e-003        | 0.0393        | 4.6300e-003        | 0.0439        | 0.0113         | 4.4300e-003        | 0.0158        | 0.0000        | 155.9652        | 155.9652        | 0.0104        | 0.0000        | 156.2255        |
| Worker       | 0.0800        | 0.0667        | 0.7251        | 1.8600e-003        | 0.1750        | 1.5400e-003        | 0.1765        | 0.0465         | 1.4200e-003        | 0.0479        | 0.0000        | 168.2264        | 168.2264        | 5.7800e-003   | 0.0000        | 168.3711        |
| <b>Total</b> | <b>0.1064</b> | <b>0.8034</b> | <b>0.9265</b> | <b>3.4700e-003</b> | <b>0.2143</b> | <b>6.1700e-003</b> | <b>0.2205</b> | <b>0.0578</b>  | <b>5.8500e-003</b> | <b>0.0637</b> | <b>0.0000</b> | <b>324.1917</b> | <b>324.1917</b> | <b>0.0162</b> | <b>0.0000</b> | <b>324.5966</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.0646        | 0.2756        | 1.7623        | 2.6500e-003        |               | 0.0132        | 0.0132        |                | 0.0132        | 0.0132        | 0.0000        | 232.0602        | 232.0602        | 0.0573        | 0.0000        | 233.4915        |
| <b>Total</b> | <b>0.0646</b> | <b>0.2756</b> | <b>1.7623</b> | <b>2.6500e-003</b> |               | <b>0.0132</b> | <b>0.0132</b> |                | <b>0.0132</b> | <b>0.0132</b> | <b>0.0000</b> | <b>232.0602</b> | <b>232.0602</b> | <b>0.0573</b> | <b>0.0000</b> | <b>233.4915</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 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        | 0.7367        | 0.2015        | 1.6100e-003        | 0.0393        | 4.6300e-003        | 0.0439        | 0.0113         | 4.4300e-003        | 0.0158        | 0.0000        | 155.9652        | 155.9652        | 0.0104        | 0.0000        | 156.2255        |
| Worker       | 0.0800        | 0.0667        | 0.7251        | 1.8600e-003        | 0.1750        | 1.5400e-003        | 0.1765        | 0.0465         | 1.4200e-003        | 0.0479        | 0.0000        | 168.2264        | 168.2264        | 5.7800e-003   | 0.0000        | 168.3711        |
| <b>Total</b> | <b>0.1064</b> | <b>0.8034</b> | <b>0.9265</b> | <b>3.4700e-003</b> | <b>0.2143</b> | <b>6.1700e-003</b> | <b>0.2205</b> | <b>0.0578</b>  | <b>5.8500e-003</b> | <b>0.0637</b> | <b>0.0000</b> | <b>324.1917</b> | <b>324.1917</b> | <b>0.0162</b> | <b>0.0000</b> | <b>324.5966</b> |

**3.3 Park R and Tennis Building Construction - 2020**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |               |               |                |
| Off-Road     | 0.0879        | 0.7990        | 0.7081        | 1.1200e-003        |               | 0.0467        | 0.0467        |                | 0.0439        | 0.0439        | 0.0000        | 96.7368        | 96.7368        | 0.0239        | 0.0000        | 97.3349        |
| <b>Total</b> | <b>0.0879</b> | <b>0.7990</b> | <b>0.7081</b> | <b>1.1200e-003</b> |               | <b>0.0467</b> | <b>0.0467</b> |                | <b>0.0439</b> | <b>0.0439</b> | <b>0.0000</b> | <b>96.7368</b> | <b>96.7368</b> | <b>0.0239</b> | <b>0.0000</b> | <b>97.3349</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 9.5700e-003   | 0.2861        | 0.0774        | 6.8000e-004        | 0.0166        | 1.3300e-003        | 0.0180        | 4.8000e-003    | 1.2700e-003        | 6.0700e-003   | 0.0000        | 65.5845         | 65.5845         | 4.1700e-003        | 0.0000        | 65.6887         |
| Worker       | 0.0312        | 0.0252        | 0.2783        | 7.6000e-004        | 0.0741        | 6.3000e-004        | 0.0747        | 0.0197         | 5.8000e-004        | 0.0203        | 0.0000        | 69.0433         | 69.0433         | 2.1800e-003        | 0.0000        | 69.0977         |
| <b>Total</b> | <b>0.0408</b> | <b>0.3112</b> | <b>0.3557</b> | <b>1.4400e-003</b> | <b>0.0907</b> | <b>1.9600e-003</b> | <b>0.0927</b> | <b>0.0245</b>  | <b>1.8500e-003</b> | <b>0.0263</b> | <b>0.0000</b> | <b>134.6278</b> | <b>134.6278</b> | <b>6.3500e-003</b> | <b>0.0000</b> | <b>134.7864</b> |

**Mitigated Construction On-Site**

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|----------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|---------|
| Category | tons/yr |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |        |        |         |
| Off-Road | 0.0256  | 0.1146 | 0.7444 | 1.1200e-003 |               | 5.0700e-003  | 5.0700e-003 |                | 5.0700e-003   | 5.0700e-003 | 0.0000   | 96.7367   | 96.7367   | 0.0239 | 0.0000 | 97.3348 |

|              |               |               |               |                    |  |                    |                    |  |                    |                    |               |                |                |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|--|--------------------|--------------------|--|--------------------|--------------------|---------------|----------------|----------------|---------------|---------------|----------------|
| <b>Total</b> | <b>0.0256</b> | <b>0.1146</b> | <b>0.7444</b> | <b>1.1200e-003</b> |  | <b>5.0700e-003</b> | <b>5.0700e-003</b> |  | <b>5.0700e-003</b> | <b>5.0700e-003</b> | <b>0.0000</b> | <b>96.7367</b> | <b>96.7367</b> | <b>0.0239</b> | <b>0.0000</b> | <b>97.3348</b> |
|--------------|---------------|---------------|---------------|--------------------|--|--------------------|--------------------|--|--------------------|--------------------|---------------|----------------|----------------|---------------|---------------|----------------|

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 9.5700e-003   | 0.2861        | 0.0774        | 6.8000e-004        | 0.0166        | 1.3300e-003        | 0.0180        | 4.8000e-003    | 1.2700e-003        | 6.0700e-003   | 0.0000        | 65.5845         | 65.5845         | 4.1700e-003        | 0.0000        | 65.6887         |
| Worker       | 0.0312        | 0.0252        | 0.2783        | 7.6000e-004        | 0.0741        | 6.3000e-004        | 0.0747        | 0.0197         | 5.8000e-004        | 0.0203        | 0.0000        | 69.0433         | 69.0433         | 2.1800e-003        | 0.0000        | 69.0977         |
| <b>Total</b> | <b>0.0408</b> | <b>0.3112</b> | <b>0.3557</b> | <b>1.4400e-003</b> | <b>0.0907</b> | <b>1.9600e-003</b> | <b>0.0927</b> | <b>0.0245</b>  | <b>1.8500e-003</b> | <b>0.0263</b> | <b>0.0000</b> | <b>134.6278</b> | <b>134.6278</b> | <b>6.3500e-003</b> | <b>0.0000</b> | <b>134.7864</b> |

**3.4 Park R and Tennis Paving - 2020**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 0.0182        | 0.1840        | 0.1913        | 3.0000e-004        |               | 9.9800e-003        | 9.9800e-003        |                | 9.2000e-003        | 9.2000e-003        | 0.0000        | 25.7886        | 25.7886        | 8.1700e-003        | 0.0000        | 25.9929        |
| Paving       | 0.0000        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| <b>Total</b> | <b>0.0182</b> | <b>0.1840</b> | <b>0.1913</b> | <b>3.0000e-004</b> |               | <b>9.9800e-003</b> | <b>9.9800e-003</b> |                | <b>9.2000e-003</b> | <b>9.2000e-003</b> | <b>0.0000</b> | <b>25.7886</b> | <b>25.7886</b> | <b>8.1700e-003</b> | <b>0.0000</b> | <b>25.9929</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.1700e-003        | 9.4000e-004        | 0.0104        | 3.0000e-005        | 2.7700e-003        | 2.0000e-005        | 2.8000e-003        | 7.4000e-004        | 2.0000e-005        | 7.6000e-004        | 0.0000        | 2.5840        | 2.5840        | 8.0000e-005        | 0.0000        | 2.5861        |
| <b>Total</b> | <b>1.1700e-003</b> | <b>9.4000e-004</b> | <b>0.0104</b> | <b>3.0000e-005</b> | <b>2.7700e-003</b> | <b>2.0000e-005</b> | <b>2.8000e-003</b> | <b>7.4000e-004</b> | <b>2.0000e-005</b> | <b>7.6000e-004</b> | <b>0.0000</b> | <b>2.5840</b> | <b>2.5840</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>2.5861</b> |

**Mitigated Construction On-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 3.5000e-003        | 0.0152        | 0.2160        | 3.0000e-004        |               | 4.7000e-004        | 4.7000e-004        |                | 4.7000e-004        | 4.7000e-004        | 0.0000        | 25.7886        | 25.7886        | 8.1700e-003        | 0.0000        | 25.9929        |
| Paving       | 0.0000             |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| <b>Total</b> | <b>3.5000e-003</b> | <b>0.0152</b> | <b>0.2160</b> | <b>3.0000e-004</b> |               | <b>4.7000e-004</b> | <b>4.7000e-004</b> |                | <b>4.7000e-004</b> | <b>4.7000e-004</b> | <b>0.0000</b> | <b>25.7886</b> | <b>25.7886</b> | <b>8.1700e-003</b> | <b>0.0000</b> | <b>25.9929</b> |

**Mitigated Construction Off-Site**

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

| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
|              | Hauling            | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.1700e-003        | 9.4000e-004        | 0.0104        | 3.0000e-005        | 2.7700e-003        | 2.0000e-005        | 2.8000e-003        | 7.4000e-004        | 2.0000e-005        | 7.6000e-004        | 0.0000        | 2.5840        | 2.5840        | 8.0000e-005        | 0.0000        | 2.5861        |
| <b>Total</b> | <b>1.1700e-003</b> | <b>9.4000e-004</b> | <b>0.0104</b> | <b>3.0000e-005</b> | <b>2.7700e-003</b> | <b>2.0000e-005</b> | <b>2.8000e-003</b> | <b>7.4000e-004</b> | <b>2.0000e-005</b> | <b>7.6000e-004</b> | <b>0.0000</b> | <b>2.5840</b> | <b>2.5840</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>2.5861</b> |

### 3.5 Park R and Tennis Architectural Coating - 2020

#### Unmitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.4249        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 2.5400e-003   | 0.0177        | 0.0192        | 3.0000e-005        |               | 1.1600e-003        | 1.1600e-003        |                | 1.1600e-003        | 1.1600e-003        | 0.0000        | 2.6809        | 2.6809        | 2.1000e-004        | 0.0000        | 2.6861        |
| <b>Total</b>    | <b>0.4274</b> | <b>0.0177</b> | <b>0.0192</b> | <b>3.0000e-005</b> |               | <b>1.1600e-003</b> | <b>1.1600e-003</b> |                | <b>1.1600e-003</b> | <b>1.1600e-003</b> | <b>0.0000</b> | <b>2.6809</b> | <b>2.6809</b> | <b>2.1000e-004</b> | <b>0.0000</b> | <b>2.6861</b> |

#### Unmitigated Construction Off-Site

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

|              |                    |                    |               |                    |                    |                    |                    |                    |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Worker       | 1.6500e-003        | 1.3300e-003        | 0.0147        | 4.0000e-005        | 3.9100e-003        | 3.0000e-005        | 3.9500e-003        | 1.0400e-003        | 3.0000e-005        | 1.0700e-003        | 0.0000        | 3.6462        | 3.6462        | 1.1000e-004        | 0.0000        | 3.6491        |
| <b>Total</b> | <b>1.6500e-003</b> | <b>1.3300e-003</b> | <b>0.0147</b> | <b>4.0000e-005</b> | <b>3.9100e-003</b> | <b>3.0000e-005</b> | <b>3.9500e-003</b> | <b>1.0400e-003</b> | <b>3.0000e-005</b> | <b>1.0700e-003</b> | <b>0.0000</b> | <b>3.6462</b> | <b>3.6462</b> | <b>1.1000e-004</b> | <b>0.0000</b> | <b>3.6491</b> |

**Mitigated Construction On-Site**

|                 | ROG           | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |                    |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.4249        |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 3.1000e-004   | 1.3500e-003        | 0.0192        | 3.0000e-005        |               | 4.0000e-005        | 4.0000e-005        |                | 4.0000e-005        | 4.0000e-005        | 0.0000        | 2.6809        | 2.6809        | 2.1000e-004        | 0.0000        | 2.6861        |
| <b>Total</b>    | <b>0.4252</b> | <b>1.3500e-003</b> | <b>0.0192</b> | <b>3.0000e-005</b> |               | <b>4.0000e-005</b> | <b>4.0000e-005</b> |                | <b>4.0000e-005</b> | <b>4.0000e-005</b> | <b>0.0000</b> | <b>2.6809</b> | <b>2.6809</b> | <b>2.1000e-004</b> | <b>0.0000</b> | <b>2.6861</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.6500e-003        | 1.3300e-003        | 0.0147        | 4.0000e-005        | 3.9100e-003        | 3.0000e-005        | 3.9500e-003        | 1.0400e-003        | 3.0000e-005        | 1.0700e-003        | 0.0000        | 3.6462        | 3.6462        | 1.1000e-004        | 0.0000        | 3.6491        |
| <b>Total</b> | <b>1.6500e-003</b> | <b>1.3300e-003</b> | <b>0.0147</b> | <b>4.0000e-005</b> | <b>3.9100e-003</b> | <b>3.0000e-005</b> | <b>3.9500e-003</b> | <b>1.0400e-003</b> | <b>3.0000e-005</b> | <b>1.0700e-003</b> | <b>0.0000</b> | <b>3.6462</b> | <b>3.6462</b> | <b>1.1000e-004</b> | <b>0.0000</b> | <b>3.6491</b> |

**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   | 0.0346  | 0.1220 | 0.3801 | 1.1200e-003 | 0.1048        | 1.3800e-003  | 0.1061     | 0.0281         | 1.3000e-003   | 0.0294      | 0.0000   | 103.0631  | 103.0631  | 5.9600e-003 | 0.0000 | 103.2122 |
| Unmitigated | 0.0346  | 0.1220 | 0.3801 | 1.1200e-003 | 0.1048        | 1.3800e-003  | 0.1061     | 0.0281         | 1.3000e-003   | 0.0294      | 0.0000   | 103.0631  | 103.0631  | 5.9600e-003 | 0.0000 | 103.2122 |

#### 4.2 Trip Summary Information

| Land Use                         | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------------|-------------------------|----------|--------|-------------|------------|
|                                  | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Racquet Club                     | 122.22                  | 185.39   | 151.76 | 276,249     | 276,249    |
| Unenclosed Parking with Elevator | 0.00                    | 0.00     | 0.00   |             |            |
| Total                            | 122.22                  | 185.39   | 151.76 | 276,249     | 276,249    |

#### 4.3 Trip Type Information

| Land Use                         | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|----------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                                  | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Racquet Club                     | 16.60      | 8.40       | 6.90        | 11.50      | 69.50      | 19.00       | 52             | 39       | 9       |
| Unenclosed Parking with Elevator | 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       |
|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Racquet Club                     | 0.904015 | 0.012054 | 0.012054 | 0.001205 | 0.012054 | 0.007613 | 0.025361 | 0.012054 | 0.003135 | 0.002244 | 0.006361 | 0.000855 | 0.000997 |
| Unenclosed Parking with Elevator | 0.904015 | 0.012054 | 0.012054 | 0.001205 | 0.012054 | 0.007613 | 0.025361 | 0.012054 | 0.003135 | 0.002244 | 0.006361 | 0.000855 | 0.000997 |

## 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   | 488.7852  | 488.7852  | 0.0202      | 4.1800e-003 | 490.5339 |
| Electricity Unmitigated |             |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 488.7852  | 488.7852  | 0.0202      | 4.1800e-003 | 490.5339 |
| NaturalGas Mitigated    | 8.0100e-003 | 0.0728 | 0.0611 | 4.4000e-004 |               | 5.5300e-003  | 5.5300e-003 |                | 5.5300e-003   | 5.5300e-003 | 0.0000   | 79.2315   | 79.2315   | 1.5200e-003 | 1.4500e-003 | 79.7024  |
| NaturalGas Unmitigated  | 8.0100e-003 | 0.0728 | 0.0611 | 4.4000e-004 |               | 5.5300e-003  | 5.5300e-003 |                | 5.5300e-003   | 5.5300e-003 | 0.0000   | 79.2315   | 79.2315   | 1.5200e-003 | 1.4500e-003 | 79.7024  |

### 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         |                |                |                    |                    |                |
| Racquet Club                     | 1.48474e+006   | 8.0100e-003        | 0.0728        | 0.0611        | 4.4000e-004        |               | 5.5300e-003        | 5.5300e-003        |                | 5.5300e-003        | 5.5300e-003        | 0.0000        | 79.2315        | 79.2315        | 1.5200e-003        | 1.4500e-003        | 79.7024        |
| Unenclosed Parking with Elevator | 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         |
| <b>Total</b>                     |                | <b>8.0100e-003</b> | <b>0.0728</b> | <b>0.0611</b> | <b>4.4000e-004</b> |               | <b>5.5300e-003</b> | <b>5.5300e-003</b> |                | <b>5.5300e-003</b> | <b>5.5300e-003</b> | <b>0.0000</b> | <b>79.2315</b> | <b>79.2315</b> | <b>1.5200e-003</b> | <b>1.4500e-003</b> | <b>79.7024</b> |

**Mitigated**

|                                 | Natural Gas 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         |                |                |                    |                    |                |
| Racquet Club                    | 1.48474e+006    | 8.0100e-003        | 0.0728        | 0.0611        | 4.4000e-004        |               | 5.5300e-003        | 5.5300e-003        |                | 5.5300e-003        | 5.5300e-003        | 0.0000        | 79.2315        | 79.2315        | 1.5200e-003        | 1.4500e-003        | 79.7024        |
| Unenclosed Parking with Cluster | 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         |
| <b>Total</b>                    |                 | <b>8.0100e-003</b> | <b>0.0728</b> | <b>0.0611</b> | <b>4.4000e-004</b> |               | <b>5.5300e-003</b> | <b>5.5300e-003</b> |                | <b>5.5300e-003</b> | <b>5.5300e-003</b> | <b>0.0000</b> | <b>79.2315</b> | <b>79.2315</b> | <b>1.5200e-003</b> | <b>1.4500e-003</b> | <b>79.7024</b> |

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

|                                 | Electricity Use | Total CO2       | CH4           | N2O                | CO2e            |
|---------------------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use                        | kWh/yr          | MT/yr           |               |                    |                 |
| Racquet Club                    | 910533          | 290.1153        | 0.0120        | 2.4800e-003        | 291.1532        |
| Unenclosed Parking with Cluster | 623530          | 198.6699        | 8.2000e-003   | 1.7000e-003        | 199.3806        |
| <b>Total</b>                    |                 | <b>488.7852</b> | <b>0.0202</b> | <b>4.1800e-003</b> | <b>490.5339</b> |

**Mitigated**

|  | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--|-----------------|-----------|-----|-----|------|
|--|-----------------|-----------|-----|-----|------|



|                   |               |                    |                    |               |  |                    |                    |  |                    |                    |               |               |               |                    |               |               |
|-------------------|---------------|--------------------|--------------------|---------------|--|--------------------|--------------------|--|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Consumer Products | 0.3172        |                    |                    |               |  | 0.0000             | 0.0000             |  | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Landscaping       | 4.9000e-004   | 5.0000e-005        | 5.1800e-003        | 0.0000        |  | 2.0000e-005        | 2.0000e-005        |  | 2.0000e-005        | 2.0000e-005        | 0.0000        | 0.0100        | 0.0100        | 3.0000e-005        | 0.0000        | 0.0107        |
| <b>Total</b>      | <b>0.3602</b> | <b>5.0000e-005</b> | <b>5.1800e-003</b> | <b>0.0000</b> |  | <b>2.0000e-005</b> | <b>2.0000e-005</b> |  | <b>2.0000e-005</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>0.0100</b> | <b>0.0100</b> | <b>3.0000e-005</b> | <b>0.0000</b> | <b>0.0107</b> |

**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 | 0.0425        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Consumer Products     | 0.3172        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Landscaping           | 4.9000e-004   | 5.0000e-005        | 5.1800e-003        | 0.0000        |               | 2.0000e-005        | 2.0000e-005        |                | 2.0000e-005        | 2.0000e-005        | 0.0000        | 0.0100        | 0.0100        | 3.0000e-005        | 0.0000        | 0.0107        |
| <b>Total</b>          | <b>0.3602</b> | <b>5.0000e-005</b> | <b>5.1800e-003</b> | <b>0.0000</b> |               | <b>2.0000e-005</b> | <b>2.0000e-005</b> |                | <b>2.0000e-005</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>0.0100</b> | <b>0.0100</b> | <b>3.0000e-005</b> | <b>0.0000</b> | <b>0.0107</b> |

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

|           | Total CO2 | CH4    | N2O         | CO2e    |
|-----------|-----------|--------|-------------|---------|
| Category  | MT/yr     |        |             |         |
| Mitigated | 32.1928   | 0.1594 | 3.9900e-003 | 37.3670 |

|             |         |        |             |         |
|-------------|---------|--------|-------------|---------|
| Unmitigated | 32.1928 | 0.1594 | 3.9900e-003 | 37.3670 |
|-------------|---------|--------|-------------|---------|

## 7.2 Water by Land Use

### Unmitigated

|                                  | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|----------------------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use                         | Mgal               | MT/yr          |               |                    |                |
| Racquet Club                     | 4.85151 / 2.97351  | 32.1928        | 0.1594        | 3.9900e-003        | 37.3670        |
| Unenclosed Parking with Elevator | 0 / 0              | 0.0000         | 0.0000        | 0.0000             | 0.0000         |
| <b>Total</b>                     |                    | <b>32.1928</b> | <b>0.1594</b> | <b>3.9900e-003</b> | <b>37.3670</b> |

### Mitigated

|                                  | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|----------------------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use                         | Mgal               | MT/yr          |               |                    |                |
| Racquet Club                     | 4.85151 / 2.97351  | 32.1928        | 0.1594        | 3.9900e-003        | 37.3670        |
| Unenclosed Parking with Elevator | 0 / 0              | 0.0000         | 0.0000        | 0.0000             | 0.0000         |
| <b>Total</b>                     |                    | <b>32.1928</b> | <b>0.1594</b> | <b>3.9900e-003</b> | <b>37.3670</b> |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

|             | Total CO2 | CH4    | N2O    | CO2e     |
|-------------|-----------|--------|--------|----------|
|             | MT/yr     |        |        |          |
| Mitigated   | 94.9125   | 5.6092 | 0.0000 | 235.1417 |
| Unmitigated | 94.9125   | 5.6092 | 0.0000 | 235.1417 |

**8.2 Waste by Land Use**

**Unmitigated**

|                                   | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e            |
|-----------------------------------|----------------|----------------|---------------|---------------|-----------------|
| Land Use                          | tons           | MT/yr          |               |               |                 |
| Racquet Club                      | 467.57         | 94.9125        | 5.6092        | 0.0000        | 235.1417        |
| Unenclosed Parking with Elevators | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| <b>Total</b>                      |                | <b>94.9125</b> | <b>5.6092</b> | <b>0.0000</b> | <b>235.1417</b> |

**Mitigated**

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

| Land Use                         | tons   | MT/yr          |               |               |                 |
|----------------------------------|--------|----------------|---------------|---------------|-----------------|
|                                  |        |                |               |               |                 |
| Racquet Club                     | 467.57 | 94.9125        | 5.6092        | 0.0000        | 235.1417        |
| Unenclosed Parking with Elevator | 0      | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| <b>Total</b>                     |        | <b>94.9125</b> | <b>5.6092</b> | <b>0.0000</b> | <b>235.1417</b> |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

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Mt SAC Parking Structure S and Pedestrian Bridge - Los Angeles-South Coast County, Annual

**Mt SAC Parking Structure S and Pedestrian Bridge**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                        | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|----------------------------------|--------|----------|-------------|--------------------|------------|
| Unenclosed Parking with Elevator | 286.41 | 1000sqft | 6.58        | 286,412.00         | 0          |

**1.2 Other Project Characteristics**

|                                 |                            |                                 |       |                                  |       |
|---------------------------------|----------------------------|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                      | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 9                          |                                 |       | <b>Operational Year</b>          | 2020  |
| <b>Utility Company</b>          | Southern California Edison |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 702.44                     | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

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

- Project Characteristics -
- Land Use - Parking Structure S
- Construction Phase - .
- Off-road Equipment - .
- Trips and VMT - .
- Architectural Coating - .
- Construction Off-road Equipment Mitigation - Tier 4 Equipment
- Energy Mitigation -
- Off-road Equipment - Added 1 saw, 1 excavator for pedestrian bridge

Off-road Equipment - .

Off-road Equipment - added 1 more crane for pedestrian bridge

Off-road Equipment -

Grading -

Vehicle Trips - No trips

| Table Name              | Column Name                | Default Value | New Value    |
|-------------------------|----------------------------|---------------|--------------|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 5.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 3.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 3.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 2.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 5.00         |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstructionPhase    | NumDays                    | 20.00         | 21.00        |
| tblConstructionPhase    | NumDays                    | 230.00        | 260.00       |
| tblConstructionPhase    | NumDays                    | 20.00         | 39.00        |

|                      |                            |            |            |
|----------------------|----------------------------|------------|------------|
| tblConstructionPhase | NumDays                    | 20.00      | 38.00      |
| tblConstructionPhase | NumDaysWeek                | 5.00       | 6.00       |
| tblConstructionPhase | NumDaysWeek                | 5.00       | 6.00       |
| tblConstructionPhase | NumDaysWeek                | 5.00       | 6.00       |
| tblConstructionPhase | NumDaysWeek                | 5.00       | 6.00       |
| tblLandUse           | LandUseSquareFeet          | 286,410.00 | 286,412.00 |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00       | 2.00       |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00       | 2.00       |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 3.00       | 4.00       |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00       | 2.00       |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 3.00       | 4.00       |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 3.00       | 2.00       |
| tblTripsAndVMT       | WorkerTripNumber           | 20.00      | 15.00      |

## 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         |                 |                 |               |               |                 |
| 2019           | 0.2786        | 2.8047        | 1.9756        | 3.9300e-003        | 0.2400        | 0.1325        | 0.3725        | 0.0859         | 0.1234        | 0.2093        | 0.0000        | 353.3511        | 353.3511        | 0.0805        | 0.0000        | 355.3631        |
| 2020           | 0.3922        | 3.1849        | 2.7280        | 6.1500e-003        | 0.1687        | 0.1498        | 0.3185        | 0.0455         | 0.1404        | 0.1859        | 0.0000        | 549.8337        | 549.8337        | 0.0894        | 0.0000        | 552.0677        |
| <b>Maximum</b> | <b>0.3922</b> | <b>3.1849</b> | <b>2.7280</b> | <b>6.1500e-003</b> | <b>0.2400</b> | <b>0.1498</b> | <b>0.3725</b> | <b>0.0859</b>  | <b>0.1404</b> | <b>0.2093</b> | <b>0.0000</b> | <b>549.8337</b> | <b>549.8337</b> | <b>0.0894</b> | <b>0.0000</b> | <b>552.0677</b> |

#### Mitigated Construction

|                | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Year           | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| 2019           | 0.0979        | 0.6813        | 2.0085        | 3.9300e-003        | 0.1369        | 0.0243        | 0.1612        | 0.0465         | 0.0233        | 0.0698        | 0.0000        | 353.3507        | 353.3507        | 0.0805        | 0.0000        | 355.3628        |
| 2020           | 0.2361        | 1.4811        | 2.8188        | 6.1500e-003        | 0.1687        | 0.0465        | 0.2152        | 0.0455         | 0.0439        | 0.0894        | 0.0000        | 549.8334        | 549.8334        | 0.0894        | 0.0000        | 552.0673        |
| <b>Maximum</b> | <b>0.2361</b> | <b>1.4811</b> | <b>2.8188</b> | <b>6.1500e-003</b> | <b>0.1687</b> | <b>0.0465</b> | <b>0.2152</b> | <b>0.0465</b>  | <b>0.0439</b> | <b>0.0894</b> | <b>0.0000</b> | <b>549.8334</b> | <b>549.8334</b> | <b>0.0894</b> | <b>0.0000</b> | <b>552.0673</b> |

|                          | ROG          | NOx          | CO           | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total   | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2    | NBio- CO2   | Total CO2   | CH4         | N2O         | CO2e        |
|--------------------------|--------------|--------------|--------------|-------------|---------------|--------------|--------------|----------------|---------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Percent Reduction</b> | <b>50.21</b> | <b>63.90</b> | <b>-2.63</b> | <b>0.00</b> | <b>25.21</b>  | <b>74.92</b> | <b>45.52</b> | <b>30.02</b>   | <b>74.52</b>  | <b>59.72</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

| Quarter | Start Date | End Date       | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|----------------|--|--|
| 1       | 8-1-2019   | 10-31-2019     | 2.0808                                       | 0.3132                                     |
| 2       | 11-1-2019  | 1-31-2020      | 1.4339                                       | 0.6757                                     |
| 3       | 2-1-2020   | 4-30-2020      | 1.3132                                       | 0.6237                                     |
| 4       | 5-1-2020   | 7-31-2020      | 1.3395                                       | 0.6346                                     |
| 5       | 8-1-2020   | 9-30-2020      | 0.4564                                       | 0.2306                                     |
|         |            | <b>Highest</b> | <b>2.0808</b>                                | <b>0.6757</b>                              |

## 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     | 0.0228  | 3.0000e-005 | 3.6800e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 7.1100e-003 | 7.1100e-003 | 2.0000e-005 | 0.0000 | 7.5800e-003 |

|              |               |                    |                    |               |               |                    |                    |               |                    |                    |               |                 |                 |                    |                    |                 |
|--------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|---------------|--------------------|--------------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             | 0.0000        | 177.0386        | 177.0386        | 7.3100e-003        | 1.5100e-003        | 177.6719        |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Waste        |               |                    |                    |               |               | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Water        |               |                    |                    |               |               | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| <b>Total</b> | <b>0.0228</b> | <b>3.0000e-005</b> | <b>3.6800e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>177.0457</b> | <b>177.0457</b> | <b>7.3300e-003</b> | <b>1.5100e-003</b> | <b>177.6795</b> |

### 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         | 0.0228        | 3.0000e-005        | 3.6800e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        | 0.0000        | 7.1100e-003     | 7.1100e-003     | 2.0000e-005        | 0.0000             | 7.5800e-003     |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 177.0386        | 177.0386        | 7.3100e-003        | 1.5100e-003        | 177.6719        |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000         | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Waste        |               |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Water        |               |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| <b>Total</b> | <b>0.0228</b> | <b>3.0000e-005</b> | <b>3.6800e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b>  | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>177.0457</b> | <b>177.0457</b> | <b>7.3300e-003</b> | <b>1.5100e-003</b> | <b>177.6795</b> |

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

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name                   | Phase Type            | Start Date | End Date   | Num Days Week | Num Days | Phase Description |
|--------------|------------------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1            | Park S Demolition            | Demolition            | 8/1/2019   | 9/14/2019  | 6             | 39       |                   |
| 2            | Park S Grading               | Grading               | 9/16/2019  | 10/29/2019 | 6             | 38       |                   |
| 3            | Park S Building Construction | Building Construction | 10/30/2019 | 8/27/2020  | 6             | 260      |                   |
| 4            | Park S Architectural Coating | Architectural Coating | 8/28/2020  | 9/21/2020  | 6             | 21       |                   |

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

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

**Acres of Paving: 6.58**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 17,185**

**OffRoad Equipment**

| Phase Name                   | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------------------------|---------------------------|--------|-------------|-------------|-------------|
| Park S Demolition            | Concrete/Industrial Saws  | 2      | 8.00        | 81          | 0.73        |
| Park S Demolition            | Excavators                | 4      | 8.00        | 158         | 0.38        |
| Park S Demolition            | Rubber Tired Dozers       | 2      | 8.00        | 247         | 0.40        |
| Park S Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Park S Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Park S Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Park S Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Park S Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Park S Building Construction | Cranes                    | 2      | 7.00        | 231         | 0.29        |
| Park S Building Construction | Forklifts                 | 4      | 8.00        | 89          | 0.20        |
| Park S Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Park S Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Park S Building Construction | Welders                   | 1      | 8.00        | 46          | 0.45        |
| Park S 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 |
|------------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Park S Demolition            | 8                       | 15.00              | 0.00               | 208.00              | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Park S Grading               | 8                       | 20.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Park S Building Construction | 11                      | 120.00             | 47.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Park S Architectural Coating | 1                       | 24.00              | 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

Water Exposed Area

### 3.2 Park S Demolition - 2019

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                    |               |               | MT/yr         |                |                |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.0225        | 0.0000        | 0.0225        | 3.4100e-003        | 0.0000        | 3.4100e-003   | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0826        | 0.8200        | 0.5660        | 9.8000e-004        |               | 0.0420        | 0.0420        |                    | 0.0394        | 0.0394        | 0.0000        | 87.0475        | 87.0475        | 0.0224        | 0.0000        | 87.6071        |
| <b>Total</b>  | <b>0.0826</b> | <b>0.8200</b> | <b>0.5660</b> | <b>9.8000e-004</b> | <b>0.0225</b> | <b>0.0420</b> | <b>0.0645</b> | <b>3.4100e-003</b> | <b>0.0394</b> | <b>0.0428</b> | <b>0.0000</b> | <b>87.0475</b> | <b>87.0475</b> | <b>0.0224</b> | <b>0.0000</b> | <b>87.6071</b> |

#### Unmitigated Construction Off-Site

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

|              |                    |               |               |                    |                    |                    |                    |                    |                    |                    |               |                |                |                    |               |                |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Hauling      | 9.9000e-004        | 0.0329        | 6.9900e-003   | 8.0000e-005        | 1.7900e-003        | 1.2000e-004        | 1.9100e-003        | 4.9000e-004        | 1.1000e-004        | 6.0000e-004        | 0.0000        | 8.0983         | 8.0983         | 5.7000e-004        | 0.0000        | 8.1126         |
| Vendor       | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Worker       | 1.4700e-003        | 1.2200e-003   | 0.0133        | 3.0000e-005        | 3.2100e-003        | 3.0000e-005        | 3.2300e-003        | 8.5000e-004        | 3.0000e-005        | 8.8000e-004        | 0.0000        | 3.0811         | 3.0811         | 1.1000e-004        | 0.0000        | 3.0837         |
| <b>Total</b> | <b>2.4600e-003</b> | <b>0.0341</b> | <b>0.0203</b> | <b>1.1000e-004</b> | <b>5.0000e-003</b> | <b>1.5000e-004</b> | <b>5.1400e-003</b> | <b>1.3400e-003</b> | <b>1.4000e-004</b> | <b>1.4800e-003</b> | <b>0.0000</b> | <b>11.1794</b> | <b>11.1794</b> | <b>6.8000e-004</b> | <b>0.0000</b> | <b>11.1963</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.0101        | 0.0000             | 0.0101        | 1.5300e-003        | 0.0000             | 1.5300e-003        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0219        | 0.1463        | 0.5939        | 9.8000e-004        |               | 7.4400e-003        | 7.4400e-003   |                    | 7.3100e-003        | 7.3100e-003        | 0.0000        | 87.0474        | 87.0474        | 0.0224        | 0.0000        | 87.6070        |
| <b>Total</b>  | <b>0.0219</b> | <b>0.1463</b> | <b>0.5939</b> | <b>9.8000e-004</b> | <b>0.0101</b> | <b>7.4400e-003</b> | <b>0.0176</b> | <b>1.5300e-003</b> | <b>7.3100e-003</b> | <b>8.8400e-003</b> | <b>0.0000</b> | <b>87.0474</b> | <b>87.0474</b> | <b>0.0224</b> | <b>0.0000</b> | <b>87.6070</b> |

**Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |        |
| Hauling  | 9.9000e-004 | 0.0329      | 6.9900e-003 | 8.0000e-005 | 1.7900e-003   | 1.2000e-004  | 1.9100e-003 | 4.9000e-004    | 1.1000e-004   | 6.0000e-004 | 0.0000   | 8.0983    | 8.0983    | 5.7000e-004 | 0.0000 | 8.1126 |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Worker   | 1.4700e-003 | 1.2200e-003 | 0.0133      | 3.0000e-005 | 3.2100e-003   | 3.0000e-005  | 3.2300e-003 | 8.5000e-004    | 3.0000e-005   | 8.8000e-004 | 0.0000   | 3.0811    | 3.0811    | 1.1000e-004 | 0.0000 | 3.0837 |



|       |             |        |        |             |             |             |             |             |             |             |        |         |         |             |        |         |
|-------|-------------|--------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|---------|---------|-------------|--------|---------|
| Total | 2.4600e-003 | 0.0341 | 0.0203 | 1.1000e-004 | 5.0000e-003 | 1.5000e-004 | 5.1400e-003 | 1.3400e-003 | 1.4000e-004 | 1.4800e-003 | 0.0000 | 11.1794 | 11.1794 | 6.8000e-004 | 0.0000 | 11.1963 |
|-------|-------------|--------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|---------|---------|-------------|--------|---------|

### 3.3 Park S Grading - 2019

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.1648        | 0.0000        | 0.1648        | 0.0683         | 0.0000        | 0.0683        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0900        | 1.0359        | 0.6342        | 1.1800e-003        |               | 0.0453        | 0.0453        |                | 0.0417        | 0.0417        | 0.0000        | 105.8325        | 105.8325        | 0.0335        | 0.0000        | 106.6696        |
| <b>Total</b>  | <b>0.0900</b> | <b>1.0359</b> | <b>0.6342</b> | <b>1.1800e-003</b> | <b>0.1648</b> | <b>0.0453</b> | <b>0.2101</b> | <b>0.0683</b>  | <b>0.0417</b> | <b>0.1100</b> | <b>0.0000</b> | <b>105.8325</b> | <b>105.8325</b> | <b>0.0335</b> | <b>0.0000</b> | <b>106.6696</b> |

#### Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.9000e-003        | 1.5900e-003        | 0.0173        | 4.0000e-005        | 4.1600e-003        | 4.0000e-005        | 4.2000e-003        | 1.1100e-003        | 3.0000e-005        | 1.1400e-003        | 0.0000        | 4.0028        | 4.0028        | 1.4000e-004        | 0.0000        | 4.0062        |
| <b>Total</b> | <b>1.9000e-003</b> | <b>1.5900e-003</b> | <b>0.0173</b> | <b>4.0000e-005</b> | <b>4.1600e-003</b> | <b>4.0000e-005</b> | <b>4.2000e-003</b> | <b>1.1100e-003</b> | <b>3.0000e-005</b> | <b>1.1400e-003</b> | <b>0.0000</b> | <b>4.0028</b> | <b>4.0028</b> | <b>1.4000e-004</b> | <b>0.0000</b> | <b>4.0062</b> |

#### Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.0742        | 0.0000             | 0.0742        | 0.0308         | 0.0000             | 0.0308        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0157        | 0.0783        | 0.6228        | 1.1800e-003        |               | 2.7100e-003        | 2.7100e-003   |                | 2.6400e-003        | 2.6400e-003   | 0.0000        | 105.8324        | 105.8324        | 0.0335        | 0.0000        | 106.6695        |
| <b>Total</b>  | <b>0.0157</b> | <b>0.0783</b> | <b>0.6228</b> | <b>1.1800e-003</b> | <b>0.0742</b> | <b>2.7100e-003</b> | <b>0.0769</b> | <b>0.0308</b>  | <b>2.6400e-003</b> | <b>0.0334</b> | <b>0.0000</b> | <b>105.8324</b> | <b>105.8324</b> | <b>0.0335</b> | <b>0.0000</b> | <b>106.6695</b> |

### Mitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.9000e-003        | 1.5900e-003        | 0.0173        | 4.0000e-005        | 4.1600e-003        | 4.0000e-005        | 4.2000e-003        | 1.1100e-003        | 3.0000e-005        | 1.1400e-003        | 0.0000        | 4.0028        | 4.0028        | 1.4000e-004        | 0.0000        | 4.0062        |
| <b>Total</b> | <b>1.9000e-003</b> | <b>1.5900e-003</b> | <b>0.0173</b> | <b>4.0000e-005</b> | <b>4.1600e-003</b> | <b>4.0000e-005</b> | <b>4.2000e-003</b> | <b>1.1100e-003</b> | <b>3.0000e-005</b> | <b>1.1400e-003</b> | <b>0.0000</b> | <b>4.0028</b> | <b>4.0028</b> | <b>1.4000e-004</b> | <b>0.0000</b> | <b>4.0062</b> |

### **3.4 Park S Building Construction - 2019**

#### Unmitigated Construction On-Site

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

|              |               |               |               |                    |  |               |               |  |               |               |               |                |                |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|--|---------------|---------------|--|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Off-Road     | 0.0800        | 0.7496        | 0.5498        | 9.0000e-004        |  | 0.0438        | 0.0438        |  | 0.0410        | 0.0410        | 0.0000        | 79.4269        | 79.4269        | 0.0205        | 0.0000        | 79.9396        |
| <b>Total</b> | <b>0.0800</b> | <b>0.7496</b> | <b>0.5498</b> | <b>9.0000e-004</b> |  | <b>0.0438</b> | <b>0.0438</b> |  | <b>0.0410</b> | <b>0.0410</b> | <b>0.0000</b> | <b>79.4269</b> | <b>79.4269</b> | <b>0.0205</b> | <b>0.0000</b> | <b>79.9396</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Vendor       | 5.3700e-003   | 0.1499        | 0.0410        | 3.3000e-004        | 7.9900e-003   | 9.4000e-004        | 8.9400e-003   | 2.3100e-003    | 9.0000e-004        | 3.2100e-003   | 0.0000        | 31.7332        | 31.7332        | 2.1200e-003        | 0.0000        | 31.7861        |
| Worker       | 0.0162        | 0.0135        | 0.1471        | 3.8000e-004        | 0.0355        | 3.1000e-004        | 0.0358        | 9.4300e-003    | 2.9000e-004        | 9.7200e-003   | 0.0000        | 34.1288        | 34.1288        | 1.1700e-003        | 0.0000        | 34.1581        |
| <b>Total</b> | <b>0.0216</b> | <b>0.1634</b> | <b>0.1881</b> | <b>7.1000e-004</b> | <b>0.0435</b> | <b>1.2500e-003</b> | <b>0.0448</b> | <b>0.0117</b>  | <b>1.1900e-003</b> | <b>0.0129</b> | <b>0.0000</b> | <b>65.8620</b> | <b>65.8620</b> | <b>3.2900e-003</b> | <b>0.0000</b> | <b>65.9443</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |               |               |                |
| Off-Road     | 0.0343        | 0.2576        | 0.5662        | 9.0000e-004        |               | 0.0127        | 0.0127        |                | 0.0120        | 0.0120        | 0.0000        | 79.4268        | 79.4268        | 0.0205        | 0.0000        | 79.9396        |
| <b>Total</b> | <b>0.0343</b> | <b>0.2576</b> | <b>0.5662</b> | <b>9.0000e-004</b> |               | <b>0.0127</b> | <b>0.0127</b> |                | <b>0.0120</b> | <b>0.0120</b> | <b>0.0000</b> | <b>79.4268</b> | <b>79.4268</b> | <b>0.0205</b> | <b>0.0000</b> | <b>79.9396</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Vendor       | 5.3700e-003   | 0.1499        | 0.0410        | 3.3000e-004        | 7.9900e-003   | 9.4000e-004        | 8.9400e-003   | 2.3100e-003    | 9.0000e-004        | 3.2100e-003   | 0.0000        | 31.7332        | 31.7332        | 2.1200e-003        | 0.0000        | 31.7861        |
| Worker       | 0.0162        | 0.0135        | 0.1471        | 3.8000e-004        | 0.0355        | 3.1000e-004        | 0.0358        | 9.4300e-003    | 2.9000e-004        | 9.7200e-003   | 0.0000        | 34.1288        | 34.1288        | 1.1700e-003        | 0.0000        | 34.1581        |
| <b>Total</b> | <b>0.0216</b> | <b>0.1634</b> | <b>0.1881</b> | <b>7.1000e-004</b> | <b>0.0435</b> | <b>1.2500e-003</b> | <b>0.0448</b> | <b>0.0117</b>  | <b>1.1900e-003</b> | <b>0.0129</b> | <b>0.0000</b> | <b>65.8620</b> | <b>65.8620</b> | <b>3.2900e-003</b> | <b>0.0000</b> | <b>65.9443</b> |

**3.4 Park S Building Construction - 2020**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.2740        | 2.5957        | 2.0476        | 3.4500e-003        |               | 0.1450        | 0.1450        |                | 0.1358        | 0.1358        | 0.0000        | 298.0769        | 298.0769        | 0.0775        | 0.0000        | 300.0132        |
| <b>Total</b> | <b>0.2740</b> | <b>2.5957</b> | <b>2.0476</b> | <b>3.4500e-003</b> |               | <b>0.1450</b> | <b>0.1450</b> |                | <b>0.1358</b> | <b>0.1358</b> | <b>0.0000</b> | <b>298.0769</b> | <b>298.0769</b> | <b>0.0775</b> | <b>0.0000</b> | <b>300.0132</b> |

**Unmitigated Construction Off-Site**



|              |               |               |               |                    |               |                    |               |               |                    |               |               |                 |                 |               |               |                 |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Vendor       | 0.0176        | 0.5246        | 0.1420        | 1.2400e-003        | 0.0305        | 2.4400e-003        | 0.0329        | 8.8000e-003   | 2.3300e-003        | 0.0111        | 0.0000        | 120.2631        | 120.2631        | 7.6400e-003   | 0.0000        | 120.4542        |
| Worker       | 0.0571        | 0.0460        | 0.5088        | 1.4000e-003        | 0.1354        | 1.1500e-003        | 0.1366        | 0.0360        | 1.0600e-003        | 0.0370        | 0.0000        | 126.2389        | 126.2389        | 3.9800e-003   | 0.0000        | 126.3384        |
| <b>Total</b> | <b>0.0746</b> | <b>0.5706</b> | <b>0.6508</b> | <b>2.6400e-003</b> | <b>0.1659</b> | <b>3.5900e-003</b> | <b>0.1695</b> | <b>0.0448</b> | <b>3.3900e-003</b> | <b>0.0482</b> | <b>0.0000</b> | <b>246.5021</b> | <b>246.5021</b> | <b>0.0116</b> | <b>0.0000</b> | <b>246.7926</b> |

### 3.5 Park S Architectural Coating - 2020

#### Unmitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.0398        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 2.5400e-003   | 0.0177        | 0.0192        | 3.0000e-005        |               | 1.1600e-003        | 1.1600e-003        |                | 1.1600e-003        | 1.1600e-003        | 0.0000        | 2.6809        | 2.6809        | 2.1000e-004        | 0.0000        | 2.6861        |
| <b>Total</b>    | <b>0.0424</b> | <b>0.0177</b> | <b>0.0192</b> | <b>3.0000e-005</b> |               | <b>1.1600e-003</b> | <b>1.1600e-003</b> |                | <b>1.1600e-003</b> | <b>1.1600e-003</b> | <b>0.0000</b> | <b>2.6809</b> | <b>2.6809</b> | <b>2.1000e-004</b> | <b>0.0000</b> | <b>2.6861</b> |

#### Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.1600e-003        | 9.4000e-004        | 0.0104        | 3.0000e-005        | 2.7600e-003        | 2.0000e-005        | 2.7800e-003        | 7.3000e-004        | 2.0000e-005        | 7.6000e-004        | 0.0000        | 2.5738        | 2.5738        | 8.0000e-005        | 0.0000        | 2.5758        |
| <b>Total</b> | <b>1.1600e-003</b> | <b>9.4000e-004</b> | <b>0.0104</b> | <b>3.0000e-005</b> | <b>2.7600e-003</b> | <b>2.0000e-005</b> | <b>2.7800e-003</b> | <b>7.3000e-004</b> | <b>2.0000e-005</b> | <b>7.6000e-004</b> | <b>0.0000</b> | <b>2.5738</b> | <b>2.5738</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>2.5758</b> |

### Mitigated Construction On-Site

|                 | ROG           | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |                    |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.0398        |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 3.1000e-004   | 1.3500e-003        | 0.0192        | 3.0000e-005        |               | 4.0000e-005        | 4.0000e-005        |                | 4.0000e-005        | 4.0000e-005        | 0.0000        | 2.6809        | 2.6809        | 2.1000e-004        | 0.0000        | 2.6861        |
| <b>Total</b>    | <b>0.0401</b> | <b>1.3500e-003</b> | <b>0.0192</b> | <b>3.0000e-005</b> |               | <b>4.0000e-005</b> | <b>4.0000e-005</b> |                | <b>4.0000e-005</b> | <b>4.0000e-005</b> | <b>0.0000</b> | <b>2.6809</b> | <b>2.6809</b> | <b>2.1000e-004</b> | <b>0.0000</b> | <b>2.6861</b> |

### Mitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.1600e-003        | 9.4000e-004        | 0.0104        | 3.0000e-005        | 2.7600e-003        | 2.0000e-005        | 2.7800e-003        | 7.3000e-004        | 2.0000e-005        | 7.6000e-004        | 0.0000        | 2.5738        | 2.5738        | 8.0000e-005        | 0.0000        | 2.5758        |
| <b>Total</b> | <b>1.1600e-003</b> | <b>9.4000e-004</b> | <b>0.0104</b> | <b>3.0000e-005</b> | <b>2.7600e-003</b> | <b>2.0000e-005</b> | <b>2.7800e-003</b> | <b>7.3000e-004</b> | <b>2.0000e-005</b> | <b>7.6000e-004</b> | <b>0.0000</b> | <b>2.5738</b> | <b>2.5738</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>2.5758</b> |

## 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   | 0.0000  | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000  | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

#### 4.2 Trip Summary Information

| Land Use                         | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------------|-------------------------|----------|--------|-------------|------------|
|                                  | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Unenclosed Parking with Elevator | 0.00                    | 0.00     | 0.00   |             |            |
| Total                            | 0.00                    | 0.00     | 0.00   |             |            |

#### 4.3 Trip Type Information

| Land Use                         | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|----------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                                  | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Unenclosed Parking with Elevator | 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       |
|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Unenclosed Parking with Elevator | 0.547726 | 0.045437 | 0.201480 | 0.122768 | 0.016614 | 0.006090 | 0.019326 | 0.029174 | 0.002438 | 0.002359 | 0.005005 | 0.000677 | 0.000907 |

#### 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   | 177.0386  | 177.0386  | 7.3100e-003 | 1.5100e-003 | 177.6719 |
| Electricity Unmitigated |         |        |        |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 177.0386  | 177.0386  | 7.3100e-003 | 1.5100e-003 | 177.6719 |
| NaturalGas Mitigated    | 0.0000  | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000      | 0.0000   |
| NaturalGas Unmitigated  | 0.0000  | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000      | 0.0000   |

## 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         |               |               |               |               |               |
| Unenclosed Parking with Elevator | 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        |
| <b>Total</b>                     |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

### Mitigated

|                                 | Natural Gas 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         |               |               |               |               |               |
| Unenclosed Parking with Cluster | 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        |
| <b>Total</b>                    |                 | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

|                                 | Electricity Use | Total CO2       | CH4                | N2O                | CO2e            |
|---------------------------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use                        | kWh/yr          | MT/yr           |                    |                    |                 |
| Unenclosed Parking with Cluster | 555639          | 177.0386        | 7.3100e-003        | 1.5100e-003        | 177.6719        |
| <b>Total</b>                    |                 | <b>177.0386</b> | <b>7.3100e-003</b> | <b>1.5100e-003</b> | <b>177.6719</b> |

#### Mitigated

|                                 | Electricity Use | Total CO2       | CH4                | N2O                | CO2e            |
|---------------------------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use                        | kWh/yr          | MT/yr           |                    |                    |                 |
| Unenclosed Parking with Cluster | 555639          | 177.0386        | 7.3100e-003        | 1.5100e-003        | 177.6719        |
| <b>Total</b>                    |                 | <b>177.0386</b> | <b>7.3100e-003</b> | <b>1.5100e-003</b> | <b>177.6719</b> |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

|             | ROG     | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 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   | 0.0228  | 3.0000e-005 | 3.6800e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 7.1100e-003 | 7.1100e-003 | 2.0000e-005 | 0.0000 | 7.5800e-003 |
| Unmitigated | 0.0228  | 3.0000e-005 | 3.6800e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 7.1100e-003 | 7.1100e-003 | 2.0000e-005 | 0.0000 | 7.5800e-003 |

### 6.2 Area by SubCategory

#### Unmitigated

|                       | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2          | Total CO2          | CH4                | N2O           | CO2e               |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|
| SubCategory           | tons/yr       |                    |                    |               |               |                    |                    |                |                    |                    | MT/yr         |                    |                    |                    |               |                    |
| Architectural Coating | 3.9800e-003   |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Consumer Products     | 0.0185        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Landscaping           | 3.5000e-004   | 3.0000e-005        | 3.6800e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        | 0.0000        | 7.1100e-003        | 7.1100e-003        | 2.0000e-005        | 0.0000        | 7.5800e-003        |
| <b>Total</b>          | <b>0.0228</b> | <b>3.0000e-005</b> | <b>3.6800e-003</b> | <b>0.0000</b> |               | <b>1.0000e-005</b> | <b>1.0000e-005</b> |                | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>7.1100e-003</b> | <b>7.1100e-003</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>7.5800e-003</b> |

**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 | 3.9800e-003   |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Consumer Products     | 0.0185        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Landscaping           | 3.5000e-004   | 3.0000e-005        | 3.6800e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        | 0.0000        | 7.1100e-003        | 7.1100e-003        | 2.0000e-005        | 0.0000        | 7.5800e-003        |
| <b>Total</b>          | <b>0.0228</b> | <b>3.0000e-005</b> | <b>3.6800e-003</b> | <b>0.0000</b> |               | <b>1.0000e-005</b> | <b>1.0000e-005</b> |                | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>7.1100e-003</b> | <b>7.1100e-003</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>7.5800e-003</b> |

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

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

**7.2 Water by Land Use**

**Unmitigated**

|                                   | Indoor/Outdoor Use | Total CO2     | CH4           | N2O           | CO2e          |
|-----------------------------------|--------------------|---------------|---------------|---------------|---------------|
| Land Use                          | Mgal               | MT/yr         |               |               |               |
| Unenclosed Parking with Elevators | 0 / 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>                      |                    | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**Mitigated**

|                                   | Indoor/Outdoor Use | Total CO2     | CH4           | N2O           | CO2e          |
|-----------------------------------|--------------------|---------------|---------------|---------------|---------------|
| Land Use                          | Mgal               | MT/yr         |               |               |               |
| Unenclosed Parking with Elevators | 0 / 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>                      |                    | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

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

## 8.2 Waste by Land Use

### Unmitigated

|                                  | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------------|----------------|---------------|---------------|---------------|---------------|
| Land Use                         | tons           | MT/yr         |               |               |               |
| Unenclosed Parking with Elevator | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>                     |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

### Mitigated

|                                  | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------------|----------------|---------------|---------------|---------------|---------------|
| Land Use                         | tons           | MT/yr         |               |               |               |
| Unenclosed Parking with Elevator | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>                     |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

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|                         |             |             |              |
|-------------------------|-------------|-------------|--------------|
| tblConstEquipMitigation | Tier        | No Change   | Tier 4 Final |
| tblConstEquipMitigation | Tier        | No Change   | Tier 4 Final |
| tblConstEquipMitigation | Tier        | No Change   | Tier 4 Final |
| tblConstEquipMitigation | Tier        | No Change   | Tier 4 Final |
| tblConstEquipMitigation | Tier        | No Change   | Tier 4 Final |
| tblConstructionPhase    | NumDays     | 18.00       | 80.00        |
| tblConstructionPhase    | NumDays     | 230.00      | 523.00       |
| tblConstructionPhase    | NumDays     | 20.00       | 210.00       |
| tblConstructionPhase    | NumDays     | 8.00        | 79.00        |
| tblConstructionPhase    | NumDays     | 18.00       | 45.00        |
| tblConstructionPhase    | NumDays     | 5.00        | 627.00       |
| tblConstructionPhase    | NumDaysWeek | 5.00        | 6.00         |
| tblConstructionPhase    | NumDaysWeek | 5.00        | 6.00         |
| tblConstructionPhase    | NumDaysWeek | 5.00        | 6.00         |
| tblConstructionPhase    | NumDaysWeek | 5.00        | 6.00         |
| tblConstructionPhase    | NumDaysWeek | 5.00        | 6.00         |
| tblConstructionPhase    | NumDaysWeek | 5.00        | 6.00         |
| tblFleetMix             | HHD         | 0.03        | 0.01         |
| tblFleetMix             | LDA         | 0.55        | 0.90         |
| tblFleetMix             | LDT1        | 0.04        | 0.01         |
| tblFleetMix             | LDT2        | 0.20        | 0.01         |
| tblFleetMix             | LHD1        | 0.02        | 0.01         |
| tblFleetMix             | LHD2        | 6.1960e-003 | 7.6130e-003  |
| tblFleetMix             | MCY         | 5.1420e-003 | 6.3610e-003  |
| tblFleetMix             | MDV         | 0.12        | 1.2050e-003  |
| tblFleetMix             | MH          | 8.7600e-004 | 9.9700e-004  |
| tblFleetMix             | MHD         | 0.02        | 0.03         |
| tblFleetMix             | OBUS        | 2.5150e-003 | 3.1350e-003  |
| tblFleetMix             | SBUS        | 6.8700e-004 | 8.5500e-004  |
| tblFleetMix             | UBUS        | 2.2010e-003 | 2.2440e-003  |

|                     |                            |          |           |
|---------------------|----------------------------|----------|-----------|
| tblGrading          | MaterialExported           | 0.00     | 20,000.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00     | 2.00      |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00     | 2.00      |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00     | 1.00      |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00     | 2.00      |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00     | 1.00      |
| tblOffRoadEquipment | UsageHours                 | 6.00     | 8.00      |
| tblOffRoadEquipment | UsageHours                 | 6.00     | 8.00      |
| tblTripsAndVMT      | HaulingTripNumber          | 344.00   | 0.00      |
| tblTripsAndVMT      | HaulingTripNumber          | 2,500.00 | 0.00      |
| tblVehicleTrips     | ST_TR                      | 11.23    | 2.58      |
| tblVehicleTrips     | SU_TR                      | 1.21     | 0.28      |
| tblVehicleTrips     | WD_TR                      | 27.49    | 6.31      |

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

|                | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Year           | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| 2019           | 0.3768        | 3.7638        | 2.3878        | 4.2600e-003        | 0.0545        | 0.1886        | 0.2431        | 0.0102         | 0.1755        | 0.1857        | 0.0000        | 380.1668        | 380.1668        | 0.1017        | 0.0000        | 382.7097        |
| 2020           | 0.5966        | 5.9415        | 4.0905        | 7.9900e-003        | 1.3020        | 0.2887        | 1.5907        | 0.6426         | 0.2677        | 0.9103        | 0.0000        | 705.0948        | 705.0948        | 0.1748        | 0.0000        | 709.4637        |
| 2021           | 1.0531        | 5.5527        | 4.5585        | 8.9700e-003        | 1.0932        | 0.2734        | 1.3666        | 0.5587         | 0.2548        | 0.8135        | 0.0000        | 792.4096        | 792.4096        | 0.1657        | 0.0000        | 796.5524        |
| 2022           | 0.2794        | 0.4061        | 0.3706        | 7.6000e-004        | 0.0954        | 0.0190        | 0.1144        | 0.0485         | 0.0178        | 0.0663        | 0.0000        | 67.2276         | 67.2276         | 0.0130        | 0.0000        | 67.5518         |
| <b>Maximum</b> | <b>1.0531</b> | <b>5.9415</b> | <b>4.5585</b> | <b>8.9700e-003</b> | <b>1.3020</b> | <b>0.2887</b> | <b>1.5907</b> | <b>0.6426</b>  | <b>0.2677</b> | <b>0.9103</b> | <b>0.0000</b> | <b>792.4096</b> | <b>792.4096</b> | <b>0.1748</b> | <b>0.0000</b> | <b>796.5524</b> |

**Mitigated Construction**

|                | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Year           | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| 2019           | 0.0564        | 0.2169        | 2.5159        | 4.2600e-003        | 0.0340        | 6.6200e-003   | 0.0406        | 7.1200e-003    | 6.6100e-003   | 0.0137        | 0.0000        | 380.1664        | 380.1664        | 0.1017        | 0.0000        | 382.7093        |
| 2020           | 0.1497        | 0.7503        | 4.1784        | 7.9900e-003        | 0.6377        | 0.0200        | 0.6576        | 0.3031         | 0.0199        | 0.3230        | 0.0000        | 705.0942        | 705.0942        | 0.1748        | 0.0000        | 709.4630        |
| 2021           | 0.6463        | 0.9970        | 4.7743        | 8.9700e-003        | 0.5748        | 0.0239        | 0.5987        | 0.2737         | 0.0238        | 0.2975        | 0.0000        | 792.4089        | 792.4089        | 0.1657        | 0.0000        | 796.5517        |
| 2022           | 0.2499        | 0.0814        | 0.3932        | 7.6000e-004        | 0.0507        | 1.8400e-003   | 0.0525        | 0.0239         | 1.8300e-003   | 0.0257        | 0.0000        | 67.2276         | 67.2276         | 0.0130        | 0.0000        | 67.5518         |
| <b>Maximum</b> | <b>0.6463</b> | <b>0.9970</b> | <b>4.7743</b> | <b>8.9700e-003</b> | <b>0.6377</b> | <b>0.0239</b> | <b>0.6576</b> | <b>0.3031</b>  | <b>0.0238</b> | <b>0.3230</b> | <b>0.0000</b> | <b>792.4089</b> | <b>792.4089</b> | <b>0.1748</b> | <b>0.0000</b> | <b>796.5517</b> |

|                          | ROG          | NOx          | CO           | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total   | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2    | NBio- CO2   | Total CO2   | CH4         | N2O         | CO2e        |
|--------------------------|--------------|--------------|--------------|-------------|---------------|--------------|--------------|----------------|---------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Percent Reduction</b> | <b>52.19</b> | <b>86.94</b> | <b>-3.98</b> | <b>0.00</b> | <b>49.03</b>  | <b>93.20</b> | <b>59.29</b> | <b>51.76</b>   | <b>92.73</b>  | <b>66.60</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

| Quarter | Start Date | End Date   | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|------------|--|--|
| 1       | 4-1-2019   | 6-30-2019  | 1.5376                                       | 0.1012                                     |
| 2       | 7-1-2019   | 9-30-2019  | 1.5545                                       | 0.1023                                     |
| 3       | 10-1-2019  | 12-31-2019 | 1.0311                                       | 0.0682                                     |
| 4       | 1-1-2020   | 3-31-2020  | 1.1082                                       | 0.0770                                     |
| 5       | 4-1-2020   | 6-30-2020  | 2.3372                                       | 0.2262                                     |
| 6       | 7-1-2020   | 9-30-2020  | 1.5502                                       | 0.2946                                     |
| 7       | 10-1-2020  | 12-31-2020 | 1.5526                                       | 0.2971                                     |
| 8       | 1-1-2021   | 3-31-2021  | 1.4072                                       | 0.2752                                     |
| 9       | 4-1-2021   | 6-30-2021  | 1.4207                                       | 0.2762                                     |
| 10      | 7-1-2021   | 9-30-2021  | 1.8166                                       | 0.3350                                     |
| 11      | 10-1-2021  | 12-31-2021 | 1.9412                                       | 0.7426                                     |

|    |          |           |        |        |
|----|----------|-----------|--------|--------|
| 12 | 1-1-2022 | 3-31-2022 | 0.6962 | 0.3364 |
|    |          | Highest   | 2.3372 | 0.7426 |

## 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         | 0.6117        | 2.0000e-005   | 1.9200e-003   | 0.0000             |               | 1.0000e-005   | 1.0000e-005   |                | 1.0000e-005   | 1.0000e-005   | 0.0000         | 3.7200e-003       | 3.7200e-003       | 1.0000e-005   | 0.0000        | 3.9700e-003       |
| Energy       | 0.0219        | 0.1991        | 0.1673        | 1.1900e-003        |               | 0.0151        | 0.0151        |                | 0.0151        | 0.0151        | 0.0000         | 695.6518          | 695.6518          | 0.0239        | 8.0600e-003   | 698.6531          |
| Mobile       | 0.1905        | 0.7089        | 2.4340        | 8.3200e-003        | 0.8444        | 7.8200e-003   | 0.8523        | 0.2264         | 7.2800e-003   | 0.2337        | 0.0000         | 765.4790          | 765.4790          | 0.0401        | 0.0000        | 766.4814          |
| Waste        |               |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 39.5832        | 0.0000            | 39.5832           | 2.3393        | 0.0000        | 98.0658           |
| Water        |               |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 2.3342         | 71.2597           | 73.5939           | 0.2427        | 6.2700e-003   | 81.5292           |
| <b>Total</b> | <b>0.8241</b> | <b>0.9081</b> | <b>2.6032</b> | <b>9.5100e-003</b> | <b>0.8444</b> | <b>0.0230</b> | <b>0.8674</b> | <b>0.2264</b>  | <b>0.0224</b> | <b>0.2489</b> | <b>41.9174</b> | <b>1,532.3943</b> | <b>1,574.3117</b> | <b>2.6460</b> | <b>0.0143</b> | <b>1,644.7335</b> |

### 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     | 0.6117  | 2.0000e-005 | 1.9200e-003 | 0.0000      |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 3.7200e-003 | 3.7200e-003 | 1.0000e-005 | 0.0000      | 3.9700e-003 |
| Energy   | 0.0132  | 0.1202      | 0.1010      | 7.2000e-004 |               | 9.1400e-003  | 9.1400e-003 |                | 9.1400e-003   | 9.1400e-003 | 0.0000   | 550.9321    | 550.9321    | 0.0199      | 5.9900e-003 | 553.2127    |
| Mobile   | 0.1905  | 0.7089      | 2.4340      | 8.3200e-003 | 0.8444        | 7.8200e-003  | 0.8523      | 0.2264         | 7.2800e-003   | 0.2337      | 0.0000   | 765.4790    | 765.4790    | 0.0401      | 0.0000      | 766.4814    |

|              |               |               |               |                    |               |               |               |               |               |               |                |                   |                   |               |               |                   |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------------------|-------------------|---------------|---------------|-------------------|
| Waste        |               |               |               |                    |               | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        | 39.5832        | 0.0000            | 39.5832           | 2.3393        | 0.0000        | 98.0658           |
| Water        |               |               |               |                    |               | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        | 2.3342         | 71.2597           | 73.5939           | 0.2427        | 6.2700e-003   | 81.5292           |
| <b>Total</b> | <b>0.8154</b> | <b>0.8292</b> | <b>2.5369</b> | <b>9.0400e-003</b> | <b>0.8444</b> | <b>0.0170</b> | <b>0.8614</b> | <b>0.2264</b> | <b>0.0164</b> | <b>0.2429</b> | <b>41.9174</b> | <b>1,387.6746</b> | <b>1,429.5920</b> | <b>2.6419</b> | <b>0.0123</b> | <b>1,499.2931</b> |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O   | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|-------|------|
| Percent Reduction | 1.05 | 8.69 | 2.55 | 4.94 | 0.00          | 26.09        | 0.69       | 0.00           | 26.72         | 2.41        | 0.00     | 9.44     | 9.19      | 0.15 | 14.45 | 8.84 |

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name                       | Phase Type            | Start Date | End Date   | Num Days Week | Num Days | Phase Description |
|--------------|----------------------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1            | Stu Center Demolition            | Demolition            | 4/1/2019   | 11/30/2019 | 6             | 210      |                   |
| 2            | Stu Center Site Preparation      | Site Preparation      | 2/1/2020   | 2/1/2022   | 6             | 627      |                   |
| 3            | Stu Center Grading               | Grading               | 3/1/2020   | 6/1/2020   | 6             | 79       |                   |
| 4            | Stu Center Building Construction | Building Construction | 6/2/2020   | 2/1/2022   | 6             | 523      |                   |
| 5            | Stu Center Paving                | Paving                | 7/13/2021  | 9/2/2021   | 6             | 45       |                   |
| 6            | Stu Center Architectural Coating | Architectural Coating | 11/1/2021  | 2/1/2022   | 6             | 80       |                   |

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

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

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 225,000; Non-Residential Outdoor: 75,000; Striped Parking Area: 0**

#### OffRoad Equipment

| Phase Name            | Offroad Equipment Type   | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|--------------------------|--------|-------------|-------------|-------------|
| Stu Center Demolition | Concrete/Industrial Saws | 1      | 8.00        | 81          | 0.73        |
| Stu Center Demolition | Excavators               | 3      | 8.00        | 158         | 0.38        |
| Stu Center Demolition | Rubber Tired Dozers      | 2      | 8.00        | 247         | 0.40        |

|                                  |                           |   |      |     |      |
|----------------------------------|---------------------------|---|------|-----|------|
| Stu Center Site Preparation      | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Stu Center Site Preparation      | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Stu Center Grading               | Excavators                | 2 | 8.00 | 158 | 0.38 |
| Stu Center Grading               | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Stu Center Grading               | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Stu Center Grading               | Scrapers                  | 2 | 8.00 | 367 | 0.48 |
| Stu Center Grading               | Tractors/Loaders/Backhoes | 2 | 8.00 | 97  | 0.37 |
| Stu Center Building Construction | Cranes                    | 1 | 7.00 | 231 | 0.29 |
| Stu Center Building Construction | Forklifts                 | 3 | 8.00 | 89  | 0.20 |
| Stu Center Building Construction | Generator Sets            | 1 | 8.00 | 84  | 0.74 |
| Stu Center Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97  | 0.37 |
| Stu Center Building Construction | Welders                   | 1 | 8.00 | 46  | 0.45 |
| Stu Center Paving                | Cement and Mortar Mixers  | 2 | 6.00 | 9   | 0.56 |
| Stu Center Paving                | Pavers                    | 2 | 8.00 | 130 | 0.42 |
| Stu Center Paving                | Paving Equipment          | 2 | 8.00 | 132 | 0.36 |
| Stu Center Paving                | Rollers                   | 2 | 8.00 | 80  | 0.38 |
| Stu Center Paving                | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Stu Center 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 |
|----------------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Stu Center Demolition            | 6                       | 15.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Stu Center Site Preparation      | 2                       | 5.00               | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Stu Center Grading               | 8                       | 20.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Stu Center Building Construction | 9                       | 63.00              | 25.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Stu Center Paving                | 9                       | 23.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Stu Center Architectural Coating | 1                       | 13.00              | 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

Water Exposed Area

**3.2 Stu Center Demolition - 2019**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                    |               |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.0372        | 0.0000        | 0.0372        | 5.6400e-003        | 0.0000        | 5.6400e-003   | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.3689        | 3.7572        | 2.3163        | 4.0700e-003        |               | 0.1885        | 0.1885        |                    | 0.1753        | 0.1753        | 0.0000        | 363.5765        | 363.5765        | 0.1011        | 0.0000        | 366.1051        |
| <b>Total</b>  | <b>0.3689</b> | <b>3.7572</b> | <b>2.3163</b> | <b>4.0700e-003</b> | <b>0.0372</b> | <b>0.1885</b> | <b>0.2257</b> | <b>5.6400e-003</b> | <b>0.1753</b> | <b>0.1810</b> | <b>0.0000</b> | <b>363.5765</b> | <b>363.5765</b> | <b>0.1011</b> | <b>0.0000</b> | <b>366.1051</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |                    |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Worker       | 7.8900e-003        | 6.5800e-003        | 0.0715        | 1.8000e-004        | 0.0173        | 1.5000e-004        | 0.0174        | 4.5800e-003        | 1.4000e-004        | 4.7200e-003        | 0.0000        | 16.5904        | 16.5904        | 5.7000e-004        | 0.0000        | 16.6046        |
| <b>Total</b> | <b>7.8900e-003</b> | <b>6.5800e-003</b> | <b>0.0715</b> | <b>1.8000e-004</b> | <b>0.0173</b> | <b>1.5000e-004</b> | <b>0.0174</b> | <b>4.5800e-003</b> | <b>1.4000e-004</b> | <b>4.7200e-003</b> | <b>0.0000</b> | <b>16.5904</b> | <b>16.5904</b> | <b>5.7000e-004</b> | <b>0.0000</b> | <b>16.6046</b> |



### Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.0168        | 0.0000             | 0.0168        | 2.5400e-003        | 0.0000             | 2.5400e-003        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0485        | 0.2103        | 2.4444        | 4.0700e-003        |               | 6.4700e-003        | 6.4700e-003   |                    | 6.4700e-003        | 6.4700e-003        | 0.0000        | 363.5760        | 363.5760        | 0.1011        | 0.0000        | 366.1046        |
| <b>Total</b>  | <b>0.0485</b> | <b>0.2103</b> | <b>2.4444</b> | <b>4.0700e-003</b> | <b>0.0168</b> | <b>6.4700e-003</b> | <b>0.0232</b> | <b>2.5400e-003</b> | <b>6.4700e-003</b> | <b>9.0100e-003</b> | <b>0.0000</b> | <b>363.5760</b> | <b>363.5760</b> | <b>0.1011</b> | <b>0.0000</b> | <b>366.1046</b> |

### Mitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |                    |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Worker       | 7.8900e-003        | 6.5800e-003        | 0.0715        | 1.8000e-004        | 0.0173        | 1.5000e-004        | 0.0174        | 4.5800e-003        | 1.4000e-004        | 4.7200e-003        | 0.0000        | 16.5904        | 16.5904        | 5.7000e-004        | 0.0000        | 16.6046        |
| <b>Total</b> | <b>7.8900e-003</b> | <b>6.5800e-003</b> | <b>0.0715</b> | <b>1.8000e-004</b> | <b>0.0173</b> | <b>1.5000e-004</b> | <b>0.0174</b> | <b>4.5800e-003</b> | <b>1.4000e-004</b> | <b>4.7200e-003</b> | <b>0.0000</b> | <b>16.5904</b> | <b>16.5904</b> | <b>5.7000e-004</b> | <b>0.0000</b> | <b>16.6046</b> |

### **3.3 Stu Center Site Preparation - 2020**

#### Unmitigated Construction On-Site

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

| Category     | tons/yr       |               |               |                    |               |               |               |               |               |               | MT/yr         |                 |                 |               |               |                 |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
|              | Fugitive Dust |               |               |                    |               | 0.8642        | 0.0000        | 0.8642        | 0.4750        | 0.0000        | 0.4750        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road     | 0.1850        | 1.9283        | 0.9200        | 1.6700e-003        |               | 0.0987        | 0.0987        |               | 0.0908        | 0.0908        | 0.0000        | 146.8586        | 146.8586        | 0.0475        | 0.0000        | 148.0461        |
| <b>Total</b> | <b>0.1850</b> | <b>1.9283</b> | <b>0.9200</b> | <b>1.6700e-003</b> | <b>0.8642</b> | <b>0.0987</b> | <b>0.9629</b> | <b>0.4750</b> | <b>0.0908</b> | <b>0.5659</b> | <b>0.0000</b> | <b>146.8586</b> | <b>146.8586</b> | <b>0.0475</b> | <b>0.0000</b> | <b>148.0461</b> |

**Unmitigated Construction Off-Site**

| Category     | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
|              | 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       | 3.3100e-003        | 2.6700e-003        | 0.0295        | 8.0000e-005        | 7.8600e-003        | 7.0000e-005        | 7.9300e-003        | 2.0900e-003        | 6.0000e-005        | 2.1500e-003        | 0.0000        | 7.3282        | 7.3282        | 2.3000e-004        | 0.0000        | 7.3340        |
| <b>Total</b> | <b>3.3100e-003</b> | <b>2.6700e-003</b> | <b>0.0295</b> | <b>8.0000e-005</b> | <b>7.8600e-003</b> | <b>7.0000e-005</b> | <b>7.9300e-003</b> | <b>2.0900e-003</b> | <b>6.0000e-005</b> | <b>2.1500e-003</b> | <b>0.0000</b> | <b>7.3282</b> | <b>7.3282</b> | <b>2.3000e-004</b> | <b>0.0000</b> | <b>7.3340</b> |

**Mitigated Construction On-Site**

| Category      | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|---------------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
|               | tons/yr |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |        |        |          |
| Fugitive Dust |         |        |        |             | 0.3889        | 0.0000       | 0.3889      | 0.2138         | 0.0000        | 0.2138      | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Off-Road      | 0.0205  | 0.0886 | 0.8862 | 1.6700e-003 |               | 2.7300e-003  | 2.7300e-003 |                | 2.7300e-003   | 2.7300e-003 | 0.0000   | 146.8585  | 146.8585  | 0.0475 | 0.0000 | 148.0459 |

|              |               |               |               |                    |               |                    |               |               |                    |               |               |                 |                 |               |               |                 |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| <b>Total</b> | <b>0.0205</b> | <b>0.0886</b> | <b>0.8862</b> | <b>1.6700e-003</b> | <b>0.3889</b> | <b>2.7300e-003</b> | <b>0.3916</b> | <b>0.2138</b> | <b>2.7300e-003</b> | <b>0.2165</b> | <b>0.0000</b> | <b>146.8585</b> | <b>146.8585</b> | <b>0.0475</b> | <b>0.0000</b> | <b>148.0459</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 3.3100e-003        | 2.6700e-003        | 0.0295        | 8.0000e-005        | 7.8600e-003        | 7.0000e-005        | 7.9300e-003        | 2.0900e-003        | 6.0000e-005        | 2.1500e-003        | 0.0000        | 7.3282        | 7.3282        | 2.3000e-004        | 0.0000        | 7.3340        |
| <b>Total</b> | <b>3.3100e-003</b> | <b>2.6700e-003</b> | <b>0.0295</b> | <b>8.0000e-005</b> | <b>7.8600e-003</b> | <b>7.0000e-005</b> | <b>7.9300e-003</b> | <b>2.0900e-003</b> | <b>6.0000e-005</b> | <b>2.1500e-003</b> | <b>0.0000</b> | <b>7.3282</b> | <b>7.3282</b> | <b>2.3000e-004</b> | <b>0.0000</b> | <b>7.3340</b> |

**3.3 Stu Center Site Preparation - 2021**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.9425        | 0.0000        | 0.9425        | 0.5181         | 0.0000        | 0.5181        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.1931        | 2.0137        | 0.9856        | 1.8200e-003        |               | 0.1008        | 0.1008        |                | 0.0928        | 0.0928        | 0.0000        | 160.1830        | 160.1830        | 0.0518        | 0.0000        | 161.4781        |
| <b>Total</b>  | <b>0.1931</b> | <b>2.0137</b> | <b>0.9856</b> | <b>1.8200e-003</b> | <b>0.9425</b> | <b>0.1008</b> | <b>1.0433</b> | <b>0.5181</b>  | <b>0.0928</b> | <b>0.6108</b> | <b>0.0000</b> | <b>160.1830</b> | <b>160.1830</b> | <b>0.0518</b> | <b>0.0000</b> | <b>161.4781</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 3.3700e-003        | 2.6200e-003        | 0.0296        | 9.0000e-005        | 8.5700e-003        | 7.0000e-005        | 8.6500e-003        | 2.2800e-003        | 7.0000e-005        | 2.3400e-003        | 0.0000        | 7.7383        | 7.7383        | 2.3000e-004        | 0.0000        | 7.7440        |
| <b>Total</b> | <b>3.3700e-003</b> | <b>2.6200e-003</b> | <b>0.0296</b> | <b>9.0000e-005</b> | <b>8.5700e-003</b> | <b>7.0000e-005</b> | <b>8.6500e-003</b> | <b>2.2800e-003</b> | <b>7.0000e-005</b> | <b>2.3400e-003</b> | <b>0.0000</b> | <b>7.7383</b> | <b>7.7383</b> | <b>2.3000e-004</b> | <b>0.0000</b> | <b>7.7440</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.4241        | 0.0000             | 0.4241        | 0.2331         | 0.0000             | 0.2331        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0223        | 0.0967        | 0.9665        | 1.8200e-003        |               | 2.9700e-003        | 2.9700e-003   |                | 2.9700e-003        | 2.9700e-003   | 0.0000        | 160.1828        | 160.1828        | 0.0518        | 0.0000        | 161.4779        |
| <b>Total</b>  | <b>0.0223</b> | <b>0.0967</b> | <b>0.9665</b> | <b>1.8200e-003</b> | <b>0.4241</b> | <b>2.9700e-003</b> | <b>0.4271</b> | <b>0.2331</b>  | <b>2.9700e-003</b> | <b>0.2361</b> | <b>0.0000</b> | <b>160.1828</b> | <b>160.1828</b> | <b>0.0518</b> | <b>0.0000</b> | <b>161.4779</b> |

**Mitigated Construction Off-Site**

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

|              |                    |                    |               |                    |                    |                    |                    |                    |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 3.3700e-003        | 2.6200e-003        | 0.0296        | 9.0000e-005        | 8.5700e-003        | 7.0000e-005        | 8.6500e-003        | 2.2800e-003        | 7.0000e-005        | 2.3400e-003        | 0.0000        | 7.7383        | 7.7383        | 2.3000e-004        | 0.0000        | 7.7440        |
| <b>Total</b> | <b>3.3700e-003</b> | <b>2.6200e-003</b> | <b>0.0296</b> | <b>9.0000e-005</b> | <b>8.5700e-003</b> | <b>7.0000e-005</b> | <b>8.6500e-003</b> | <b>2.2800e-003</b> | <b>7.0000e-005</b> | <b>2.3400e-003</b> | <b>0.0000</b> | <b>7.7383</b> | <b>7.7383</b> | <b>2.3000e-004</b> | <b>0.0000</b> | <b>7.7440</b> |

### 3.3 Stu Center Site Preparation - 2022

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0813        | 0.0000             | 0.0813        | 0.0447         | 0.0000             | 0.0447        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0135        | 0.1413        | 0.0786        | 1.6000e-004        |               | 6.8500e-003        | 6.8500e-003   |                | 6.3000e-003        | 6.3000e-003   | 0.0000        | 13.8180        | 13.8180        | 4.4700e-003        | 0.0000        | 13.9297        |
| <b>Total</b>  | <b>0.0135</b> | <b>0.1413</b> | <b>0.0786</b> | <b>1.6000e-004</b> | <b>0.0813</b> | <b>6.8500e-003</b> | <b>0.0882</b> | <b>0.0447</b>  | <b>6.3000e-003</b> | <b>0.0510</b> | <b>0.0000</b> | <b>13.8180</b> | <b>13.8180</b> | <b>4.4700e-003</b> | <b>0.0000</b> | <b>13.9297</b> |

#### Unmitigated Construction Off-Site

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |        |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Worker   | 2.7000e-004 | 2.0000e-004 | 2.3500e-003 | 1.0000e-005 | 7.4000e-004   | 1.0000e-005  | 7.5000e-004 | 2.0000e-004    | 1.0000e-005   | 2.0000e-004 | 0.0000   | 0.6441    | 0.6441    | 2.0000e-005 | 0.0000 | 0.6445 |

|              |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| <b>Total</b> | <b>2.7000e-004</b> | <b>2.0000e-004</b> | <b>2.3500e-003</b> | <b>1.0000e-005</b> | <b>7.4000e-004</b> | <b>1.0000e-005</b> | <b>7.5000e-004</b> | <b>2.0000e-004</b> | <b>1.0000e-005</b> | <b>2.0000e-004</b> | <b>0.0000</b> | <b>0.6441</b> | <b>0.6441</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>0.6445</b> |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|

**Mitigated Construction On-Site**

|               | ROG                | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr            |                    |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |                    |                    |               |                    | 0.0366        | 0.0000             | 0.0366        | 0.0201         | 0.0000             | 0.0201        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 1.9200e-003        | 8.3400e-003        | 0.0834        | 1.6000e-004        |               | 2.6000e-004        | 2.6000e-004   |                | 2.6000e-004        | 2.6000e-004   | 0.0000        | 13.8180        | 13.8180        | 4.4700e-003        | 0.0000        | 13.9297        |
| <b>Total</b>  | <b>1.9200e-003</b> | <b>8.3400e-003</b> | <b>0.0834</b> | <b>1.6000e-004</b> | <b>0.0366</b> | <b>2.6000e-004</b> | <b>0.0368</b> | <b>0.0201</b>  | <b>2.6000e-004</b> | <b>0.0204</b> | <b>0.0000</b> | <b>13.8180</b> | <b>13.8180</b> | <b>4.4700e-003</b> | <b>0.0000</b> | <b>13.9297</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 2.7000e-004        | 2.0000e-004        | 2.3500e-003        | 1.0000e-005        | 7.4000e-004        | 1.0000e-005        | 7.5000e-004        | 2.0000e-004        | 1.0000e-005        | 2.0000e-004        | 0.0000        | 0.6441        | 0.6441        | 2.0000e-005        | 0.0000        | 0.6445        |
| <b>Total</b> | <b>2.7000e-004</b> | <b>2.0000e-004</b> | <b>2.3500e-003</b> | <b>1.0000e-005</b> | <b>7.4000e-004</b> | <b>1.0000e-005</b> | <b>7.5000e-004</b> | <b>2.0000e-004</b> | <b>1.0000e-005</b> | <b>2.0000e-004</b> | <b>0.0000</b> | <b>0.6441</b> | <b>0.6441</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>0.6445</b> |

**3.4 Stu Center Grading - 2020**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.3437        | 0.0000        | 0.3437        | 0.1422         | 0.0000        | 0.1422        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.1758        | 1.9828        | 1.2624        | 2.4500e-003        |               | 0.0859        | 0.0859        |                | 0.0790        | 0.0790        | 0.0000        | 215.2130        | 215.2130        | 0.0696        | 0.0000        | 216.9531        |
| <b>Total</b>  | <b>0.1758</b> | <b>1.9828</b> | <b>1.2624</b> | <b>2.4500e-003</b> | <b>0.3437</b> | <b>0.0859</b> | <b>0.4296</b> | <b>0.1422</b>  | <b>0.0790</b> | <b>0.2212</b> | <b>0.0000</b> | <b>215.2130</b> | <b>215.2130</b> | <b>0.0696</b> | <b>0.0000</b> | <b>216.9531</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 3.6500e-003        | 2.9400e-003        | 0.0325        | 9.0000e-005        | 8.6600e-003        | 7.0000e-005        | 8.7300e-003        | 2.3000e-003        | 7.0000e-005        | 2.3700e-003        | 0.0000        | 8.0687        | 8.0687        | 2.5000e-004        | 0.0000        | 8.0750        |
| <b>Total</b> | <b>3.6500e-003</b> | <b>2.9400e-003</b> | <b>0.0325</b> | <b>9.0000e-005</b> | <b>8.6600e-003</b> | <b>7.0000e-005</b> | <b>8.7300e-003</b> | <b>2.3000e-003</b> | <b>7.0000e-005</b> | <b>2.3700e-003</b> | <b>0.0000</b> | <b>8.0687</b> | <b>8.0687</b> | <b>2.5000e-004</b> | <b>0.0000</b> | <b>8.0750</b> |

**Mitigated Construction On-Site**

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

|               |               |               |               |                    |               |                    |               |               |                    |               |               |                 |                 |               |               |                 |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Fugitive Dust |               |               |               |                    | 0.1547        | 0.0000             | 0.1547        | 0.0640        | 0.0000             | 0.0640        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0301        | 0.1304        | 1.3035        | 2.4500e-003        |               | 4.0100e-003        | 4.0100e-003   |               | 4.0100e-003        | 4.0100e-003   | 0.0000        | 215.2127        | 215.2127        | 0.0696        | 0.0000        | 216.9528        |
| <b>Total</b>  | <b>0.0301</b> | <b>0.1304</b> | <b>1.3035</b> | <b>2.4500e-003</b> | <b>0.1547</b> | <b>4.0100e-003</b> | <b>0.1587</b> | <b>0.0640</b> | <b>4.0100e-003</b> | <b>0.0680</b> | <b>0.0000</b> | <b>215.2127</b> | <b>215.2127</b> | <b>0.0696</b> | <b>0.0000</b> | <b>216.9528</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 3.6500e-003        | 2.9400e-003        | 0.0325        | 9.0000e-005        | 8.6600e-003        | 7.0000e-005        | 8.7300e-003        | 2.3000e-003        | 7.0000e-005        | 2.3700e-003        | 0.0000        | 8.0687        | 8.0687        | 2.5000e-004        | 0.0000        | 8.0750        |
| <b>Total</b> | <b>3.6500e-003</b> | <b>2.9400e-003</b> | <b>0.0325</b> | <b>9.0000e-005</b> | <b>8.6600e-003</b> | <b>7.0000e-005</b> | <b>8.7300e-003</b> | <b>2.3000e-003</b> | <b>7.0000e-005</b> | <b>2.3700e-003</b> | <b>0.0000</b> | <b>8.0687</b> | <b>8.0687</b> | <b>2.5000e-004</b> | <b>0.0000</b> | <b>8.0750</b> |

**3.5 Stu Center Building Construction - 2020**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.1940        | 1.7555        | 1.5416        | 2.4600e-003        |               | 0.1022        | 0.1022        |                | 0.0961        | 0.0961        | 0.0000        | 211.9231        | 211.9231        | 0.0517        | 0.0000        | 213.2157        |
| <b>Total</b> | <b>0.1940</b> | <b>1.7555</b> | <b>1.5416</b> | <b>2.4600e-003</b> |               | <b>0.1022</b> | <b>0.1022</b> |                | <b>0.0961</b> | <b>0.0961</b> | <b>0.0000</b> | <b>211.9231</b> | <b>211.9231</b> | <b>0.0517</b> | <b>0.0000</b> | <b>213.2157</b> |



**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 8.3000e-003   | 0.2479        | 0.0671        | 5.9000e-004        | 0.0144        | 1.1500e-003        | 0.0156        | 4.1600e-003    | 1.1000e-003        | 5.2600e-003   | 0.0000        | 56.8275         | 56.8275         | 3.6100e-003        | 0.0000        | 56.9178         |
| Worker       | 0.0266        | 0.0215        | 0.2373        | 6.5000e-004        | 0.0632        | 5.4000e-004        | 0.0637        | 0.0168         | 5.0000e-004        | 0.0173        | 0.0000        | 58.8758         | 58.8758         | 1.8600e-003        | 0.0000        | 58.9221         |
| <b>Total</b> | <b>0.0349</b> | <b>0.2693</b> | <b>0.3044</b> | <b>1.2400e-003</b> | <b>0.0776</b> | <b>1.6900e-003</b> | <b>0.0793</b> | <b>0.0209</b>  | <b>1.6000e-003</b> | <b>0.0225</b> | <b>0.0000</b> | <b>115.7032</b> | <b>115.7032</b> | <b>5.4700e-003</b> | <b>0.0000</b> | <b>115.8399</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.0573        | 0.2564        | 1.6223        | 2.4600e-003        |               | 0.0114        | 0.0114        |                | 0.0114        | 0.0114        | 0.0000        | 211.9229        | 211.9229        | 0.0517        | 0.0000        | 213.2154        |
| <b>Total</b> | <b>0.0573</b> | <b>0.2564</b> | <b>1.6223</b> | <b>2.4600e-003</b> |               | <b>0.0114</b> | <b>0.0114</b> |                | <b>0.0114</b> | <b>0.0114</b> | <b>0.0000</b> | <b>211.9229</b> | <b>211.9229</b> | <b>0.0517</b> | <b>0.0000</b> | <b>213.2154</b> |

**Mitigated Construction Off-Site**



|              |               |               |               |                    |               |                    |               |               |                    |               |               |                 |                 |                    |               |                 |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|
| Vendor       | 0.0122        | 0.3861        | 0.1047        | 9.9000e-004        | 0.0246        | 7.9000e-004        | 0.0254        | 7.1100e-003   | 7.5000e-004        | 7.8700e-003   | 0.0000        | 96.4418         | 96.4418         | 5.9200e-003        | 0.0000        | 96.5897         |
| Worker       | 0.0424        | 0.0330        | 0.3729        | 1.0800e-003        | 0.1080        | 8.9000e-004        | 0.1089        | 0.0287        | 8.2000e-004        | 0.0295        | 0.0000        | 97.5023         | 97.5023         | 2.8700e-003        | 0.0000        | 97.5740         |
| <b>Total</b> | <b>0.0546</b> | <b>0.4192</b> | <b>0.4775</b> | <b>2.0700e-003</b> | <b>0.1327</b> | <b>1.6800e-003</b> | <b>0.1344</b> | <b>0.0358</b> | <b>1.5700e-003</b> | <b>0.0374</b> | <b>0.0000</b> | <b>193.9441</b> | <b>193.9441</b> | <b>8.7900e-003</b> | <b>0.0000</b> | <b>194.1637</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.0918        | 0.4288        | 2.7673        | 4.2100e-003        |               | 0.0175        | 0.0175        |                | 0.0175        | 0.0175        | 0.0000        | 362.5119        | 362.5119        | 0.0875        | 0.0000        | 364.6984        |
| <b>Total</b> | <b>0.0918</b> | <b>0.4288</b> | <b>2.7673</b> | <b>4.2100e-003</b> |               | <b>0.0175</b> | <b>0.0175</b> |                | <b>0.0175</b> | <b>0.0175</b> | <b>0.0000</b> | <b>362.5119</b> | <b>362.5119</b> | <b>0.0875</b> | <b>0.0000</b> | <b>364.6984</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0122        | 0.3861        | 0.1047        | 9.9000e-004        | 0.0246        | 7.9000e-004        | 0.0254        | 7.1100e-003    | 7.5000e-004        | 7.8700e-003   | 0.0000        | 96.4418         | 96.4418         | 5.9200e-003        | 0.0000        | 96.5897         |
| Worker       | 0.0424        | 0.0330        | 0.3729        | 1.0800e-003        | 0.1080        | 8.9000e-004        | 0.1089        | 0.0287         | 8.2000e-004        | 0.0295        | 0.0000        | 97.5023         | 97.5023         | 2.8700e-003        | 0.0000        | 97.5740         |
| <b>Total</b> | <b>0.0546</b> | <b>0.4192</b> | <b>0.4775</b> | <b>2.0700e-003</b> | <b>0.1327</b> | <b>1.6800e-003</b> | <b>0.1344</b> | <b>0.0358</b>  | <b>1.5700e-003</b> | <b>0.0374</b> | <b>0.0000</b> | <b>193.9441</b> | <b>193.9441</b> | <b>8.7900e-003</b> | <b>0.0000</b> | <b>194.1637</b> |

### 3.5 Stu Center Building Construction - 2022

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |                    |               |                |
| Off-Road     | 0.0230        | 0.2108        | 0.2209        | 3.6000e-004        |               | 0.0109        | 0.0109        |                | 0.0103        | 0.0103        | 0.0000        | 31.2829        | 31.2829        | 7.4900e-003        | 0.0000        | 31.4703        |
| <b>Total</b> | <b>0.0230</b> | <b>0.2108</b> | <b>0.2209</b> | <b>3.6000e-004</b> |               | <b>0.0109</b> | <b>0.0109</b> |                | <b>0.0103</b> | <b>0.0103</b> | <b>0.0000</b> | <b>31.2829</b> | <b>31.2829</b> | <b>7.4900e-003</b> | <b>0.0000</b> | <b>31.4703</b> |

#### Unmitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Vendor       | 9.8000e-004        | 0.0316        | 8.5400e-003   | 8.0000e-005        | 2.1300e-003   | 6.0000e-005        | 2.1900e-003   | 6.1000e-004        | 6.0000e-005        | 6.7000e-004        | 0.0000        | 8.2462         | 8.2462         | 4.9000e-004        | 0.0000        | 8.2585         |
| Worker       | 3.4300e-003        | 2.5700e-003   | 0.0296        | 9.0000e-005        | 9.3200e-003   | 7.0000e-005        | 9.3900e-003   | 2.4800e-003        | 7.0000e-005        | 2.5400e-003        | 0.0000        | 8.1151         | 8.1151         | 2.2000e-004        | 0.0000        | 8.1207         |
| <b>Total</b> | <b>4.4100e-003</b> | <b>0.0342</b> | <b>0.0382</b> | <b>1.7000e-004</b> | <b>0.0115</b> | <b>1.3000e-004</b> | <b>0.0116</b> | <b>3.0900e-003</b> | <b>1.3000e-004</b> | <b>3.2100e-003</b> | <b>0.0000</b> | <b>16.3613</b> | <b>16.3613</b> | <b>7.1000e-004</b> | <b>0.0000</b> | <b>16.3792</b> |

#### Mitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 7.5700e-003        | 0.0364        | 0.2384        | 3.6000e-004        |               | 1.3700e-003        | 1.3700e-003        |                | 1.3700e-003        | 1.3700e-003        | 0.0000        | 31.2829        | 31.2829        | 7.4900e-003        | 0.0000        | 31.4702        |
| <b>Total</b> | <b>7.5700e-003</b> | <b>0.0364</b> | <b>0.2384</b> | <b>3.6000e-004</b> |               | <b>1.3700e-003</b> | <b>1.3700e-003</b> |                | <b>1.3700e-003</b> | <b>1.3700e-003</b> | <b>0.0000</b> | <b>31.2829</b> | <b>31.2829</b> | <b>7.4900e-003</b> | <b>0.0000</b> | <b>31.4702</b> |

### Mitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Vendor       | 9.8000e-004        | 0.0316        | 8.5400e-003   | 8.0000e-005        | 2.1300e-003   | 6.0000e-005        | 2.1900e-003   | 6.1000e-004        | 6.0000e-005        | 6.7000e-004        | 0.0000        | 8.2462         | 8.2462         | 4.9000e-004        | 0.0000        | 8.2585         |
| Worker       | 3.4300e-003        | 2.5700e-003   | 0.0296        | 9.0000e-005        | 9.3200e-003   | 7.0000e-005        | 9.3900e-003   | 2.4800e-003        | 7.0000e-005        | 2.5400e-003        | 0.0000        | 8.1151         | 8.1151         | 2.2000e-004        | 0.0000        | 8.1207         |
| <b>Total</b> | <b>4.4100e-003</b> | <b>0.0342</b> | <b>0.0382</b> | <b>1.7000e-004</b> | <b>0.0115</b> | <b>1.3000e-004</b> | <b>0.0116</b> | <b>3.0900e-003</b> | <b>1.3000e-004</b> | <b>3.2100e-003</b> | <b>0.0000</b> | <b>16.3613</b> | <b>16.3613</b> | <b>7.1000e-004</b> | <b>0.0000</b> | <b>16.3792</b> |

### **3.6 Stu Center Paving - 2021**

#### Unmitigated Construction On-Site

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|---------|
| Category | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |        |        |         |
| Off-Road | 0.0345  | 0.3458 | 0.3910 | 6.1000e-004 |               | 0.0183       | 0.0183     |                | 0.0168        | 0.0168      | 0.0000   | 52.7414   | 52.7414   | 0.0167 | 0.0000 | 53.1593 |

|              |               |               |               |                    |  |               |               |  |               |               |               |                |                |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|--|---------------|---------------|--|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Paving       | 0.0000        |               |               |                    |  | 0.0000        | 0.0000        |  | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| <b>Total</b> | <b>0.0345</b> | <b>0.3458</b> | <b>0.3910</b> | <b>6.1000e-004</b> |  | <b>0.0183</b> | <b>0.0183</b> |  | <b>0.0168</b> | <b>0.0168</b> | <b>0.0000</b> | <b>52.7414</b> | <b>52.7414</b> | <b>0.0167</b> | <b>0.0000</b> | <b>53.1593</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 2.2300e-003        | 1.7300e-003        | 0.0196        | 6.0000e-005        | 5.6700e-003        | 5.0000e-005        | 5.7200e-003        | 1.5100e-003        | 4.0000e-005        | 1.5500e-003        | 0.0000        | 5.1177        | 5.1177        | 1.5000e-004        | 0.0000        | 5.1214        |
| <b>Total</b> | <b>2.2300e-003</b> | <b>1.7300e-003</b> | <b>0.0196</b> | <b>6.0000e-005</b> | <b>5.6700e-003</b> | <b>5.0000e-005</b> | <b>5.7200e-003</b> | <b>1.5100e-003</b> | <b>4.0000e-005</b> | <b>1.5500e-003</b> | <b>0.0000</b> | <b>5.1177</b> | <b>5.1177</b> | <b>1.5000e-004</b> | <b>0.0000</b> | <b>5.1214</b> |

**Mitigated Construction On-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |               |               |                |
| Off-Road     | 9.1500e-003        | 0.0435        | 0.4523        | 6.1000e-004        |               | 1.4400e-003        | 1.4400e-003        |                | 1.4400e-003        | 1.4400e-003        | 0.0000        | 52.7413        | 52.7413        | 0.0167        | 0.0000        | 53.1593        |
| Paving       | 0.0000             |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| <b>Total</b> | <b>9.1500e-003</b> | <b>0.0435</b> | <b>0.4523</b> | <b>6.1000e-004</b> |               | <b>1.4400e-003</b> | <b>1.4400e-003</b> |                | <b>1.4400e-003</b> | <b>1.4400e-003</b> | <b>0.0000</b> | <b>52.7413</b> | <b>52.7413</b> | <b>0.0167</b> | <b>0.0000</b> | <b>53.1593</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 2.2300e-003        | 1.7300e-003        | 0.0196        | 6.0000e-005        | 5.6700e-003        | 5.0000e-005        | 5.7200e-003        | 1.5100e-003        | 4.0000e-005        | 1.5500e-003        | 0.0000        | 5.1177        | 5.1177        | 1.5000e-004        | 0.0000        | 5.1214        |
| <b>Total</b> | <b>2.2300e-003</b> | <b>1.7300e-003</b> | <b>0.0196</b> | <b>6.0000e-005</b> | <b>5.6700e-003</b> | <b>5.0000e-005</b> | <b>5.7200e-003</b> | <b>1.5100e-003</b> | <b>4.0000e-005</b> | <b>1.5500e-003</b> | <b>0.0000</b> | <b>5.1177</b> | <b>5.1177</b> | <b>1.5000e-004</b> | <b>0.0000</b> | <b>5.1214</b> |

**3.7 Stu Center Architectural Coating - 2021**

**Unmitigated Construction On-Site**

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.4606        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 5.8000e-003   | 0.0405        | 0.0482        | 8.0000e-005        |               | 2.4900e-003        | 2.4900e-003        |                | 2.4900e-003        | 2.4900e-003        | 0.0000        | 6.7661        | 6.7661        | 4.6000e-004        | 0.0000        | 6.7777        |
| <b>Total</b>    | <b>0.4664</b> | <b>0.0405</b> | <b>0.0482</b> | <b>8.0000e-005</b> |               | <b>2.4900e-003</b> | <b>2.4900e-003</b> |                | <b>2.4900e-003</b> | <b>2.4900e-003</b> | <b>0.0000</b> | <b>6.7661</b> | <b>6.7661</b> | <b>4.6000e-004</b> | <b>0.0000</b> | <b>6.7777</b> |

**Unmitigated Construction Off-Site**

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

| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
|              | Hauling            | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.4800e-003        | 1.1500e-003        | 0.0130        | 4.0000e-005        | 3.7800e-003        | 3.0000e-005        | 3.8100e-003        | 1.0000e-003        | 3.0000e-005        | 1.0300e-003        | 0.0000        | 3.4068        | 3.4068        | 1.0000e-004        | 0.0000        | 3.4093        |
| <b>Total</b> | <b>1.4800e-003</b> | <b>1.1500e-003</b> | <b>0.0130</b> | <b>4.0000e-005</b> | <b>3.7800e-003</b> | <b>3.0000e-005</b> | <b>3.8100e-003</b> | <b>1.0000e-003</b> | <b>3.0000e-005</b> | <b>1.0300e-003</b> | <b>0.0000</b> | <b>3.4068</b> | <b>3.4068</b> | <b>1.0000e-004</b> | <b>0.0000</b> | <b>3.4093</b> |

**Mitigated Construction On-Site**

|                 | ROG           | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |                    |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.4606        |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 7.9000e-004   | 3.4100e-003        | 0.0486        | 8.0000e-005        |               | 1.0000e-004        | 1.0000e-004        |                | 1.0000e-004        | 1.0000e-004        | 0.0000        | 6.7661        | 6.7661        | 4.6000e-004        | 0.0000        | 6.7777        |
| <b>Total</b>    | <b>0.4614</b> | <b>3.4100e-003</b> | <b>0.0486</b> | <b>8.0000e-005</b> |               | <b>1.0000e-004</b> | <b>1.0000e-004</b> |                | <b>1.0000e-004</b> | <b>1.0000e-004</b> | <b>0.0000</b> | <b>6.7661</b> | <b>6.7661</b> | <b>4.6000e-004</b> | <b>0.0000</b> | <b>6.7777</b> |

**Mitigated Construction Off-Site**

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



|              |                    |                    |               |                    |                    |                    |                    |                    |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Worker       | 1.4800e-003        | 1.1500e-003        | 0.0130        | 4.0000e-005        | 3.7800e-003        | 3.0000e-005        | 3.8100e-003        | 1.0000e-003        | 3.0000e-005        | 1.0300e-003        | 0.0000        | 3.4068        | 3.4068        | 1.0000e-004        | 0.0000        | 3.4093        |
| <b>Total</b> | <b>1.4800e-003</b> | <b>1.1500e-003</b> | <b>0.0130</b> | <b>4.0000e-005</b> | <b>3.7800e-003</b> | <b>3.0000e-005</b> | <b>3.8100e-003</b> | <b>1.0000e-003</b> | <b>3.0000e-005</b> | <b>1.0300e-003</b> | <b>0.0000</b> | <b>3.4068</b> | <b>3.4068</b> | <b>1.0000e-004</b> | <b>0.0000</b> | <b>3.4093</b> |

### 3.7 Stu Center Architectural Coating - 2022

#### Unmitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.2347        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 2.7600e-003   | 0.0190        | 0.0245        | 4.0000e-005        |               | 1.1000e-003        | 1.1000e-003        |                | 1.1000e-003        | 1.1000e-003        | 0.0000        | 3.4469        | 3.4469        | 2.2000e-004        | 0.0000        | 3.4525        |
| <b>Total</b>    | <b>0.2374</b> | <b>0.0190</b> | <b>0.0245</b> | <b>4.0000e-005</b> |               | <b>1.1000e-003</b> | <b>1.1000e-003</b> |                | <b>1.1000e-003</b> | <b>1.1000e-003</b> | <b>0.0000</b> | <b>3.4469</b> | <b>3.4469</b> | <b>2.2000e-004</b> | <b>0.0000</b> | <b>3.4525</b> |

#### Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 7.1000e-004        | 5.3000e-004        | 6.1100e-003        | 2.0000e-005        | 1.9200e-003        | 2.0000e-005        | 1.9400e-003        | 5.1000e-004        | 1.0000e-005        | 5.2000e-004        | 0.0000        | 1.6745        | 1.6745        | 5.0000e-005        | 0.0000        | 1.6757        |
| <b>Total</b> | <b>7.1000e-004</b> | <b>5.3000e-004</b> | <b>6.1100e-003</b> | <b>2.0000e-005</b> | <b>1.9200e-003</b> | <b>2.0000e-005</b> | <b>1.9400e-003</b> | <b>5.1000e-004</b> | <b>1.0000e-005</b> | <b>5.2000e-004</b> | <b>0.0000</b> | <b>1.6745</b> | <b>1.6745</b> | <b>5.0000e-005</b> | <b>0.0000</b> | <b>1.6757</b> |

### Mitigated Construction On-Site

|                 | ROG           | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |                    |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.2347        |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 4.0000e-004   | 1.7400e-003        | 0.0247        | 4.0000e-005        |               | 5.0000e-005        | 5.0000e-005        |                | 5.0000e-005        | 5.0000e-005        | 0.0000        | 3.4469        | 3.4469        | 2.2000e-004        | 0.0000        | 3.4525        |
| <b>Total</b>    | <b>0.2351</b> | <b>1.7400e-003</b> | <b>0.0247</b> | <b>4.0000e-005</b> |               | <b>5.0000e-005</b> | <b>5.0000e-005</b> |                | <b>5.0000e-005</b> | <b>5.0000e-005</b> | <b>0.0000</b> | <b>3.4469</b> | <b>3.4469</b> | <b>2.2000e-004</b> | <b>0.0000</b> | <b>3.4525</b> |

### Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 7.1000e-004        | 5.3000e-004        | 6.1100e-003        | 2.0000e-005        | 1.9200e-003        | 2.0000e-005        | 1.9400e-003        | 5.1000e-004        | 1.0000e-005        | 5.2000e-004        | 0.0000        | 1.6745        | 1.6745        | 5.0000e-005        | 0.0000        | 1.6757        |
| <b>Total</b> | <b>7.1000e-004</b> | <b>5.3000e-004</b> | <b>6.1100e-003</b> | <b>2.0000e-005</b> | <b>1.9200e-003</b> | <b>2.0000e-005</b> | <b>1.9400e-003</b> | <b>5.1000e-004</b> | <b>1.0000e-005</b> | <b>5.2000e-004</b> | <b>0.0000</b> | <b>1.6745</b> | <b>1.6745</b> | <b>5.0000e-005</b> | <b>0.0000</b> | <b>1.6757</b> |

## 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   | 0.1905  | 0.7089 | 2.4340 | 8.3200e-003 | 0.8444        | 7.8200e-003  | 0.8523     | 0.2264         | 7.2800e-003   | 0.2337      | 0.0000   | 765.4790  | 765.4790  | 0.0401 | 0.0000 | 766.4814 |
| Unmitigated | 0.1905  | 0.7089 | 2.4340 | 8.3200e-003 | 0.8444        | 7.8200e-003  | 0.8523     | 0.2264         | 7.2800e-003   | 0.2337      | 0.0000   | 765.4790  | 765.4790  | 0.0401 | 0.0000 | 766.4814 |

#### 4.2 Trip Summary Information

| Land Use             | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------|-------------------------|----------|--------|-------------|------------|
|                      | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Junior College (2Yr) | 946.50                  | 387.00   | 42.00  | 2,227,083   | 2,227,083  |
| Total                | 946.50                  | 387.00   | 42.00  | 2,227,083   | 2,227,083  |

#### 4.3 Trip Type Information

| Land Use             | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|----------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                      | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Junior College (2Yr) | 16.60      | 8.40       | 6.90        | 6.40       | 88.60      | 5.00        | 92             | 7        | 1       |

#### 4.4 Fleet Mix

| Land Use             | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Junior College (2Yr) | 0.904015 | 0.012054 | 0.012054 | 0.001205 | 0.012054 | 0.007613 | 0.025361 | 0.012054 | 0.003135 | 0.002244 | 0.006361 | 0.000855 | 0.000997 |

#### 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   | 420.0450  | 420.0450  | 0.0173      | 3.5900e-003 | 421.5477 |
| Electricity Unmitigated |         |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 478.8880  | 478.8880  | 0.0198      | 4.0900e-003 | 480.6012 |
| NaturalGas Mitigated    | 0.0132  | 0.1202 | 0.1010 | 7.2000e-004 |               | 9.1400e-003  | 9.1400e-003 |                | 9.1400e-003   | 9.1400e-003 | 0.0000   | 130.8872  | 130.8872  | 2.5100e-003 | 2.4000e-003 | 131.6649 |
| NaturalGas Unmitigated  | 0.0219  | 0.1991 | 0.1673 | 1.1900e-003 |               | 0.0151       | 0.0151      |                | 0.0151        | 0.0151      | 0.0000   | 216.7638  | 216.7638  | 4.1500e-003 | 3.9700e-003 | 218.0519 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

|                      | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|----------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use             | kBTU/yr        | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |                    |                    |                 |
| Junior College (2Yr) | 4.062e+006     | 0.0219        | 0.1991        | 0.1673        | 1.1900e-003        |               | 0.0151        | 0.0151        |                | 0.0151        | 0.0151        | 0.0000        | 216.7638        | 216.7638        | 4.1500e-003        | 3.9700e-003        | 218.0519        |
| <b>Total</b>         |                | <b>0.0219</b> | <b>0.1991</b> | <b>0.1673</b> | <b>1.1900e-003</b> |               | <b>0.0151</b> | <b>0.0151</b> |                | <b>0.0151</b> | <b>0.0151</b> | <b>0.0000</b> | <b>216.7638</b> | <b>216.7638</b> | <b>4.1500e-003</b> | <b>3.9700e-003</b> | <b>218.0519</b> |

### Mitigated

|                      | Natural Gas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|----------------------|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use             | kBTU/yr         | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                 |                 |                    |                    |                 |
| Junior College (2Yr) | 2.45273e+006    | 0.0132        | 0.1202        | 0.1010        | 7.2000e-004        |               | 9.1400e-003        | 9.1400e-003        |                | 9.1400e-003        | 9.1400e-003        | 0.0000        | 130.8872        | 130.8872        | 2.5100e-003        | 2.4000e-003        | 131.6649        |
| <b>Total</b>         |                 | <b>0.0132</b> | <b>0.1202</b> | <b>0.1010</b> | <b>7.2000e-004</b> |               | <b>9.1400e-003</b> | <b>9.1400e-003</b> |                | <b>9.1400e-003</b> | <b>9.1400e-003</b> | <b>0.0000</b> | <b>130.8872</b> | <b>130.8872</b> | <b>2.5100e-003</b> | <b>2.4000e-003</b> | <b>131.6649</b> |

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

|                      | Electricity Use | Total CO2       | CH4           | N2O                | CO2e            |
|----------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use             | kWh/yr          | MT/yr           |               |                    |                 |
| Junior College (2Yr) | 1.503e+006      | 478.8880        | 0.0198        | 4.0900e-003        | 480.6012        |
| <b>Total</b>         |                 | <b>478.8880</b> | <b>0.0198</b> | <b>4.0900e-003</b> | <b>480.6012</b> |

#### Mitigated

|          | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|----------|-----------------|-----------|-----|-----|------|
| Land Use | kWh/yr          | MT/yr     |     |     |      |



|              |               |                    |                    |               |  |                    |                    |  |                    |                    |               |                    |                    |                    |               |                    |
|--------------|---------------|--------------------|--------------------|---------------|--|--------------------|--------------------|--|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|
| Landscaping  | 1.8000e-004   | 2.0000e-005        | 1.9200e-003        | 0.0000        |  | 1.0000e-005        | 1.0000e-005        |  | 1.0000e-005        | 1.0000e-005        | 0.0000        | 3.7200e-003        | 3.7200e-003        | 1.0000e-005        | 0.0000        | 3.9700e-003        |
| <b>Total</b> | <b>0.6117</b> | <b>2.0000e-005</b> | <b>1.9200e-003</b> | <b>0.0000</b> |  | <b>1.0000e-005</b> | <b>1.0000e-005</b> |  | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.7200e-003</b> | <b>3.7200e-003</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.9700e-003</b> |

### 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 | 0.0695        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Consumer Products     | 0.5420        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Landscaping           | 1.8000e-004   | 2.0000e-005        | 1.9200e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        | 0.0000        | 3.7200e-003        | 3.7200e-003        | 1.0000e-005        | 0.0000        | 3.9700e-003        |
| <b>Total</b>          | <b>0.6117</b> | <b>2.0000e-005</b> | <b>1.9200e-003</b> | <b>0.0000</b> |               | <b>1.0000e-005</b> | <b>1.0000e-005</b> |                | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.7200e-003</b> | <b>3.7200e-003</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.9700e-003</b> |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

|             | Total CO2 | CH4    | N2O         | CO2e    |
|-------------|-----------|--------|-------------|---------|
| Category    | MT/yr     |        |             |         |
| Mitigated   | 73.5939   | 0.2427 | 6.2700e-003 | 81.5292 |
| Unmitigated | 73.5939   | 0.2427 | 6.2700e-003 | 81.5292 |

## 7.2 Water by Land Use

### Unmitigated

|                      | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|----------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use             | Mgal               | MT/yr          |               |                    |                |
| Junior College (2Yr) | 7.35735 / 11.5077  | 73.5939        | 0.2427        | 6.2700e-003        | 81.5292        |
| <b>Total</b>         |                    | <b>73.5939</b> | <b>0.2427</b> | <b>6.2700e-003</b> | <b>81.5292</b> |

### Mitigated

|                      | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|----------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use             | Mgal               | MT/yr          |               |                    |                |
| Junior College (2Yr) | 7.35735 / 11.5077  | 73.5939        | 0.2427        | 6.2700e-003        | 81.5292        |
| <b>Total</b>         |                    | <b>73.5939</b> | <b>0.2427</b> | <b>6.2700e-003</b> | <b>81.5292</b> |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste



**Category/Year**

|             | Total CO2 | CH4    | N2O    | CO2e    |
|-------------|-----------|--------|--------|---------|
|             | MT/yr     |        |        |         |
| Mitigated   | 39.5832   | 2.3393 | 0.0000 | 98.0658 |
| Unmitigated | 39.5832   | 2.3393 | 0.0000 | 98.0658 |

**8.2 Waste by Land Use**

**Unmitigated**

|                      | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e           |
|----------------------|----------------|----------------|---------------|---------------|----------------|
| Land Use             | tons           | MT/yr          |               |               |                |
| Junior College (2Yr) | 195            | 39.5832        | 2.3393        | 0.0000        | 98.0658        |
| <b>Total</b>         |                | <b>39.5832</b> | <b>2.3393</b> | <b>0.0000</b> | <b>98.0658</b> |

**Mitigated**

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

| Land Use                | tons | MT/yr          |               |               |                |
|-------------------------|------|----------------|---------------|---------------|----------------|
|                         |      |                |               |               |                |
| Junior College<br>(2Yr) | 195  | 39.5832        | 2.3393        | 0.0000        | 98.0658        |
| <b>Total</b>            |      | <b>39.5832</b> | <b>2.3393</b> | <b>0.0000</b> | <b>98.0658</b> |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

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Demolition - .

Vehicle Trips - .

Construction Off-road Equipment Mitigation - Tier 4

Energy Mitigation - 15% over Title 24, current (CalEEMod 2016.3.2 uses 2016 standards)

| Table Name              | Column Name                | Default Value | New Value      |
|-------------------------|----------------------------|---------------|----------------|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00           |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00           |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 5.00           |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 3.00           |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00           |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00           |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00           |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00           |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 2.00           |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 4.00           |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 6.00           |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final   |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final   |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final   |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final   |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final   |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final   |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final   |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final   |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final   |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Interim |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final   |
| tblConstructionPhase    | NumDays                    | 200.00        | 312.00         |
| tblConstructionPhase    | NumDays                    | 20.00         | 158.00         |

|                      |                            |             |             |
|----------------------|----------------------------|-------------|-------------|
| tblConstructionPhase | NumDays                    | 4.00        | 78.00       |
| tblConstructionPhase | NumDays                    | 10.00       | 338.00      |
| tblConstructionPhase | NumDays                    | 2.00        | 78.00       |
| tblConstructionPhase | NumDaysWeek                | 5.00        | 6.00        |
| tblConstructionPhase | NumDaysWeek                | 5.00        | 6.00        |
| tblConstructionPhase | NumDaysWeek                | 5.00        | 6.00        |
| tblConstructionPhase | NumDaysWeek                | 5.00        | 6.00        |
| tblConstructionPhase | NumDaysWeek                | 5.00        | 6.00        |
| tblFleetMix          | HHD                        | 0.03        | 0.01        |
| tblFleetMix          | LDA                        | 0.55        | 0.90        |
| tblFleetMix          | LDT1                       | 0.04        | 0.01        |
| tblFleetMix          | LDT2                       | 0.20        | 0.01        |
| tblFleetMix          | LHD1                       | 0.02        | 0.01        |
| tblFleetMix          | LHD2                       | 6.1960e-003 | 7.6130e-003 |
| tblFleetMix          | MCY                        | 5.1420e-003 | 6.3607e-003 |
| tblFleetMix          | MDV                        | 0.12        | 1.2054e-003 |
| tblFleetMix          | MH                         | 8.7600e-004 | 9.9683e-004 |
| tblFleetMix          | MHD                        | 0.02        | 0.03        |
| tblFleetMix          | OBUS                       | 2.5150e-003 | 3.1351e-003 |
| tblFleetMix          | SBUS                       | 6.8700e-004 | 8.5460e-004 |
| tblFleetMix          | UBUS                       | 2.2010e-003 | 2.2444e-003 |
| tblGrading           | AcresOfGrading             | 39.00       | 0.00        |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00        | 3.00        |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00        | 2.00        |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00        | 2.00        |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00        | 3.00        |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00        | 2.00        |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 3.00        | 1.00        |
| tblOffRoadEquipment  | UsageHours                 | 6.00        | 7.00        |
| tblOffRoadEquipment  | UsageHours                 | 6.00        | 8.00        |

|                     |                  |       |        |
|---------------------|------------------|-------|--------|
| tblOffRoadEquipment | UsageHours       | 6.00  | 8.00   |
| tblOffRoadEquipment | UsageHours       | 6.00  | 8.00   |
| tblOffRoadEquipment | UsageHours       | 7.00  | 8.00   |
| tblOffRoadEquipment | UsageHours       | 6.00  | 8.00   |
| tblOffRoadEquipment | UsageHours       | 7.00  | 8.00   |
| tblOffRoadEquipment | UsageHours       | 6.00  | 7.00   |
| tblOffRoadEquipment | UsageHours       | 7.00  | 8.00   |
| tblTripsAndVMT      | VendorTripNumber | 7.00  | 156.00 |
| tblTripsAndVMT      | WorkerTripNumber | 23.00 | 15.00  |
| tblTripsAndVMT      | WorkerTripNumber | 8.00  | 5.00   |
| tblTripsAndVMT      | WorkerTripNumber | 19.00 | 100.00 |
| tblTripsAndVMT      | WorkerTripNumber | 15.00 | 10.00  |
| tblVehicleTrips     | ST_TR            | 11.23 | 3.69   |
| tblVehicleTrips     | SU_TR            | 1.21  | 0.40   |
| tblVehicleTrips     | WD_TR            | 27.49 | 9.02   |

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

|      | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Year | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |        |        |          |
| 2019 | 0.3390  | 3.3975 | 2.3448 | 3.9700e-003 | 0.0217        | 0.1789       | 0.2006     | 4.8400e-003    | 0.1661        | 0.1709      | 0.0000   | 355.0338  | 355.0338  | 0.0977 | 0.0000 | 357.4751 |
| 2021 | 0.4160  | 4.5760 | 3.3997 | 8.3400e-003 | 0.6423        | 0.1809       | 0.8232     | 0.3023         | 0.1678        | 0.4701      | 0.0000   | 754.6447  | 754.6447  | 0.1419 | 0.0000 | 758.1918 |
| 2022 | 0.3321  | 3.7238 | 3.3924 | 8.8900e-003 | 0.1994        | 0.1267       | 0.3262     | 0.0550         | 0.1183        | 0.1733      | 0.0000   | 810.2282  | 810.2282  | 0.1243 | 0.0000 | 813.3344 |

|         |        |        |        |             |        |        |        |        |        |        |        |          |          |        |        |          |
|---------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|--------|----------|----------|--------|--------|----------|
| Maximum | 0.4160 | 4.5760 | 3.3997 | 8.8900e-003 | 0.6423 | 0.1809 | 0.8232 | 0.3023 | 0.1678 | 0.4701 | 0.0000 | 810.2282 | 810.2282 | 0.1419 | 0.0000 | 813.3344 |
|---------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|--------|----------|----------|--------|--------|----------|

**Mitigated Construction**

|         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Year    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |        |        |          |
| 2019    | 0.0758  | 0.7035 | 2.5569 | 3.9700e-003 | 0.0173        | 0.0205       | 0.0378     | 4.1700e-003    | 0.0193        | 0.0235      | 0.0000   | 355.0334  | 355.0334  | 0.0977 | 0.0000 | 357.4747 |
| 2021    | 0.1835  | 1.9987 | 3.7048 | 8.3400e-003 | 0.3725        | 0.0379       | 0.4104     | 0.1590         | 0.0359        | 0.1949      | 0.0000   | 754.6442  | 754.6442  | 0.1419 | 0.0000 | 758.1912 |
| 2022    | 0.1762  | 1.9271 | 3.6595 | 8.8900e-003 | 0.1994        | 0.0282       | 0.2276     | 0.0550         | 0.0270        | 0.0821      | 0.0000   | 810.2278  | 810.2278  | 0.1243 | 0.0000 | 813.3340 |
| Maximum | 0.1835  | 1.9987 | 3.7048 | 8.8900e-003 | 0.3725        | 0.0379       | 0.4104     | 0.1590         | 0.0359        | 0.1949      | 0.0000   | 810.2278  | 810.2278  | 0.1419 | 0.0000 | 813.3340 |

|                   | ROG   | NOx   | CO    | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|-------|-------|-------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|------|------|------|
| Percent Reduction | 59.95 | 60.42 | -8.58 | 0.00 | 31.75         | 82.20        | 49.94      | 39.74          | 81.81         | 63.10       | 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       | 7-1-2019   | 9-30-2019  | 1.8644                                       | 0.3884                                     |
| 2       | 10-1-2019  | 12-31-2019 | 1.8650                                       | 0.3891                                     |
| 7       | 1-1-2021   | 3-31-2021  | 0.5188                                       | 0.1716                                     |
| 8       | 4-1-2021   | 6-30-2021  | 0.9780                                       | 0.3084                                     |
| 9       | 7-1-2021   | 9-30-2021  | 1.5821                                       | 0.7276                                     |
| 10      | 10-1-2021  | 12-31-2021 | 1.8702                                       | 0.9459                                     |
| 11      | 1-1-2022   | 3-31-2022  | 1.6638                                       | 0.8763                                     |
| 12      | 4-1-2022   | 6-30-2022  | 1.6798                                       | 0.8835                                     |
| 13      | 7-1-2022   | 9-30-2022  | 0.6897                                       | 0.3200                                     |
|         |            | Highest    | 1.8702                                       | 0.9459                                     |

## 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         | 0.1835        | 1.0000e-005   | 5.8000e-004   | 0.0000             |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000         | 1.1200e-003     | 1.1200e-003     | 0.0000        | 0.0000             | 1.1900e-003     |
| Energy       | 6.5700e-003   | 0.0597        | 0.0502        | 3.6000e-004        |               | 4.5400e-003        | 4.5400e-003   |                | 4.5400e-003        | 4.5400e-003   | 0.0000         | 208.6955        | 208.6955        | 7.1800e-003   | 2.4200e-003        | 209.5959        |
| Mobile       | 0.0817        | 0.3040        | 1.0438        | 3.5700e-003        | 0.3621        | 3.3500e-003        | 0.3655        | 0.0971         | 3.1200e-003        | 0.1002        | 0.0000         | 328.2801        | 328.2801        | 0.0172        | 0.0000             | 328.7100        |
| Waste        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 11.8750        | 0.0000          | 11.8750         | 0.7018        | 0.0000             | 29.4197         |
| Water        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.7002         | 21.3779         | 22.0782         | 0.0728        | 1.8800e-003        | 24.4588         |
| <b>Total</b> | <b>0.2718</b> | <b>0.3638</b> | <b>1.0946</b> | <b>3.9300e-003</b> | <b>0.3621</b> | <b>7.8900e-003</b> | <b>0.3700</b> | <b>0.0971</b>  | <b>7.6600e-003</b> | <b>0.1048</b> | <b>12.5752</b> | <b>558.3547</b> | <b>570.9299</b> | <b>0.7990</b> | <b>4.3000e-003</b> | <b>592.1857</b> |

### 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     | 0.1835      | 1.0000e-005 | 5.8000e-004 | 0.0000      |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 1.1200e-003 | 1.1200e-003 | 0.0000      | 0.0000      | 1.1900e-003 |
| Energy   | 3.9700e-003 | 0.0361      | 0.0303      | 2.2000e-004 |               | 2.7400e-003  | 2.7400e-003 |                | 2.7400e-003   | 2.7400e-003 | 0.0000   | 165.2796    | 165.2796    | 5.9600e-003 | 1.8000e-003 | 165.9638    |
| Mobile   | 0.0817      | 0.3040      | 1.0438      | 3.5700e-003 | 0.3621        | 3.3500e-003  | 0.3655      | 0.0971         | 3.1200e-003   | 0.1002      | 0.0000   | 328.2801    | 328.2801    | 0.0172      | 0.0000      | 328.7100    |
| Waste    |             |             |             |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 11.8750  | 0.0000      | 11.8750     | 0.7018      | 0.0000      | 29.4197     |
| Water    |             |             |             |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.7002   | 21.3779     | 22.0782     | 0.0728      | 1.8800e-003 | 24.4588     |



|       |        |        |        |             |        |             |        |        |             |        |         |          |          |        |             |          |
|-------|--------|--------|--------|-------------|--------|-------------|--------|--------|-------------|--------|---------|----------|----------|--------|-------------|----------|
| Total | 0.2692 | 0.3401 | 1.0747 | 3.7900e-003 | 0.3621 | 6.0900e-003 | 0.3682 | 0.0971 | 5.8600e-003 | 0.1030 | 12.5752 | 514.9388 | 527.5140 | 0.7978 | 3.6800e-003 | 548.5535 |
|-------|--------|--------|--------|-------------|--------|-------------|--------|--------|-------------|--------|---------|----------|----------|--------|-------------|----------|

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O   | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|-------|------|
| Percent Reduction | 0.96 | 6.51 | 1.82 | 3.56 | 0.00          | 22.81        | 0.49       | 0.00           | 23.50         | 1.72        | 0.00     | 7.78     | 7.60      | 0.15 | 14.42 | 7.37 |

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name                      | Phase Type            | Start Date | End Date   | Num Days Week | Num Days | Phase Description |
|--------------|---------------------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1            | Demolition                      | Demolition            | 7/1/2019   | 12/31/2019 | 6             | 158      |                   |
| 2            | Bookstore Site Preparation      | Site Preparation      | 2/1/2021   | 5/1/2021   | 6             | 78       |                   |
| 3            | Bookstore Grading               | Grading               | 5/2/2021   | 7/31/2021  | 6             | 78       |                   |
| 4            | Bookstore Building Construction | Building Construction | 8/2/2021   | 7/30/2022  | 6             | 312      |                   |
| 5            | Bookstore Paving                | Paving                | 8/2/2021   | 8/30/2022  | 6             | 338      |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

#### OffRoad Equipment

| Phase Name                 | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|----------------------------|---------------------------|--------|-------------|-------------|-------------|
| Demolition                 | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Demolition                 | Excavators                | 3      | 8.00        | 158         | 0.38        |
| Demolition                 | Rubber Tired Dozers       | 2      | 8.00        | 247         | 0.40        |
| Bookstore Site Preparation | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Bookstore Site Preparation | Tractors/Loaders/Backhoes | 1      | 8.00        | 97          | 0.37        |
| Bookstore Grading          | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Bookstore Grading          | Graders                   | 1      | 8.00        | 187         | 0.41        |

|                                 |                           |   |      |     |      |
|---------------------------------|---------------------------|---|------|-----|------|
| Bookstore Grading               | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Bookstore Grading               | Scrapers                  | 0 | 8.00 | 367 | 0.48 |
| Bookstore Grading               | Tractors/Loaders/Backhoes | 2 | 8.00 | 97  | 0.37 |
| Bookstore Building Construction | Cranes                    | 1 | 7.00 | 231 | 0.29 |
| Bookstore Building Construction | Forklifts                 | 3 | 8.00 | 89  | 0.20 |
| Bookstore Building Construction | Generator Sets            | 1 | 8.00 | 84  | 0.74 |
| Bookstore Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97  | 0.37 |
| Bookstore Building Construction | Welders                   | 1 | 8.00 | 46  | 0.45 |
| Bookstore Paving                | Pavers                    | 1 | 8.00 | 130 | 0.42 |
| Bookstore Paving                | Paving Equipment          | 1 | 8.00 | 132 | 0.36 |
| Bookstore Paving                | Rollers                   | 2 | 8.00 | 80  | 0.38 |
| Bookstore Paving                | Cement and Mortar Mixers  | 1 | 6.00 | 9   | 0.56 |
| Bookstore Site Preparation      | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Demolition                      | Tractors/Loaders/Backhoes | 3 | 8.00 | 97  | 0.37 |
| Bookstore Paving                | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |

### Trips and VMT

| Phase Name                      | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---------------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition                      | 9                       | 15.00              | 0.00               | 74.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Bookstore Site Preparation      | 3                       | 5.00               | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Bookstore Grading               | 6                       | 15.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Bookstore Building Construction | 9                       | 100.00             | 156.00             | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Bookstore Paving                | 6                       | 10.00              | 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

Water Exposed Area

### 3.2 Demolition - 2019

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10  | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |                    |               |               |                    |               |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 8.0600e-003        | 0.0000        | 8.0600e-003   | 1.2200e-003        | 0.0000        | 1.2200e-003   | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.3327        | 3.3808        | 2.2885        | 3.8000e-003        |                    | 0.1788        | 0.1788        |                    | 0.1659        | 0.1659        | 0.0000        | 339.6704        | 339.6704        | 0.0970        | 0.0000        | 342.0958        |
| <b>Total</b>  | <b>0.3327</b> | <b>3.3808</b> | <b>2.2885</b> | <b>3.8000e-003</b> | <b>8.0600e-003</b> | <b>0.1788</b> | <b>0.1868</b> | <b>1.2200e-003</b> | <b>0.1659</b> | <b>0.1672</b> | <b>0.0000</b> | <b>339.6704</b> | <b>339.6704</b> | <b>0.0970</b> | <b>0.0000</b> | <b>342.0958</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 3.5000e-004        | 0.0117        | 2.4900e-003   | 3.0000e-005        | 6.4000e-004   | 4.0000e-005        | 6.8000e-004   | 1.7000e-004        | 4.0000e-005        | 2.1000e-004        | 0.0000        | 2.8811         | 2.8811         | 2.0000e-004        | 0.0000        | 2.8862         |
| Vendor       | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Worker       | 5.9400e-003        | 4.9500e-003   | 0.0538        | 1.4000e-004        | 0.0130        | 1.1000e-004        | 0.0131        | 3.4500e-003        | 1.1000e-004        | 3.5500e-003        | 0.0000        | 12.4823        | 12.4823        | 4.3000e-004        | 0.0000        | 12.4930        |
| <b>Total</b> | <b>6.2900e-003</b> | <b>0.0167</b> | <b>0.0563</b> | <b>1.7000e-004</b> | <b>0.0136</b> | <b>1.5000e-004</b> | <b>0.0138</b> | <b>3.6200e-003</b> | <b>1.5000e-004</b> | <b>3.7600e-003</b> | <b>0.0000</b> | <b>15.3634</b> | <b>15.3634</b> | <b>6.3000e-004</b> | <b>0.0000</b> | <b>15.3792</b> |

**Mitigated Construction On-Site**

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

| Category     | tons/yr       |               |               |                    |                    |               |               |                    |               |               | MT/yr         |                 |                 |               |               |                 |
|--------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
|              | Fugitive Dust |               |               |                    |                    | 3.6300e-003   | 0.0000        | 3.6300e-003        | 5.5000e-004   | 0.0000        | 5.5000e-004   | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road     | 0.0695        | 0.6868        | 2.5006        | 3.8000e-003        |                    | 0.0204        | 0.0204        |                    | 0.0192        | 0.0192        | 0.0000        | 339.6700        | 339.6700        | 0.0970        | 0.0000        | 342.0954        |
| <b>Total</b> | <b>0.0695</b> | <b>0.6868</b> | <b>2.5006</b> | <b>3.8000e-003</b> | <b>3.6300e-003</b> | <b>0.0204</b> | <b>0.0240</b> | <b>5.5000e-004</b> | <b>0.0192</b> | <b>0.0198</b> | <b>0.0000</b> | <b>339.6700</b> | <b>339.6700</b> | <b>0.0970</b> | <b>0.0000</b> | <b>342.0954</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 3.5000e-004        | 0.0117        | 2.4900e-003   | 3.0000e-005        | 6.4000e-004   | 4.0000e-005        | 6.8000e-004   | 1.7000e-004        | 4.0000e-005        | 2.1000e-004        | 0.0000        | 2.8811         | 2.8811         | 2.0000e-004        | 0.0000        | 2.8862         |
| Vendor       | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Worker       | 5.9400e-003        | 4.9500e-003   | 0.0538        | 1.4000e-004        | 0.0130        | 1.1000e-004        | 0.0131        | 3.4500e-003        | 1.1000e-004        | 3.5500e-003        | 0.0000        | 12.4823        | 12.4823        | 4.3000e-004        | 0.0000        | 12.4930        |
| <b>Total</b> | <b>6.2900e-003</b> | <b>0.0167</b> | <b>0.0563</b> | <b>1.7000e-004</b> | <b>0.0136</b> | <b>1.5000e-004</b> | <b>0.0138</b> | <b>3.6200e-003</b> | <b>1.5000e-004</b> | <b>3.7600e-003</b> | <b>0.0000</b> | <b>15.3634</b> | <b>15.3634</b> | <b>6.3000e-004</b> | <b>0.0000</b> | <b>15.3792</b> |

**3.3 Bookstore Site Preparation - 2021**

**Unmitigated Construction On-Site**

|               | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|---------|
| Category      | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |        |        |         |
| Fugitive Dust |         |        |        |             | 0.2349        | 0.0000       | 0.2349     | 0.1291         | 0.0000        | 0.1291      | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0658  | 0.7329 | 0.3145 | 7.1000e-004 |               | 0.0325       | 0.0325     |                | 0.0299        | 0.0299      | 0.0000   | 62.6207   | 62.6207   | 0.0203 | 0.0000 | 63.1270 |

|              |               |               |               |                    |               |               |               |               |               |               |               |                |                |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| <b>Total</b> | <b>0.0658</b> | <b>0.7329</b> | <b>0.3145</b> | <b>7.1000e-004</b> | <b>0.2349</b> | <b>0.0325</b> | <b>0.2673</b> | <b>0.1291</b> | <b>0.0299</b> | <b>0.1590</b> | <b>0.0000</b> | <b>62.6207</b> | <b>62.6207</b> | <b>0.0203</b> | <b>0.0000</b> | <b>63.1270</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 8.4000e-004        | 6.5000e-004        | 7.3700e-003        | 2.0000e-005        | 2.1400e-003        | 2.0000e-005        | 2.1500e-003        | 5.7000e-004        | 2.0000e-005        | 5.8000e-004        | 0.0000        | 1.9284        | 1.9284        | 6.0000e-005        | 0.0000        | 1.9298        |
| <b>Total</b> | <b>8.4000e-004</b> | <b>6.5000e-004</b> | <b>7.3700e-003</b> | <b>2.0000e-005</b> | <b>2.1400e-003</b> | <b>2.0000e-005</b> | <b>2.1500e-003</b> | <b>5.7000e-004</b> | <b>2.0000e-005</b> | <b>5.8000e-004</b> | <b>0.0000</b> | <b>1.9284</b> | <b>1.9284</b> | <b>6.0000e-005</b> | <b>0.0000</b> | <b>1.9298</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.1057        | 0.0000             | 0.1057        | 0.0581         | 0.0000             | 0.0581        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0197        | 0.2435        | 0.3592        | 7.1000e-004        |               | 6.2800e-003        | 6.2800e-003   |                | 5.8400e-003        | 5.8400e-003   | 0.0000        | 62.6206        | 62.6206        | 0.0203        | 0.0000        | 63.1270        |
| <b>Total</b>  | <b>0.0197</b> | <b>0.2435</b> | <b>0.3592</b> | <b>7.1000e-004</b> | <b>0.1057</b> | <b>6.2800e-003</b> | <b>0.1120</b> | <b>0.0581</b>  | <b>5.8400e-003</b> | <b>0.0639</b> | <b>0.0000</b> | <b>62.6206</b> | <b>62.6206</b> | <b>0.0203</b> | <b>0.0000</b> | <b>63.1270</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 8.4000e-004        | 6.5000e-004        | 7.3700e-003        | 2.0000e-005        | 2.1400e-003        | 2.0000e-005        | 2.1500e-003        | 5.7000e-004        | 2.0000e-005        | 5.8000e-004        | 0.0000        | 1.9284        | 1.9284        | 6.0000e-005        | 0.0000        | 1.9298        |
| <b>Total</b> | <b>8.4000e-004</b> | <b>6.5000e-004</b> | <b>7.3700e-003</b> | <b>2.0000e-005</b> | <b>2.1400e-003</b> | <b>2.0000e-005</b> | <b>2.1500e-003</b> | <b>5.7000e-004</b> | <b>2.0000e-005</b> | <b>5.8000e-004</b> | <b>0.0000</b> | <b>1.9284</b> | <b>1.9284</b> | <b>6.0000e-005</b> | <b>0.0000</b> | <b>1.9298</b> |

### 3.4 Bookstore Grading - 2021

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.2555        | 0.0000        | 0.2555        | 0.1313         | 0.0000        | 0.1313        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0910        | 0.9748        | 0.6579        | 1.2400e-003        |               | 0.0450        | 0.0450        |                | 0.0414        | 0.0414        | 0.0000        | 108.6604        | 108.6604        | 0.0351        | 0.0000        | 109.5390        |
| <b>Total</b>  | <b>0.0910</b> | <b>0.9748</b> | <b>0.6579</b> | <b>1.2400e-003</b> | <b>0.2555</b> | <b>0.0450</b> | <b>0.3005</b> | <b>0.1313</b>  | <b>0.0414</b> | <b>0.1727</b> | <b>0.0000</b> | <b>108.6604</b> | <b>108.6604</b> | <b>0.0351</b> | <b>0.0000</b> | <b>109.5390</b> |

#### Unmitigated Construction Off-Site

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

|              |                    |                    |               |                    |                    |                    |                    |                    |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 2.5200e-003        | 1.9600e-003        | 0.0221        | 6.0000e-005        | 6.4100e-003        | 5.0000e-005        | 6.4600e-003        | 1.7000e-003        | 5.0000e-005        | 1.7500e-003        | 0.0000        | 5.7852        | 5.7852        | 1.7000e-004        | 0.0000        | 5.7894        |
| <b>Total</b> | <b>2.5200e-003</b> | <b>1.9600e-003</b> | <b>0.0221</b> | <b>6.0000e-005</b> | <b>6.4100e-003</b> | <b>5.0000e-005</b> | <b>6.4600e-003</b> | <b>1.7000e-003</b> | <b>5.0000e-005</b> | <b>1.7500e-003</b> | <b>0.0000</b> | <b>5.7852</b> | <b>5.7852</b> | <b>1.7000e-004</b> | <b>0.0000</b> | <b>5.7894</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.1150        | 0.0000             | 0.1150        | 0.0591         | 0.0000             | 0.0591        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0284        | 0.2984        | 0.7549        | 1.2400e-003        |               | 8.8000e-003        | 8.8000e-003   |                | 8.2300e-003        | 8.2300e-003   | 0.0000        | 108.6603        | 108.6603        | 0.0351        | 0.0000        | 109.5389        |
| <b>Total</b>  | <b>0.0284</b> | <b>0.2984</b> | <b>0.7549</b> | <b>1.2400e-003</b> | <b>0.1150</b> | <b>8.8000e-003</b> | <b>0.1238</b> | <b>0.0591</b>  | <b>8.2300e-003</b> | <b>0.0673</b> | <b>0.0000</b> | <b>108.6603</b> | <b>108.6603</b> | <b>0.0351</b> | <b>0.0000</b> | <b>109.5389</b> |

**Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|----------|-------------|-------------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr     |             |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |        |
| Hauling  | 0.0000      | 0.0000      | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Vendor   | 0.0000      | 0.0000      | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Worker   | 2.5200e-003 | 1.9600e-003 | 0.0221 | 6.0000e-005 | 6.4100e-003   | 5.0000e-005  | 6.4600e-003 | 1.7000e-003    | 5.0000e-005   | 1.7500e-003 | 0.0000   | 5.7852    | 5.7852    | 1.7000e-004 | 0.0000 | 5.7894 |

|              |                    |                    |               |                    |                    |                    |                    |                    |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| <b>Total</b> | <b>2.5200e-003</b> | <b>1.9600e-003</b> | <b>0.0221</b> | <b>6.0000e-005</b> | <b>6.4100e-003</b> | <b>5.0000e-005</b> | <b>6.4600e-003</b> | <b>1.7000e-003</b> | <b>5.0000e-005</b> | <b>1.7500e-003</b> | <b>0.0000</b> | <b>5.7852</b> | <b>5.7852</b> | <b>1.7000e-004</b> | <b>0.0000</b> | <b>5.7894</b> |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|

### 3.5 Bookstore Building Construction - 2021

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.1245        | 1.1418        | 1.0857        | 1.7600e-003        |               | 0.0628        | 0.0628        |                | 0.0590        | 0.0590        | 0.0000        | 151.7224        | 151.7224        | 0.0366        | 0.0000        | 152.6375        |
| <b>Total</b> | <b>0.1245</b> | <b>1.1418</b> | <b>1.0857</b> | <b>1.7600e-003</b> |               | <b>0.0628</b> | <b>0.0628</b> |                | <b>0.0590</b> | <b>0.0590</b> | <b>0.0000</b> | <b>151.7224</b> | <b>151.7224</b> | <b>0.0366</b> | <b>0.0000</b> | <b>152.6375</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0317        | 1.0084        | 0.2734        | 2.6000e-003        | 0.0644        | 2.0600e-003        | 0.0664        | 0.0186         | 1.9700e-003        | 0.0205        | 0.0000        | 251.8702        | 251.8702        | 0.0155        | 0.0000        | 252.2564        |
| Worker       | 0.0282        | 0.0219        | 0.2477        | 7.2000e-004        | 0.0718        | 5.9000e-004        | 0.0724        | 0.0191         | 5.4000e-004        | 0.0196        | 0.0000        | 64.7741         | 64.7741         | 1.9100e-003   | 0.0000        | 64.8217         |
| <b>Total</b> | <b>0.0599</b> | <b>1.0304</b> | <b>0.5211</b> | <b>3.3200e-003</b> | <b>0.1361</b> | <b>2.6500e-003</b> | <b>0.1388</b> | <b>0.0376</b>  | <b>2.5100e-003</b> | <b>0.0402</b> | <b>0.0000</b> | <b>316.6443</b> | <b>316.6443</b> | <b>0.0174</b> | <b>0.0000</b> | <b>317.0782</b> |

#### Mitigated Construction On-Site



|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.0487        | 0.2985        | 1.1526        | 1.7600e-003        |               | 0.0147        | 0.0147        |                | 0.0141        | 0.0141        | 0.0000        | 151.7222        | 151.7222        | 0.0366        | 0.0000        | 152.6373        |
| <b>Total</b> | <b>0.0487</b> | <b>0.2985</b> | <b>1.1526</b> | <b>1.7600e-003</b> |               | <b>0.0147</b> | <b>0.0147</b> |                | <b>0.0141</b> | <b>0.0141</b> | <b>0.0000</b> | <b>151.7222</b> | <b>151.7222</b> | <b>0.0366</b> | <b>0.0000</b> | <b>152.6373</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0317        | 1.0084        | 0.2734        | 2.6000e-003        | 0.0644        | 2.0600e-003        | 0.0664        | 0.0186         | 1.9700e-003        | 0.0205        | 0.0000        | 251.8702        | 251.8702        | 0.0155        | 0.0000        | 252.2564        |
| Worker       | 0.0282        | 0.0219        | 0.2477        | 7.2000e-004        | 0.0718        | 5.9000e-004        | 0.0724        | 0.0191         | 5.4000e-004        | 0.0196        | 0.0000        | 64.7741         | 64.7741         | 1.9100e-003   | 0.0000        | 64.8217         |
| <b>Total</b> | <b>0.0599</b> | <b>1.0304</b> | <b>0.5211</b> | <b>3.3200e-003</b> | <b>0.1361</b> | <b>2.6500e-003</b> | <b>0.1388</b> | <b>0.0376</b>  | <b>2.5100e-003</b> | <b>0.0402</b> | <b>0.0000</b> | <b>316.6443</b> | <b>316.6443</b> | <b>0.0174</b> | <b>0.0000</b> | <b>317.0782</b> |

**3.5 Bookstore Building Construction - 2022**

**Unmitigated Construction On-Site**

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

|              |               |               |               |                    |  |               |               |  |               |               |               |                 |                 |               |               |                 |
|--------------|---------------|---------------|---------------|--------------------|--|---------------|---------------|--|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Off-Road     | 0.1544        | 1.4132        | 1.4809        | 2.4400e-003        |  | 0.0732        | 0.0732        |  | 0.0689        | 0.0689        | 0.0000        | 209.7114        | 209.7114        | 0.0502        | 0.0000        | 210.9674        |
| <b>Total</b> | <b>0.1544</b> | <b>1.4132</b> | <b>1.4809</b> | <b>2.4400e-003</b> |  | <b>0.0732</b> | <b>0.0732</b> |  | <b>0.0689</b> | <b>0.0689</b> | <b>0.0000</b> | <b>209.7114</b> | <b>209.7114</b> | <b>0.0502</b> | <b>0.0000</b> | <b>210.9674</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0412        | 1.3237        | 0.3574        | 3.5500e-003        | 0.0889        | 2.4800e-003        | 0.0914        | 0.0257         | 2.3800e-003        | 0.0280        | 0.0000        | 344.9473        | 344.9473        | 0.0206        | 0.0000        | 345.4623        |
| Worker       | 0.0365        | 0.0274        | 0.3153        | 9.6000e-004        | 0.0992        | 7.9000e-004        | 0.1000        | 0.0263         | 7.3000e-004        | 0.0271        | 0.0000        | 86.3510         | 86.3510         | 2.3800e-003   | 0.0000        | 86.4105         |
| <b>Total</b> | <b>0.0777</b> | <b>1.3511</b> | <b>0.6728</b> | <b>4.5100e-003</b> | <b>0.1881</b> | <b>3.2700e-003</b> | <b>0.1914</b> | <b>0.0520</b>  | <b>3.1100e-003</b> | <b>0.0551</b> | <b>0.0000</b> | <b>431.2983</b> | <b>431.2983</b> | <b>0.0230</b> | <b>0.0000</b> | <b>431.8728</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.0628        | 0.3874        | 1.5883        | 2.4400e-003        |               | 0.0173        | 0.0173        |                | 0.0166        | 0.0166        | 0.0000        | 209.7111        | 209.7111        | 0.0502        | 0.0000        | 210.9671        |
| <b>Total</b> | <b>0.0628</b> | <b>0.3874</b> | <b>1.5883</b> | <b>2.4400e-003</b> |               | <b>0.0173</b> | <b>0.0173</b> |                | <b>0.0166</b> | <b>0.0166</b> | <b>0.0000</b> | <b>209.7111</b> | <b>209.7111</b> | <b>0.0502</b> | <b>0.0000</b> | <b>210.9671</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0412        | 1.3237        | 0.3574        | 3.5500e-003        | 0.0889        | 2.4800e-003        | 0.0914        | 0.0257         | 2.3800e-003        | 0.0280        | 0.0000        | 344.9473        | 344.9473        | 0.0206        | 0.0000        | 345.4623        |
| Worker       | 0.0365        | 0.0274        | 0.3153        | 9.6000e-004        | 0.0992        | 7.9000e-004        | 0.1000        | 0.0263         | 7.3000e-004        | 0.0271        | 0.0000        | 86.3510         | 86.3510         | 2.3800e-003   | 0.0000        | 86.4105         |
| <b>Total</b> | <b>0.0777</b> | <b>1.3511</b> | <b>0.6728</b> | <b>4.5100e-003</b> | <b>0.1881</b> | <b>3.2700e-003</b> | <b>0.1914</b> | <b>0.0520</b>  | <b>3.1100e-003</b> | <b>0.0551</b> | <b>0.0000</b> | <b>431.2983</b> | <b>431.2983</b> | <b>0.0230</b> | <b>0.0000</b> | <b>431.8728</b> |

**3.6 Bookstore Paving - 2021**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.0687        | 0.6914        | 0.7663        | 1.1600e-003        |               | 0.0379        | 0.0379        |                | 0.0350        | 0.0350        | 0.0000        | 100.8060        | 100.8060        | 0.0321        | 0.0000        | 101.6087        |
| Paving       | 0.0000        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| <b>Total</b> | <b>0.0687</b> | <b>0.6914</b> | <b>0.7663</b> | <b>1.1600e-003</b> |               | <b>0.0379</b> | <b>0.0379</b> |                | <b>0.0350</b> | <b>0.0350</b> | <b>0.0000</b> | <b>100.8060</b> | <b>100.8060</b> | <b>0.0321</b> | <b>0.0000</b> | <b>101.6087</b> |

**Unmitigated Construction Off-Site**



|              |                    |                    |               |                    |                    |                    |                    |                    |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 2.8200e-003        | 2.1900e-003        | 0.0248        | 7.0000e-005        | 7.1800e-003        | 6.0000e-005        | 7.2400e-003        | 1.9100e-003        | 5.0000e-005        | 1.9600e-003        | 0.0000        | 6.4774        | 6.4774        | 1.9000e-004        | 0.0000        | 6.4822        |
| <b>Total</b> | <b>2.8200e-003</b> | <b>2.1900e-003</b> | <b>0.0248</b> | <b>7.0000e-005</b> | <b>7.1800e-003</b> | <b>6.0000e-005</b> | <b>7.2400e-003</b> | <b>1.9100e-003</b> | <b>5.0000e-005</b> | <b>1.9600e-003</b> | <b>0.0000</b> | <b>6.4774</b> | <b>6.4774</b> | <b>1.9000e-004</b> | <b>0.0000</b> | <b>6.4822</b> |

### 3.6 Bookstore Paving - 2022

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.0959        | 0.9564        | 1.2027        | 1.8300e-003        |               | 0.0501        | 0.0501        |                | 0.0462        | 0.0462        | 0.0000        | 159.3431        | 159.3431        | 0.0508        | 0.0000        | 160.6120        |
| Paving       | 0.0000        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| <b>Total</b> | <b>0.0959</b> | <b>0.9564</b> | <b>1.2027</b> | <b>1.8300e-003</b> |               | <b>0.0501</b> | <b>0.0501</b> |                | <b>0.0462</b> | <b>0.0462</b> | <b>0.0000</b> | <b>159.3431</b> | <b>159.3431</b> | <b>0.0508</b> | <b>0.0000</b> | <b>160.6120</b> |

#### Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |               |                    |               |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 4.1800e-003        | 3.1300e-003        | 0.0361        | 1.1000e-004        | 0.0113        | 9.0000e-005        | 0.0114        | 3.0100e-003        | 8.0000e-005        | 3.1000e-003        | 0.0000        | 9.8755        | 9.8755        | 2.7000e-004        | 0.0000        | 9.8823        |
| <b>Total</b> | <b>4.1800e-003</b> | <b>3.1300e-003</b> | <b>0.0361</b> | <b>1.1000e-004</b> | <b>0.0113</b> | <b>9.0000e-005</b> | <b>0.0114</b> | <b>3.0100e-003</b> | <b>8.0000e-005</b> | <b>3.1000e-003</b> | <b>0.0000</b> | <b>9.8755</b> | <b>9.8755</b> | <b>2.7000e-004</b> | <b>0.0000</b> | <b>9.8823</b> |

### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.0316        | 0.1855        | 1.3624        | 1.8300e-003        |               | 7.5400e-003        | 7.5400e-003        |                | 7.2400e-003        | 7.2400e-003        | 0.0000        | 159.3429        | 159.3429        | 0.0508        | 0.0000        | 160.6118        |
| Paving       | 0.0000        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| <b>Total</b> | <b>0.0316</b> | <b>0.1855</b> | <b>1.3624</b> | <b>1.8300e-003</b> |               | <b>7.5400e-003</b> | <b>7.5400e-003</b> |                | <b>7.2400e-003</b> | <b>7.2400e-003</b> | <b>0.0000</b> | <b>159.3429</b> | <b>159.3429</b> | <b>0.0508</b> | <b>0.0000</b> | <b>160.6118</b> |

### Mitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |               |                    |               |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 4.1800e-003        | 3.1300e-003        | 0.0361        | 1.1000e-004        | 0.0113        | 9.0000e-005        | 0.0114        | 3.0100e-003        | 8.0000e-005        | 3.1000e-003        | 0.0000        | 9.8755        | 9.8755        | 2.7000e-004        | 0.0000        | 9.8823        |
| <b>Total</b> | <b>4.1800e-003</b> | <b>3.1300e-003</b> | <b>0.0361</b> | <b>1.1000e-004</b> | <b>0.0113</b> | <b>9.0000e-005</b> | <b>0.0114</b> | <b>3.0100e-003</b> | <b>8.0000e-005</b> | <b>3.1000e-003</b> | <b>0.0000</b> | <b>9.8755</b> | <b>9.8755</b> | <b>2.7000e-004</b> | <b>0.0000</b> | <b>9.8823</b> |

## 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   | 0.0817  | 0.3040 | 1.0438 | 3.5700e-003 | 0.3621        | 3.3500e-003  | 0.3655     | 0.0971         | 3.1200e-003   | 0.1002      | 0.0000   | 328.2801  | 328.2801  | 0.0172 | 0.0000 | 328.7100 |
| Unmitigated | 0.0817  | 0.3040 | 1.0438 | 3.5700e-003 | 0.3621        | 3.3500e-003  | 0.3655     | 0.0971         | 3.1200e-003   | 0.1002      | 0.0000   | 328.2801  | 328.2801  | 0.0172 | 0.0000 | 328.7100 |

#### 4.2 Trip Summary Information

| Land Use             | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------|-------------------------|----------|--------|-------------|------------|
|                      | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Junior College (2Yr) | 405.90                  | 166.05   | 18.00  | 955,102     | 955,102    |
| Total                | 405.90                  | 166.05   | 18.00  | 955,102     | 955,102    |

#### 4.3 Trip Type Information

| Land Use             | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|----------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                      | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Junior College (2Yr) | 16.60      | 8.40       | 6.90        | 6.40       | 88.60      | 5.00        | 92             | 7        | 1       |

#### 4.4 Fleet Mix

| Land Use             | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Junior College (2Yr) | 0.904015 | 0.012054 | 0.012054 | 0.001205 | 0.012054 | 0.007613 | 0.025361 | 0.012054 | 0.003135 | 0.002244 | 0.006361 | 0.000855 | 0.000997 |

#### 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   | 126.0135  | 126.0135  | 5.2000e-003 | 1.0800e-003 | 126.4643 |
| Electricity Unmitigated |             |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 143.6664  | 143.6664  | 5.9300e-003 | 1.2300e-003 | 144.1804 |
| NaturalGas Mitigated    | 3.9700e-003 | 0.0361 | 0.0303 | 2.2000e-004 |               | 2.7400e-003  | 2.7400e-003 |                | 2.7400e-003   | 2.7400e-003 | 0.0000   | 39.2661   | 39.2661   | 7.5000e-004 | 7.2000e-004 | 39.4995  |
| NaturalGas Unmitigated  | 6.5700e-003 | 0.0597 | 0.0502 | 3.6000e-004 |               | 4.5400e-003  | 4.5400e-003 |                | 4.5400e-003   | 4.5400e-003 | 0.0000   | 65.0291   | 65.0291   | 1.2500e-003 | 1.1900e-003 | 65.4156  |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

|                      | NaturalGas Use | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|----------------------|----------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Land Use             | kBTU/yr        | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |                    |                |
| Junior College (2Yr) | 1.2186e+006    | 6.5700e-003        | 0.0597        | 0.0502        | 3.6000e-004        |               | 4.5400e-003        | 4.5400e-003        |                | 4.5400e-003        | 4.5400e-003        | 0.0000        | 65.0291        | 65.0291        | 1.2500e-003        | 1.1900e-003        | 65.4156        |
| <b>Total</b>         |                | <b>6.5700e-003</b> | <b>0.0597</b> | <b>0.0502</b> | <b>3.6000e-004</b> |               | <b>4.5400e-003</b> | <b>4.5400e-003</b> |                | <b>4.5400e-003</b> | <b>4.5400e-003</b> | <b>0.0000</b> | <b>65.0291</b> | <b>65.0291</b> | <b>1.2500e-003</b> | <b>1.1900e-003</b> | <b>65.4156</b> |

### Mitigated



|                      | Natural Gas Use | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|----------------------|-----------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Land Use             | kBTU/yr         | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |                    |                |
| Junior College (2Yr) | 735820          | 3.9700e-003        | 0.0361        | 0.0303        | 2.2000e-004        |               | 2.7400e-003        | 2.7400e-003        |                | 2.7400e-003        | 2.7400e-003        | 0.0000        | 39.2661        | 39.2661        | 7.5000e-004        | 7.2000e-004        | 39.4995        |
| <b>Total</b>         |                 | <b>3.9700e-003</b> | <b>0.0361</b> | <b>0.0303</b> | <b>2.2000e-004</b> |               | <b>2.7400e-003</b> | <b>2.7400e-003</b> |                | <b>2.7400e-003</b> | <b>2.7400e-003</b> | <b>0.0000</b> | <b>39.2661</b> | <b>39.2661</b> | <b>7.5000e-004</b> | <b>7.2000e-004</b> | <b>39.4995</b> |

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

|                      | Electricity Use | Total CO2       | CH4                | N2O                | CO2e            |
|----------------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use             | kWh/yr          | MT/yr           |                    |                    |                 |
| Junior College (2Yr) | 450900          | 143.6664        | 5.9300e-003        | 1.2300e-003        | 144.1804        |
| <b>Total</b>         |                 | <b>143.6664</b> | <b>5.9300e-003</b> | <b>1.2300e-003</b> | <b>144.1804</b> |

#### Mitigated

|          | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|----------|-----------------|-----------|-----|-----|------|
| Land Use | kWh/yr          | MT/yr     |     |     |      |



|              |               |                    |                    |               |  |               |               |  |               |               |               |                    |                    |               |               |                    |
|--------------|---------------|--------------------|--------------------|---------------|--|---------------|---------------|--|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| Landscaping  | 5.0000e-005   | 1.0000e-005        | 5.8000e-004        | 0.0000        |  | 0.0000        | 0.0000        |  | 0.0000        | 0.0000        | 0.0000        | 1.1200e-003        | 1.1200e-003        | 0.0000        | 0.0000        | 1.1900e-003        |
| <b>Total</b> | <b>0.1835</b> | <b>1.0000e-005</b> | <b>5.8000e-004</b> | <b>0.0000</b> |  | <b>0.0000</b> | <b>0.0000</b> |  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.1200e-003</b> | <b>1.1200e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.1900e-003</b> |

**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 | 0.0209        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 0.1626        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 5.0000e-005   | 1.0000e-005        | 5.8000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 1.1200e-003        | 1.1200e-003        | 0.0000        | 0.0000        | 1.1900e-003        |
| <b>Total</b>          | <b>0.1835</b> | <b>1.0000e-005</b> | <b>5.8000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.1200e-003</b> | <b>1.1200e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.1900e-003</b> |

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

|             | Total CO2 | CH4    | N2O         | CO2e    |
|-------------|-----------|--------|-------------|---------|
| Category    | MT/yr     |        |             |         |
| Mitigated   | 22.0782   | 0.0728 | 1.8800e-003 | 24.4588 |
| Unmitigated | 22.0782   | 0.0728 | 1.8800e-003 | 24.4588 |

## 7.2 Water by Land Use

### Unmitigated

|                      | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|----------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use             | Mgal               | MT/yr          |               |                    |                |
| Junior College (2Yr) | 2.20721 / 3.4523   | 22.0782        | 0.0728        | 1.8800e-003        | 24.4588        |
| <b>Total</b>         |                    | <b>22.0782</b> | <b>0.0728</b> | <b>1.8800e-003</b> | <b>24.4588</b> |

### Mitigated

|                      | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|----------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use             | Mgal               | MT/yr          |               |                    |                |
| Junior College (2Yr) | 2.20721 / 3.4523   | 22.0782        | 0.0728        | 1.8800e-003        | 24.4588        |
| <b>Total</b>         |                    | <b>22.0782</b> | <b>0.0728</b> | <b>1.8800e-003</b> | <b>24.4588</b> |

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

|             | Total CO2 | CH4    | N2O    | CO2e    |
|-------------|-----------|--------|--------|---------|
|             | MT/yr     |        |        |         |
| Mitigated   | 11.8750   | 0.7018 | 0.0000 | 29.4197 |
| Unmitigated | 11.8750   | 0.7018 | 0.0000 | 29.4197 |

**8.2 Waste by Land Use**

**Unmitigated**

|                      | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e           |
|----------------------|----------------|----------------|---------------|---------------|----------------|
| Land Use             | tons           | MT/yr          |               |               |                |
| Junior College (2Yr) | 58.5           | 11.8750        | 0.7018        | 0.0000        | 29.4197        |
| <b>Total</b>         |                | <b>11.8750</b> | <b>0.7018</b> | <b>0.0000</b> | <b>29.4197</b> |

**Mitigated**

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

| Land Use                | tons | MT/yr          |               |               |                |
|-------------------------|------|----------------|---------------|---------------|----------------|
|                         |      |                |               |               |                |
| Junior College<br>(2Yr) | 58.5 | 11.8750        | 0.7018        | 0.0000        | 29.4197        |
| <b>Total</b>            |      | <b>11.8750</b> | <b>0.7018</b> | <b>0.0000</b> | <b>29.4197</b> |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

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Mt SAC Sand Volleyball Courts and Parking Lot W - Los Angeles-South Coast County, Annual

**Mt SAC Sand Volleyball Courts and Parking Lot W**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses   | Size | Metric   | Lot Acreage | Floor Surface Area | Population |
|-------------|------|----------|-------------|--------------------|------------|
| Parking Lot | 2.00 | 1000sqft | 0.05        | 2,000.00           | 0          |
| City Park   | 0.05 | Acre     | 0.05        | 2,003.76           | 0          |

**1.2 Other Project Characteristics**

|                                 |                            |                                 |       |                                  |       |
|---------------------------------|----------------------------|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                      | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 9                          |                                 |       | <b>Operational Year</b>          | 2021  |
| <b>Utility Company</b>          | Southern California Edison |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 702.44                     | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

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

- Project Characteristics -
- Land Use - Volleyball Court and Parking Lot (striping only)
- Construction Phase - Assigned 1 week to paint parking strips
- Off-road Equipment -
- Off-road Equipment - .
- Off-road Equipment - .
- Off-road Equipment - .
- Off-road Equipment - .

Trips and VMT - .

Demolition -

Grading -

Architectural Coating - .

Construction Off-road Equipment Mitigation - Tier 4 Equipment

Energy Mitigation -

Vehicle Trips - .

| Table Name              | Column Name                | Default Value | New Value    |
|-------------------------|----------------------------|---------------|--------------|
| 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          | 3.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 1.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00          | 4.00         |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstEquipMitigation | Tier                       | No Change     | Tier 4 Final |
| tblConstructionPhase    | NumDays                    | 5.00          | 10.00        |
| tblConstructionPhase    | NumDays                    | 10.00         | 48.00        |
| tblConstructionPhase    | NumDays                    | 2.00          | 48.00        |
| tblConstructionPhase    | NumDays                    | 1.00          | 48.00        |
| tblConstructionPhase    | NumDaysWeek                | 5.00          | 6.00         |
| tblConstructionPhase    | NumDaysWeek                | 5.00          | 6.00         |
| tblConstructionPhase    | NumDaysWeek                | 5.00          | 6.00         |



|                      |                            |             |             |
|----------------------|----------------------------|-------------|-------------|
| tblConstructionPhase | NumDaysWeek                | 5.00        | 6.00        |
| tblFleetMix          | HHD                        | 0.03        | 9.7478e-003 |
| tblFleetMix          | HHD                        | 0.03        | 9.7478e-003 |
| tblFleetMix          | LDA                        | 0.55        | 0.78        |
| tblFleetMix          | LDA                        | 0.55        | 0.78        |
| tblFleetMix          | LDT1                       | 0.05        | 0.02        |
| tblFleetMix          | LDT1                       | 0.05        | 0.02        |
| tblFleetMix          | LDT2                       | 0.20        | 0.05        |
| tblFleetMix          | LDT2                       | 0.20        | 0.05        |
| tblFleetMix          | LHD1                       | 0.02        | 0.05        |
| tblFleetMix          | LHD1                       | 0.02        | 0.05        |
| tblFleetMix          | LHD2                       | 6.1430e-003 | 9.7478e-003 |
| tblFleetMix          | LHD2                       | 6.1430e-003 | 9.7478e-003 |
| tblFleetMix          | MCY                        | 5.0780e-003 | 4.7082e-003 |
| tblFleetMix          | MCY                        | 5.0780e-003 | 4.7082e-003 |
| tblFleetMix          | MDV                        | 0.12        | 0.05        |
| tblFleetMix          | MDV                        | 0.12        | 0.05        |
| tblFleetMix          | MH                         | 8.9100e-004 | 1.0147e-003 |
| tblFleetMix          | MH                         | 8.9100e-004 | 1.0147e-003 |
| tblFleetMix          | MHD                        | 0.02        | 9.7478e-003 |
| tblFleetMix          | MHD                        | 0.02        | 9.7478e-003 |
| tblFleetMix          | OBUS                       | 2.4790e-003 | 0.00        |
| tblFleetMix          | OBUS                       | 2.4790e-003 | 0.00        |
| tblFleetMix          | SBUS                       | 6.8200e-004 | 9.7478e-003 |
| tblFleetMix          | SBUS                       | 6.8200e-004 | 9.7478e-003 |
| tblFleetMix          | UBUS                       | 2.2700e-003 | 9.7478e-003 |
| tblFleetMix          | UBUS                       | 2.2700e-003 | 9.7478e-003 |
| tblLandUse           | LandUseSquareFeet          | 2,178.00    | 2,003.76    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 2.00        | 1.00        |
| tblOffRoadEquipment  | UsageHours                 | 1.00        | 8.00        |

|                     |                   |       |          |
|---------------------|-------------------|-------|----------|
| tblOffRoadEquipment | UsageHours        | 1.00  | 8.00     |
| tblOffRoadEquipment | UsageHours        | 6.00  | 8.00     |
| tblTripsAndVMT      | HaulingTripNumber | 17.00 | 0.00     |
| tblVehicleTrips     | ST_TR             | 22.75 | 555.58   |
| tblVehicleTrips     | SU_TR             | 16.74 | 59.86    |
| tblVehicleTrips     | WD_TR             | 1.89  | 1,360.00 |

## 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         |                 |                 |               |               |                 |
| 2020           | 0.0787        | 0.7928        | 0.4936        | 9.2000e-004        | 0.1126        | 0.0395        | 0.1522        | 0.0542         | 0.0367        | 0.0910        | 0.0000        | 80.9819         | 80.9819         | 0.0215        | 0.0000        | 81.5203         |
| 2021           | 0.0945        | 0.9982        | 0.6186        | 1.2900e-003        | 0.2513        | 0.0440        | 0.2953        | 0.1143         | 0.0409        | 0.1552        | 0.0000        | 112.9366        | 112.9366        | 0.0317        | 0.0000        | 113.7282        |
| <b>Maximum</b> | <b>0.0945</b> | <b>0.9982</b> | <b>0.6186</b> | <b>1.2900e-003</b> | <b>0.2513</b> | <b>0.0440</b> | <b>0.2953</b> | <b>0.1143</b>  | <b>0.0409</b> | <b>0.1552</b> | <b>0.0000</b> | <b>112.9366</b> | <b>112.9366</b> | <b>0.0317</b> | <b>0.0000</b> | <b>113.7282</b> |

#### Mitigated Construction

|      | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|---------|
| Year | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |        |        |         |
| 2020 | 0.0124  | 0.0466 | 0.5227 | 9.2000e-004 | 0.0533        | 1.4200e-003  | 0.0547     | 0.0251         | 1.4200e-003   | 0.0265      | 0.0000   | 80.9818   | 80.9818   | 0.0215 | 0.0000 | 81.5202 |

|                |               |               |               |                    |               |                    |               |               |                    |               |               |                 |                 |               |               |                 |
|----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| 2021           | 0.0169        | 0.0658        | 0.6698        | 1.2900e-003        | 0.1157        | 2.0200e-003        | 0.1177        | 0.0521        | 2.0200e-003        | 0.0542        | 0.0000        | 112.9365        | 112.9365        | 0.0317        | 0.0000        | 113.7281        |
| <b>Maximum</b> | <b>0.0169</b> | <b>0.0658</b> | <b>0.6698</b> | <b>1.2900e-003</b> | <b>0.1157</b> | <b>2.0200e-003</b> | <b>0.1177</b> | <b>0.0521</b> | <b>2.0200e-003</b> | <b>0.0542</b> | <b>0.0000</b> | <b>112.9365</b> | <b>112.9365</b> | <b>0.0317</b> | <b>0.0000</b> | <b>113.7281</b> |

|                          | ROG          | NOx          | CO           | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total   | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2    | NBio-CO2    | Total CO2   | CH4         | N2O         | CO2e        |
|--------------------------|--------------|--------------|--------------|-------------|---------------|--------------|--------------|----------------|---------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Percent Reduction</b> | <b>83.12</b> | <b>93.73</b> | <b>-7.22</b> | <b>0.00</b> | <b>53.57</b>  | <b>95.88</b> | <b>61.47</b> | <b>54.18</b>   | <b>95.57</b>  | <b>67.22</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

| Quarter | Start Date | End Date       | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|----------------|--|--|
| 1       | 10-1-2020  | 12-31-2020     | 0.8701                                       | 0.0590                                     |
| 2       | 1-1-2021   | 3-31-2021      | 1.0944                                       | 0.0829                                     |
|         |            | <b>Highest</b> | 1.0944                                       | 0.0829                                     |

## 2.2 Overall Operational Unmitigated Operational

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Area         | 1.8000e-004   | 0.0000        | 3.0000e-005   | 0.0000             |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000        | 5.0000e-005    | 5.0000e-005    | 0.0000             | 0.0000        | 5.0000e-005    |
| Energy       | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000        | 0.2230         | 0.2230         | 1.0000e-005        | 0.0000        | 0.2238         |
| Mobile       | 0.0161        | 0.0767        | 0.2050        | 6.3000e-004        | 0.0596        | 8.0000e-004        | 0.0604        | 0.0163         | 7.5000e-004        | 0.0170        | 0.0000        | 58.6518        | 58.6518        | 6.2200e-003        | 0.0000        | 58.8071        |
| Waste        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Water        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000        | 0.2109         | 0.2109         | 1.0000e-005        | 0.0000        | 0.2116         |
| <b>Total</b> | <b>0.0163</b> | <b>0.0767</b> | <b>0.2050</b> | <b>6.3000e-004</b> | <b>0.0596</b> | <b>8.0000e-004</b> | <b>0.0604</b> | <b>0.0163</b>  | <b>7.5000e-004</b> | <b>0.0170</b> | <b>0.0000</b> | <b>59.0857</b> | <b>59.0857</b> | <b>6.2400e-003</b> | <b>0.0000</b> | <b>59.2427</b> |

## Mitigated Operational

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Area         | 1.8000e-004   | 0.0000        | 3.0000e-005   | 0.0000             |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000        | 5.0000e-005    | 5.0000e-005    | 0.0000             | 0.0000        | 5.0000e-005    |
| Energy       | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000        | 0.2230         | 0.2230         | 1.0000e-005        | 0.0000        | 0.2238         |
| Mobile       | 0.0161        | 0.0767        | 0.2050        | 6.3000e-004        | 0.0596        | 8.0000e-004        | 0.0604        | 0.0163         | 7.5000e-004        | 0.0170        | 0.0000        | 58.6518        | 58.6518        | 6.2200e-003        | 0.0000        | 58.8071        |
| Waste        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Water        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000        | 0.2109         | 0.2109         | 1.0000e-005        | 0.0000        | 0.2116         |
| <b>Total</b> | <b>0.0163</b> | <b>0.0767</b> | <b>0.2050</b> | <b>6.3000e-004</b> | <b>0.0596</b> | <b>8.0000e-004</b> | <b>0.0604</b> | <b>0.0163</b>  | <b>7.5000e-004</b> | <b>0.0170</b> | <b>0.0000</b> | <b>59.0857</b> | <b>59.0857</b> | <b>6.2400e-003</b> | <b>0.0000</b> | <b>59.2427</b> |

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

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name             | Phase Type            | Start Date | End Date   | Num Days Week | Num Days | Phase Description |
|--------------|------------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1            | Vball Demolition       | Demolition            | 10/1/2020  | 11/25/2020 | 6             | 48       |                   |
| 2            | Vball Site Preparation | Site Preparation      | 11/26/2020 | 1/20/2021  | 6             | 48       |                   |
| 3            | Vball Grading          | Grading               | 1/21/2021  | 3/17/2021  | 6             | 48       |                   |
| 4            | Architectural Coating  | Architectural Coating | 3/18/2021  | 3/24/2021  | 6             | 10       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.05

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 120**

**OffRoad Equipment**

| Phase Name             | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------------------|---------------------------|--------|-------------|-------------|-------------|
| Vball Demolition       | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Vball Demolition       | Excavators                | 1      | 8.00        | 158         | 0.38        |
| Vball Demolition       | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Vball Demolition       | Tractors/Loaders/Backhoes | 2      | 6.00        | 97          | 0.37        |
| Vball Site Preparation | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Vball Site Preparation | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Vball Site Preparation | Tractors/Loaders/Backhoes | 1      | 8.00        | 97          | 0.37        |
| Vball Grading          | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Vball Grading          | Excavators                | 1      | 8.00        | 158         | 0.38        |
| Vball Grading          | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Vball Grading          | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Vball Grading          | Scrapers                  | 1      | 8.00        | 367         | 0.48        |
| Vball Grading          | Tractors/Loaders/Backhoes | 1      | 8.00        | 97          | 0.37        |
| 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 |
|------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Vball Demolition       | 5                       | 13.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Vball Site Preparation | 3                       | 8.00               | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Vball Grading          | 6                       | 15.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating  | 1                       | 0.00               | 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

Water Exposed Area

**3.2 Vball Demolition - 2020**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10  | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |                    |               |               |                    |               |               | MT/yr         |                |                |               |               |                |
| Fugitive Dust |               |               |               |                    | 1.7900e-003        | 0.0000        | 1.7900e-003   | 2.7000e-004        | 0.0000        | 2.7000e-004   | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0494        | 0.4848        | 0.3481        | 5.9000e-004        |                    | 0.0257        | 0.0257        |                    | 0.0240        | 0.0240        | 0.0000        | 51.6285        | 51.6285        | 0.0133        | 0.0000        | 51.9620        |
| <b>Total</b>  | <b>0.0494</b> | <b>0.4848</b> | <b>0.3481</b> | <b>5.9000e-004</b> | <b>1.7900e-003</b> | <b>0.0257</b> | <b>0.0275</b> | <b>2.7000e-004</b> | <b>0.0240</b> | <b>0.0243</b> | <b>0.0000</b> | <b>51.6285</b> | <b>51.6285</b> | <b>0.0133</b> | <b>0.0000</b> | <b>51.9620</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.4400e-003        | 1.1600e-003        | 0.0128        | 4.0000e-005        | 3.4200e-003        | 3.0000e-005        | 3.4500e-003        | 9.1000e-004        | 3.0000e-005        | 9.3000e-004        | 0.0000        | 3.1866        | 3.1866        | 1.0000e-004        | 0.0000        | 3.1891        |
| <b>Total</b> | <b>1.4400e-003</b> | <b>1.1600e-003</b> | <b>0.0128</b> | <b>4.0000e-005</b> | <b>3.4200e-003</b> | <b>3.0000e-005</b> | <b>3.4500e-003</b> | <b>9.1000e-004</b> | <b>3.0000e-005</b> | <b>9.3000e-004</b> | <b>0.0000</b> | <b>3.1866</b> | <b>3.1866</b> | <b>1.0000e-004</b> | <b>0.0000</b> | <b>3.1891</b> |

**Mitigated Construction On-Site**

|               | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |                |                |               |               |                |
| Fugitive Dust |                    |               |               |                    | 8.0000e-004        | 0.0000             | 8.0000e-004        | 1.2000e-004        | 0.0000             | 1.2000e-004        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 6.9000e-003        | 0.0299        | 0.3630        | 5.9000e-004        |                    | 9.2000e-004        | 9.2000e-004        |                    | 9.2000e-004        | 9.2000e-004        | 0.0000        | 51.6284        | 51.6284        | 0.0133        | 0.0000        | 51.9620        |
| <b>Total</b>  | <b>6.9000e-003</b> | <b>0.0299</b> | <b>0.3630</b> | <b>5.9000e-004</b> | <b>8.0000e-004</b> | <b>9.2000e-004</b> | <b>1.7200e-003</b> | <b>1.2000e-004</b> | <b>9.2000e-004</b> | <b>1.0400e-003</b> | <b>0.0000</b> | <b>51.6284</b> | <b>51.6284</b> | <b>0.0133</b> | <b>0.0000</b> | <b>51.9620</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.4400e-003        | 1.1600e-003        | 0.0128        | 4.0000e-005        | 3.4200e-003        | 3.0000e-005        | 3.4500e-003        | 9.1000e-004        | 3.0000e-005        | 9.3000e-004        | 0.0000        | 3.1866        | 3.1866        | 1.0000e-004        | 0.0000        | 3.1891        |
| <b>Total</b> | <b>1.4400e-003</b> | <b>1.1600e-003</b> | <b>0.0128</b> | <b>4.0000e-005</b> | <b>3.4200e-003</b> | <b>3.0000e-005</b> | <b>3.4500e-003</b> | <b>9.1000e-004</b> | <b>3.0000e-005</b> | <b>9.3000e-004</b> | <b>0.0000</b> | <b>3.1866</b> | <b>3.1866</b> | <b>1.0000e-004</b> | <b>0.0000</b> | <b>3.1891</b> |

**3.3 Vball Site Preparation - 2020**

**Unmitigated Construction On-Site**

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

|               |               |               |               |                    |               |               |               |               |               |               |               |                |                |                    |               |                |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Fugitive Dust |               |               |               |                    | 0.1061        | 0.0000        | 0.1061        | 0.0527        | 0.0000        | 0.0527        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0274        | 0.3063        | 0.1275        | 2.8000e-004        |               | 0.0138        | 0.0138        |               | 0.0127        | 0.0127        | 0.0000        | 24.9003        | 24.9003        | 8.0500e-003        | 0.0000        | 25.1016        |
| <b>Total</b>  | <b>0.0274</b> | <b>0.3063</b> | <b>0.1275</b> | <b>2.8000e-004</b> | <b>0.1061</b> | <b>0.0138</b> | <b>0.1199</b> | <b>0.0527</b> | <b>0.0127</b> | <b>0.0654</b> | <b>0.0000</b> | <b>24.9003</b> | <b>24.9003</b> | <b>8.0500e-003</b> | <b>0.0000</b> | <b>25.1016</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 5.7000e-004        | 4.6000e-004        | 5.1000e-003        | 1.0000e-005        | 1.3600e-003        | 1.0000e-005        | 1.3700e-003        | 3.6000e-004        | 1.0000e-005        | 3.7000e-004        | 0.0000        | 1.2665        | 1.2665        | 4.0000e-005        | 0.0000        | 1.2675        |
| <b>Total</b> | <b>5.7000e-004</b> | <b>4.6000e-004</b> | <b>5.1000e-003</b> | <b>1.0000e-005</b> | <b>1.3600e-003</b> | <b>1.0000e-005</b> | <b>1.3700e-003</b> | <b>3.6000e-004</b> | <b>1.0000e-005</b> | <b>3.7000e-004</b> | <b>0.0000</b> | <b>1.2665</b> | <b>1.2665</b> | <b>4.0000e-005</b> | <b>0.0000</b> | <b>1.2675</b> |

**Mitigated Construction On-Site**

|               | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr            |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |                    |               |               |                    | 0.0477        | 0.0000             | 0.0477        | 0.0237         | 0.0000             | 0.0237        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 3.4700e-003        | 0.0150        | 0.1418        | 2.8000e-004        |               | 4.6000e-004        | 4.6000e-004   |                | 4.6000e-004        | 4.6000e-004   | 0.0000        | 24.9003        | 24.9003        | 8.0500e-003        | 0.0000        | 25.1016        |
| <b>Total</b>  | <b>3.4700e-003</b> | <b>0.0150</b> | <b>0.1418</b> | <b>2.8000e-004</b> | <b>0.0477</b> | <b>4.6000e-004</b> | <b>0.0482</b> | <b>0.0237</b>  | <b>4.6000e-004</b> | <b>0.0242</b> | <b>0.0000</b> | <b>24.9003</b> | <b>24.9003</b> | <b>8.0500e-003</b> | <b>0.0000</b> | <b>25.1016</b> |



**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 5.7000e-004        | 4.6000e-004        | 5.1000e-003        | 1.0000e-005        | 1.3600e-003        | 1.0000e-005        | 1.3700e-003        | 3.6000e-004        | 1.0000e-005        | 3.7000e-004        | 0.0000        | 1.2665        | 1.2665        | 4.0000e-005        | 0.0000        | 1.2675        |
| <b>Total</b> | <b>5.7000e-004</b> | <b>4.6000e-004</b> | <b>5.1000e-003</b> | <b>1.0000e-005</b> | <b>1.3600e-003</b> | <b>1.0000e-005</b> | <b>1.3700e-003</b> | <b>3.6000e-004</b> | <b>1.0000e-005</b> | <b>3.7000e-004</b> | <b>0.0000</b> | <b>1.2665</b> | <b>1.2665</b> | <b>4.0000e-005</b> | <b>0.0000</b> | <b>1.2675</b> |

**3.3 Vball Site Preparation - 2021**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0639        | 0.0000             | 0.0639        | 0.0295         | 0.0000             | 0.0295        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0143        | 0.1597        | 0.0686        | 1.6000e-004        |               | 7.0700e-003        | 7.0700e-003   |                | 6.5100e-003        | 6.5100e-003   | 0.0000        | 13.6481        | 13.6481        | 4.4100e-003        | 0.0000        | 13.7585        |
| <b>Total</b>  | <b>0.0143</b> | <b>0.1597</b> | <b>0.0686</b> | <b>1.6000e-004</b> | <b>0.0639</b> | <b>7.0700e-003</b> | <b>0.0710</b> | <b>0.0295</b>  | <b>6.5100e-003</b> | <b>0.0360</b> | <b>0.0000</b> | <b>13.6481</b> | <b>13.6481</b> | <b>4.4100e-003</b> | <b>0.0000</b> | <b>13.7585</b> |

**Unmitigated Construction Off-Site**



|              |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 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-004        | 2.3000e-004        | 2.5700e-003        | 1.0000e-005        | 7.5000e-004        | 1.0000e-005        | 7.5000e-004        | 2.0000e-004        | 1.0000e-005        | 2.0000e-004        | 0.0000        | 0.6725        | 0.6725        | 2.0000e-005        | 0.0000        | 0.6730        |
| <b>Total</b> | <b>2.9000e-004</b> | <b>2.3000e-004</b> | <b>2.5700e-003</b> | <b>1.0000e-005</b> | <b>7.5000e-004</b> | <b>1.0000e-005</b> | <b>7.5000e-004</b> | <b>2.0000e-004</b> | <b>1.0000e-005</b> | <b>2.0000e-004</b> | <b>0.0000</b> | <b>0.6725</b> | <b>0.6725</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>0.6730</b> |

### 3.4 Vball Grading - 2021

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.1827        | 0.0000        | 0.1827        | 0.0836         | 0.0000        | 0.0836        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0775        | 0.8325        | 0.5284        | 1.0800e-003        |               | 0.0366        | 0.0366        |                | 0.0340        | 0.0340        | 0.0000        | 94.2900        | 94.2900        | 0.0271        | 0.0000        | 94.9668        |
| <b>Total</b>  | <b>0.0775</b> | <b>0.8325</b> | <b>0.5284</b> | <b>1.0800e-003</b> | <b>0.1827</b> | <b>0.0366</b> | <b>0.2193</b> | <b>0.0836</b>  | <b>0.0340</b> | <b>0.1176</b> | <b>0.0000</b> | <b>94.2900</b> | <b>94.2900</b> | <b>0.0271</b> | <b>0.0000</b> | <b>94.9668</b> |

#### Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.5500e-003        | 1.2100e-003        | 0.0136        | 4.0000e-005        | 3.9400e-003        | 3.0000e-005        | 3.9800e-003        | 1.0500e-003        | 3.0000e-005        | 1.0800e-003        | 0.0000        | 3.5601        | 3.5601        | 1.0000e-004        | 0.0000        | 3.5627        |
| <b>Total</b> | <b>1.5500e-003</b> | <b>1.2100e-003</b> | <b>0.0136</b> | <b>4.0000e-005</b> | <b>3.9400e-003</b> | <b>3.0000e-005</b> | <b>3.9800e-003</b> | <b>1.0500e-003</b> | <b>3.0000e-005</b> | <b>1.0800e-003</b> | <b>0.0000</b> | <b>3.5601</b> | <b>3.5601</b> | <b>1.0000e-004</b> | <b>0.0000</b> | <b>3.5627</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.0822        | 0.0000             | 0.0822        | 0.0376         | 0.0000             | 0.0376        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0129        | 0.0558        | 0.5703        | 1.0800e-003        |               | 1.7200e-003        | 1.7200e-003   |                | 1.7200e-003        | 1.7200e-003   | 0.0000        | 94.2899        | 94.2899        | 0.0271        | 0.0000        | 94.9667        |
| <b>Total</b>  | <b>0.0129</b> | <b>0.0558</b> | <b>0.5703</b> | <b>1.0800e-003</b> | <b>0.0822</b> | <b>1.7200e-003</b> | <b>0.0839</b> | <b>0.0376</b>  | <b>1.7200e-003</b> | <b>0.0393</b> | <b>0.0000</b> | <b>94.2899</b> | <b>94.2899</b> | <b>0.0271</b> | <b>0.0000</b> | <b>94.9667</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.5500e-003        | 1.2100e-003        | 0.0136        | 4.0000e-005        | 3.9400e-003        | 3.0000e-005        | 3.9800e-003        | 1.0500e-003        | 3.0000e-005        | 1.0800e-003        | 0.0000        | 3.5601        | 3.5601        | 1.0000e-004        | 0.0000        | 3.5627        |
| <b>Total</b> | <b>1.5500e-003</b> | <b>1.2100e-003</b> | <b>0.0136</b> | <b>4.0000e-005</b> | <b>3.9400e-003</b> | <b>3.0000e-005</b> | <b>3.9800e-003</b> | <b>1.0500e-003</b> | <b>3.0000e-005</b> | <b>1.0800e-003</b> | <b>0.0000</b> | <b>3.5601</b> | <b>3.5601</b> | <b>1.0000e-004</b> | <b>0.0000</b> | <b>3.5627</b> |

**3.5 Architectural Coating - 2021**

**Unmitigated Construction On-Site**



|              |                    |                    |                    |                    |  |                    |                    |  |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|--------------------|--------------------|--------------------|--|--------------------|--------------------|--|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Off-Road     | 9.0000e-005        | 3.9000e-004        | 5.5000e-003        | 1.0000e-005        |  | 1.0000e-005        | 1.0000e-005        |  | 1.0000e-005        | 1.0000e-005        | 0.0000        | 0.7660        | 0.7660        | 5.0000e-005        | 0.0000        | 0.7673        |
| <b>Total</b> | <b>2.6000e-004</b> | <b>3.9000e-004</b> | <b>5.5000e-003</b> | <b>1.0000e-005</b> |  | <b>1.0000e-005</b> | <b>1.0000e-005</b> |  | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>0.7660</b> | <b>0.7660</b> | <b>5.0000e-005</b> | <b>0.0000</b> | <b>0.7673</b> |

### Mitigated Construction Off-Site

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

## 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 | 0.0161  | 0.0767 | 0.2050 | 6.3000e-004 | 0.0596        | 8.0000e-004  | 0.0604     | 0.0163         | 7.5000e-004   | 0.0170      | 0.0000   | 58.6518   | 58.6518   | 6.2200e-003 | 0.0000 | 58.8071 |

|             |        |        |        |             |        |             |        |        |             |        |        |         |         |             |        |         |
|-------------|--------|--------|--------|-------------|--------|-------------|--------|--------|-------------|--------|--------|---------|---------|-------------|--------|---------|
| Unmitigated | 0.0161 | 0.0767 | 0.2050 | 6.3000e-004 | 0.0596 | 8.0000e-004 | 0.0604 | 0.0163 | 7.5000e-004 | 0.0170 | 0.0000 | 58.6518 | 58.6518 | 6.2200e-003 | 0.0000 | 58.8071 |
|-------------|--------|--------|--------|-------------|--------|-------------|--------|--------|-------------|--------|--------|---------|---------|-------------|--------|---------|

#### 4.2 Trip Summary Information

| Land Use    | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|-------------|-------------------------|----------|--------|-------------|------------|
|             | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| City Park   | 68.00                   | 27.78    | 2.99   | 152,416     | 152,416    |
| Parking Lot | 0.00                    | 0.00     | 0.00   |             |            |
| Total       | 68.00                   | 27.78    | 2.99   | 152,416     | 152,416    |

#### 4.3 Trip Type Information

| Land Use    | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|-------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|             | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| City Park   | 16.60      | 8.40       | 6.90        | 33.00      | 48.00      | 19.00       | 66             | 28       | 6       |
| Parking Lot | 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       |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| City Park   | 0.779825 | 0.019496 | 0.048739 | 0.048739 | 0.048739 | 0.009748 | 0.009748 | 0.009748 | 0.000000 | 0.009748 | 0.004708 | 0.009748 | 0.001015 |
| Parking Lot | 0.779825 | 0.019496 | 0.048739 | 0.048739 | 0.048739 | 0.009748 | 0.009748 | 0.009748 | 0.000000 | 0.009748 | 0.004708 | 0.009748 | 0.001015 |

#### 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 |
|-----|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-----|-----|------|
|-----|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-----|-----|------|





|       |  |        |        |        |        |  |        |        |  |        |        |        |        |        |        |        |        |
|-------|--|--------|--------|--------|--------|--|--------|--------|--|--------|--------|--------|--------|--------|--------|--------|--------|
| Total |  | 0.0000 | 0.0000 | 0.0000 | 0.0000 |  | 0.0000 | 0.0000 |  | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
|-------|--|--------|--------|--------|--------|--|--------|--------|--|--------|--------|--------|--------|--------|--------|--------|--------|

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

|              | Electricity Use | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|-----------------|---------------|--------------------|---------------|---------------|
| Land Use     | kWh/yr          | MT/yr         |                    |               |               |
| City Park    | 0               | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Parking Lot  | 700             | 0.2230        | 1.0000e-005        | 0.0000        | 0.2238        |
| <b>Total</b> |                 | <b>0.2230</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>0.2238</b> |

#### Mitigated

|              | Electricity Use | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|-----------------|---------------|--------------------|---------------|---------------|
| Land Use     | kWh/yr          | MT/yr         |                    |               |               |
| City Park    | 0               | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Parking Lot  | 700             | 0.2230        | 1.0000e-005        | 0.0000        | 0.2238        |
| <b>Total</b> |                 | <b>0.2230</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>0.2238</b> |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

|             | ROG         | NOx    | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 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   | 1.8000e-004 | 0.0000 | 3.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 5.0000e-005 | 5.0000e-005 | 0.0000 | 0.0000 | 5.0000e-005 |
| Unmitigated | 1.8000e-004 | 0.0000 | 3.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 5.0000e-005 | 5.0000e-005 | 0.0000 | 0.0000 | 5.0000e-005 |

## 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 | 3.0000e-005        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 1.5000e-004        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 0.0000             | 0.0000        | 3.0000e-005        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 5.0000e-005        | 5.0000e-005        | 0.0000        | 0.0000        | 5.0000e-005        |
| <b>Total</b>          | <b>1.8000e-004</b> | <b>0.0000</b> | <b>3.0000e-005</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>5.0000e-005</b> | <b>5.0000e-005</b> | <b>0.0000</b> | <b>0.0000</b> | <b>5.0000e-005</b> |

### 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 | 3.0000e-005        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 1.5000e-004        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 0.0000             | 0.0000        | 3.0000e-005        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 5.0000e-005        | 5.0000e-005        | 0.0000        | 0.0000        | 5.0000e-005        |
| <b>Total</b>          | <b>1.8000e-004</b> | <b>0.0000</b> | <b>3.0000e-005</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>5.0000e-005</b> | <b>5.0000e-005</b> | <b>0.0000</b> | <b>0.0000</b> | <b>5.0000e-005</b> |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

|             | Total CO2 | CH4         | N2O    | CO2e   |
|-------------|-----------|-------------|--------|--------|
| Category    | MT/yr     |             |        |        |
| Mitigated   | 0.2109    | 1.0000e-005 | 0.0000 | 0.2116 |
| Unmitigated | 0.2109    | 1.0000e-005 | 0.0000 | 0.2116 |

### 7.2 Water by Land Use

#### Unmitigated

| Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------|-----------|-----|-----|------|
|                    |           |     |     |      |

| Land Use     | Mgal          | MT/yr         |                    |               |               |
|--------------|---------------|---------------|--------------------|---------------|---------------|
| City Park    | 0 / 0.0595741 | 0.2109        | 1.0000e-005        | 0.0000        | 0.2116        |
| Parking Lot  | 0 / 0         | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| <b>Total</b> |               | <b>0.2109</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>0.2116</b> |

**Mitigated**

|              | Indoor/Outdoor Use | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|---------------|--------------------|---------------|---------------|
| Land Use     | Mgal               | MT/yr         |                    |               |               |
| City Park    | 0 / 0.0595741      | 0.2109        | 1.0000e-005        | 0.0000        | 0.2116        |
| Parking Lot  | 0 / 0              | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| <b>Total</b> |                    | <b>0.2109</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>0.2116</b> |

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

|  | Total CO2 | CH4 | N2O | CO2e |
|--|-----------|-----|-----|------|
|  | MT/yr     |     |     |      |

|             |        |        |        |        |
|-------------|--------|--------|--------|--------|
| Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

## 8.2 Waste by Land Use

### Unmitigated

|              | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|--------------|----------------|---------------|---------------|---------------|---------------|
| Land Use     | tons           | MT/yr         |               |               |               |
| City Park    | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| Parking Lot  | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

### Mitigated

|              | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|--------------|----------------|---------------|---------------|---------------|---------------|
| Land Use     | tons           | MT/yr         |               |               |               |
| City Park    | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| Parking Lot  | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

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

## 11.0 Vegetation

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