

## Oak Hill Estates - 2020

### Santa Barbara-North of Santa Ynez County, Annual

### 1.0 Project Characteristics

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#### 1.1 Land Usage

| Land Uses             | Size  | Metric        | Lot Acreage | Floor Surface Area | Population |
|-----------------------|-------|---------------|-------------|--------------------|------------|
| Single Family Housing | 29.00 | Dwelling Unit | 16.90       | 52,200.00          | 79         |

#### 1.2 Other Project Characteristics

|                                 |                                |                                 |       |                                  |       |
|---------------------------------|--------------------------------|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                          | <b>Wind Speed (m/s)</b>         | 3.1   | <b>Precipitation Freq (Days)</b> | 37    |
| <b>Climate Zone</b>             | 4                              |                                 |       | <b>Operational Year</b>          | 2020  |
| <b>Utility Company</b>          | Pacific Gas & Electric Company |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 641.35                         | <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

Land Use - Project Description

Construction Phase - Project does not include demolition (site is undeveloped). Architectural coatings modeled as concurrent with building construction.

Grading - Project grading plan.

Vehicle Trips - Based on Oak Hills Estates Traffic and Circulation Study (Penfield & Smith, 2015)

Construction Off-road Equipment Mitigation - Site wetting required by Santa Barbara County Municipal Code Section 14-23 and SBAPCD Fugitive Dust Control Measures.

Water Mitigation - Indoor water conservation required by 2014 CalGreen.

Land Use Change - Lots 1-29 to be developed. Lot 30 to remain.

| Table Name           | Column Name  | Default Value | New Value |
|----------------------|--------------|---------------|-----------|
| tblConstructionPhase | PhaseEndDate | 6/15/2018     | 5/18/2018 |

|                           |                  |           |           |
|---------------------------|------------------|-----------|-----------|
| tblConstructionPhase      | PhaseStartDate   | 5/19/2018 | 4/21/2018 |
| tblGrading                | MaterialExported | 0.00      | 3,100.00  |
| tblLandUse                | LotAcreage       | 9.42      | 16.90     |
| tblProjectCharacteristics | OperationalYear  | 2014      | 2020      |
| tblVehicleTrips           | ST_TR            | 10.08     | 9.52      |
| tblVehicleTrips           | SU_TR            | 8.77      | 9.52      |
| tblVehicleTrips           | WD_TR            | 9.57      | 9.52      |

## 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         |                 |                 |               |               |                 |
| 2017         | 0.4382        | 4.0284        | 2.8905        | 4.1300e-003        | 0.2379        | 0.2427        | 0.4806        | 0.1083         | 0.2267        | 0.3349        | 0.0000        | 370.5082        | 370.5082        | 0.0915        | 0.0000        | 372.4304        |
| 2018         | 0.9725        | 1.3679        | 1.0921        | 1.6800e-003        | 6.7400e-003   | 0.0858        | 0.0925        | 1.8000e-003    | 0.0805        | 0.0823        | 0.0000        | 147.9817        | 147.9817        | 0.0358        | 0.0000        | 148.7340        |
| <b>Total</b> | <b>1.4107</b> | <b>5.3963</b> | <b>3.9827</b> | <b>5.8100e-003</b> | <b>0.2447</b> | <b>0.3284</b> | <b>0.5731</b> | <b>0.1101</b>  | <b>0.3072</b> | <b>0.4173</b> | <b>0.0000</b> | <b>518.4900</b> | <b>518.4900</b> | <b>0.1274</b> | <b>0.0000</b> | <b>521.1644</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    |           |           |        |        |          |
| 2017 | 0.4382  | 4.0284 | 2.8905 | 4.1300e-003 | 0.1033        | 0.2427       | 0.3460     | 0.0451         | 0.2267        | 0.2717      | 0.0000   | 370.5078  | 370.5078  | 0.0915 | 0.0000 | 372.4299 |

|              |               |               |               |                    |               |               |               |               |               |               |               |                 |                 |               |               |                 |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| 2018         | 0.9725        | 1.3679        | 1.0921        | 1.6800e-003        | 6.7400e-003   | 0.0858        | 0.0925        | 1.8000e-003   | 0.0805        | 0.0823        | 0.0000        | 147.9815        | 147.9815        | 0.0358        | 0.0000        | 148.7339        |
| <b>Total</b> | <b>1.4107</b> | <b>5.3963</b> | <b>3.9827</b> | <b>5.8100e-003</b> | <b>0.1101</b> | <b>0.3284</b> | <b>0.4385</b> | <b>0.0469</b> | <b>0.3072</b> | <b>0.3540</b> | <b>0.0000</b> | <b>518.4894</b> | <b>518.4894</b> | <b>0.1274</b> | <b>0.0000</b> | <b>521.1638</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>55.02</b>  | <b>0.00</b>  | <b>23.49</b> | <b>57.44</b>   | <b>0.00</b>   | <b>15.15</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> |

## 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         | 0.2921        | 2.5000e-003   | 0.2160        | 1.0000e-005        |               | 1.1900e-003        | 1.1900e-003   |                | 1.1900e-003        | 1.1900e-003   | 0.0000        | 0.3517          | 0.3517          | 3.4000e-004   | 0.0000             | 0.3589          |
| Energy       | 5.5200e-003   | 0.0472        | 0.0201        | 3.0000e-004        |               | 3.8100e-003        | 3.8100e-003   |                | 3.8100e-003        | 3.8100e-003   | 0.0000        | 114.2725        | 114.2725        | 3.7400e-003   | 1.5600e-003        | 114.8346        |
| Mobile       | 0.1537        | 0.3703        | 1.6966        | 3.8600e-003        | 0.2875        | 4.6100e-003        | 0.2921        | 0.0770         | 4.2500e-003        | 0.0812        | 0.0000        | 269.4621        | 269.4621        | 0.0110        | 0.0000             | 269.6935        |
| Waste        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 6.5749        | 0.0000          | 6.5749          | 0.3886        | 0.0000             | 14.7347         |
| Water        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.6685        | 4.1871          | 4.8556          | 2.4900e-003   | 1.4900e-003        | 5.3707          |
| <b>Total</b> | <b>0.4514</b> | <b>0.4199</b> | <b>1.9327</b> | <b>4.1700e-003</b> | <b>0.2875</b> | <b>9.6100e-003</b> | <b>0.2971</b> | <b>0.0770</b>  | <b>9.2500e-003</b> | <b>0.0862</b> | <b>7.2434</b> | <b>388.2735</b> | <b>395.5169</b> | <b>0.4062</b> | <b>3.0500e-003</b> | <b>404.9924</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         | 0.2921        | 2.5000e-003   | 0.2160        | 1.0000e-005        |               | 1.1900e-003        | 1.1900e-003   |               | 1.1900e-003        | 1.1900e-003   | 0.0000        | 0.3517          | 0.3517          | 3.4000e-004   | 0.0000             | 0.3589          |
| Energy       | 5.5200e-003   | 0.0472        | 0.0201        | 3.0000e-004        |               | 3.8100e-003        | 3.8100e-003   |               | 3.8100e-003        | 3.8100e-003   | 0.0000        | 114.2725        | 114.2725        | 3.7400e-003   | 1.5600e-003        | 114.8346        |
| Mobile       | 0.1537        | 0.3703        | 1.6966        | 3.8600e-003        | 0.2875        | 4.6100e-003        | 0.2921        | 0.0770        | 4.2500e-003        | 0.0812        | 0.0000        | 269.4621        | 269.4621        | 0.0110        | 0.0000             | 269.6935        |
| Waste        |               |               |               |                    |               | 0.0000             | 0.0000        |               | 0.0000             | 0.0000        | 6.5749        | 0.0000          | 6.5749          | 0.3886        | 0.0000             | 14.7347         |
| Water        |               |               |               |                    |               | 0.0000             | 0.0000        |               | 0.0000             | 0.0000        | 0.5348        | 3.3706          | 3.9054          | 1.9900e-003   | 1.1900e-003        | 4.3176          |
| <b>Total</b> | <b>0.4514</b> | <b>0.4199</b> | <b>1.9327</b> | <b>4.1700e-003</b> | <b>0.2875</b> | <b>9.6100e-003</b> | <b>0.2971</b> | <b>0.0770</b> | <b>9.2500e-003</b> | <b>0.0862</b> | <b>7.1097</b> | <b>387.4571</b> | <b>394.5667</b> | <b>0.4057</b> | <b>2.7500e-003</b> | <b>403.9393</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>1.85</b> | <b>0.21</b> | <b>0.24</b> | <b>0.12</b> | <b>9.84</b> | <b>0.26</b> |

## 2.3 Vegetation

### Vegetation

|                        | CO2e             |
|------------------------|------------------|
| Category               | MT               |
| Vegetation Land Change | -105.1050        |
| <b>Total</b>           | <b>-105.1050</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            | Site Preparation | Site Preparation | 1/28/2017  | 2/10/2017 | 5             | 10       |                   |

|   |                       |                       |           |           |   |     |
|---|-----------------------|-----------------------|-----------|-----------|---|-----|
| 2 | Grading               | Grading               | 2/11/2017 | 3/24/2017 | 5 | 30  |
| 3 | Building Construction | Building Construction | 3/25/2017 | 5/18/2018 | 5 | 300 |
| 4 | Architectural Coating | Architectural Coating | 4/21/2018 | 5/18/2018 | 5 | 20  |
| 5 | Paving                | Paving                | 5/19/2018 | 6/15/2018 | 5 | 20  |

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

**Acres of Grading (Grading Phase): 75**

**Acres of Paving: 0**

**Residential Indoor: 105,705; Residential Outdoor: 35,235; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating –**

**OffRoad Equipment**

| Phase Name            | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 255         | 0.40        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading               | Excavators                | 2      | 8.00        | 162         | 0.38        |
| Grading               | Graders                   | 1      | 8.00        | 174         | 0.41        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 255         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 361         | 0.48        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Building Construction | Cranes                    | 1      | 7.00        | 226         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Building Construction | Welders                   | 1      | 8.00        | 46          | 0.45        |
| Architectural Coating | Air Compressors           | 1      | 6.00        | 78          | 0.48        |
| Paving                | Pavers                    | 2      | 8.00        | 125         | 0.42        |
| Paving                | Paving Equipment          | 2      | 8.00        | 130         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |

**Trips and VMT**

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Site Preparation      | 7                       | 18.00              | 0.00               | 0.00                | 12.30              | 4.60               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 8                       | 20.00              | 0.00               | 388.00              | 12.30              | 4.60               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 9                       | 10.00              | 3.00               | 0.00                | 12.30              | 4.60               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 2.00               | 0.00               | 0.00                | 12.30              | 4.60               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 6                       | 15.00              | 0.00               | 0.00                | 12.30              | 4.60               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Site Preparation - 2017

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0903        | 0.0000        | 0.0903        | 0.0497         | 0.0000        | 0.0497        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0242        | 0.2588        | 0.1970        | 2.0000e-004        |               | 0.0138        | 0.0138        |                | 0.0127        | 0.0127        | 0.0000        | 18.1577        | 18.1577        | 5.5600e-003        | 0.0000        | 18.2745        |
| <b>Total</b>  | <b>0.0242</b> | <b>0.2588</b> | <b>0.1970</b> | <b>2.0000e-004</b> | <b>0.0903</b> | <b>0.0138</b> | <b>0.1041</b> | <b>0.0497</b>  | <b>0.0127</b> | <b>0.0623</b> | <b>0.0000</b> | <b>18.1577</b> | <b>18.1577</b> | <b>5.5600e-003</b> | <b>0.0000</b> | <b>18.2745</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       | 3.2000e-004        | 5.7000e-004        | 4.8200e-003        | 1.0000e-005        | 8.2000e-004        | 1.0000e-005        | 8.3000e-004        | 2.2000e-004        | 1.0000e-005        | 2.2000e-004        | 0.0000        | 0.6498        | 0.6498        | 4.0000e-005        | 0.0000        | 0.6506        |
| <b>Total</b> | <b>3.2000e-004</b> | <b>5.7000e-004</b> | <b>4.8200e-003</b> | <b>1.0000e-005</b> | <b>8.2000e-004</b> | <b>1.0000e-005</b> | <b>8.3000e-004</b> | <b>2.2000e-004</b> | <b>1.0000e-005</b> | <b>2.2000e-004</b> | <b>0.0000</b> | <b>0.6498</b> | <b>0.6498</b> | <b>4.0000e-005</b> | <b>0.0000</b> | <b>0.6506</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 |               |               |               |                    | 0.0352        | 0.0000        | 0.0352        | 0.0194         | 0.0000        | 0.0194        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0242        | 0.2588        | 0.1970        | 2.0000e-004        |               | 0.0138        | 0.0138        |                | 0.0127        | 0.0127        | 0.0000        | 18.1577        | 18.1577        | 5.5600e-003        | 0.0000        | 18.2745        |
| <b>Total</b>  | <b>0.0242</b> | <b>0.2588</b> | <b>0.1970</b> | <b>2.0000e-004</b> | <b>0.0352</b> | <b>0.0138</b> | <b>0.0490</b> | <b>0.0194</b>  | <b>0.0127</b> | <b>0.0320</b> | <b>0.0000</b> | <b>18.1577</b> | <b>18.1577</b> | <b>5.5600e-003</b> | <b>0.0000</b> | <b>18.2745</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       | 3.2000e-004        | 5.7000e-004        | 4.8200e-003        | 1.0000e-005        | 8.2000e-004        | 1.0000e-005        | 8.3000e-004        | 2.2000e-004        | 1.0000e-005        | 2.2000e-004        | 0.0000        | 0.6498        | 0.6498        | 4.0000e-005        | 0.0000        | 0.6506        |
| <b>Total</b> | <b>3.2000e-004</b> | <b>5.7000e-004</b> | <b>4.8200e-003</b> | <b>1.0000e-005</b> | <b>8.2000e-004</b> | <b>1.0000e-005</b> | <b>8.3000e-004</b> | <b>2.2000e-004</b> | <b>1.0000e-005</b> | <b>2.2000e-004</b> | <b>0.0000</b> | <b>0.6498</b> | <b>0.6498</b> | <b>4.0000e-005</b> | <b>0.0000</b> | <b>0.6506</b> |

### 3.3 Grading - 2017

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.1304        | 0.0000        | 0.1304        | 0.0540         | 0.0000        | 0.0540        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0915        | 1.0439        | 0.7021        | 9.3000e-004        |               | 0.0498        | 0.0498        |                | 0.0458        | 0.0458        | 0.0000        | 85.9109        | 85.9109        | 0.0263        | 0.0000        | 86.4637        |
| <b>Total</b>  | <b>0.0915</b> | <b>1.0439</b> | <b>0.7021</b> | <b>9.3000e-004</b> | <b>0.1304</b> | <b>0.0498</b> | <b>0.1801</b> | <b>0.0540</b>  | <b>0.0458</b> | <b>0.0998</b> | <b>0.0000</b> | <b>85.9109</b> | <b>85.9109</b> | <b>0.0263</b> | <b>0.0000</b> | <b>86.4637</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      | 4.2100e-003        | 0.0558        | 0.0599        | 1.4000e-004        | 3.2900e-003        | 6.5000e-004        | 3.9400e-003        | 9.0000e-004        | 6.0000e-004        | 1.5000e-003        | 0.0000        | 12.8175        | 12.8175        | 9.0000e-005        | 0.0000        | 12.8193        |
| Vendor       | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Worker       | 1.0700e-003        | 1.9100e-003   | 0.0161        | 3.0000e-005        | 2.7400e-003        | 2.0000e-005        | 2.7600e-003        | 7.3000e-004        | 2.0000e-005        | 7.5000e-004        | 0.0000        | 2.1660         | 2.1660         | 1.3000e-004        | 0.0000        | 2.1686         |
| <b>Total</b> | <b>5.2800e-003</b> | <b>0.0577</b> | <b>0.0759</b> | <b>1.7000e-004</b> | <b>6.0300e-003</b> | <b>6.7000e-004</b> | <b>6.7000e-003</b> | <b>1.6300e-003</b> | <b>6.2000e-004</b> | <b>2.2500e-003</b> | <b>0.0000</b> | <b>14.9835</b> | <b>14.9835</b> | <b>2.2000e-004</b> | <b>0.0000</b> | <b>14.9880</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 |               |               |               |                    | 0.0509        | 0.0000        | 0.0509        | 0.0211         | 0.0000        | 0.0211        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0915        | 1.0439        | 0.7021        | 9.3000e-004        |               | 0.0498        | 0.0498        |                | 0.0458        | 0.0458        | 0.0000        | 85.9108        | 85.9108        | 0.0263        | 0.0000        | 86.4636        |
| <b>Total</b>  | <b>0.0915</b> | <b>1.0439</b> | <b>0.7021</b> | <b>9.3000e-004</b> | <b>0.0509</b> | <b>0.0498</b> | <b>0.1006</b> | <b>0.0211</b>  | <b>0.0458</b> | <b>0.0668</b> | <b>0.0000</b> | <b>85.9108</b> | <b>85.9108</b> | <b>0.0263</b> | <b>0.0000</b> | <b>86.4636</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      | 4.2100e-003        | 0.0558        | 0.0599        | 1.4000e-004        | 3.2900e-003        | 6.5000e-004        | 3.9400e-003        | 9.0000e-004        | 6.0000e-004        | 1.5000e-003        | 0.0000        | 12.8175        | 12.8175        | 9.0000e-005        | 0.0000        | 12.8193        |
| Vendor       | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Worker       | 1.0700e-003        | 1.9100e-003   | 0.0161        | 3.0000e-005        | 2.7400e-003        | 2.0000e-005        | 2.7600e-003        | 7.3000e-004        | 2.0000e-005        | 7.5000e-004        | 0.0000        | 2.1660         | 2.1660         | 1.3000e-004        | 0.0000        | 2.1686         |
| <b>Total</b> | <b>5.2800e-003</b> | <b>0.0577</b> | <b>0.0759</b> | <b>1.7000e-004</b> | <b>6.0300e-003</b> | <b>6.7000e-004</b> | <b>6.7000e-003</b> | <b>1.6300e-003</b> | <b>6.2000e-004</b> | <b>2.2500e-003</b> | <b>0.0000</b> | <b>14.9835</b> | <b>14.9835</b> | <b>2.2000e-004</b> | <b>0.0000</b> | <b>14.9880</b> |

### 3.4 Building Construction - 2017

#### Unmitigated Construction On-Site

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Category | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |        |        |          |
| Off-Road | 0.3102  | 2.6406 | 1.8129 | 2.6800e-003 |               | 0.1781       | 0.1781     |                | 0.1673        | 0.1673      | 0.0000   | 239.4791  | 239.4791  | 0.0589 | 0.0000 | 240.7169 |

|              |               |               |               |                    |  |               |               |  |               |               |               |                 |                 |               |               |                 |
|--------------|---------------|---------------|---------------|--------------------|--|---------------|---------------|--|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| <b>Total</b> | <b>0.3102</b> | <b>2.6406</b> | <b>1.8129</b> | <b>2.6800e-003</b> |  | <b>0.1781</b> | <b>0.1781</b> |  | <b>0.1673</b> | <b>0.1673</b> | <b>0.0000</b> | <b>239.4791</b> | <b>239.4791</b> | <b>0.0589</b> | <b>0.0000</b> | <b>240.7169</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       | 3.0800e-003        | 0.0205        | 0.0443        | 5.0000e-005        | 1.2200e-003   | 2.6000e-004        | 1.4800e-003   | 3.5000e-004        | 2.3000e-004        | 5.8000e-004        | 0.0000        | 4.1073         | 4.1073         | 3.0000e-005        | 0.0000        | 4.1080         |
| Worker       | 3.5800e-003        | 6.3800e-003   | 0.0535        | 1.0000e-004        | 9.1500e-003   | 7.0000e-005        | 9.2100e-003   | 2.4300e-003        | 6.0000e-005        | 2.4900e-003        | 0.0000        | 7.2200         | 7.2200         | 4.2000e-004        | 0.0000        | 7.2288         |
| <b>Total</b> | <b>6.6600e-003</b> | <b>0.0269</b> | <b>0.0978</b> | <b>1.5000e-004</b> | <b>0.0104</b> | <b>3.3000e-004</b> | <b>0.0107</b> | <b>2.7800e-003</b> | <b>2.9000e-004</b> | <b>3.0700e-003</b> | <b>0.0000</b> | <b>11.3273</b> | <b>11.3273</b> | <b>4.5000e-004</b> | <b>0.0000</b> | <b>11.3368</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     | 0.3102        | 2.6406        | 1.8129        | 2.6800e-003        |               | 0.1781        | 0.1781        |                | 0.1673        | 0.1673        | 0.0000        | 239.4788        | 239.4788        | 0.0589        | 0.0000        | 240.7166        |
| <b>Total</b> | <b>0.3102</b> | <b>2.6406</b> | <b>1.8129</b> | <b>2.6800e-003</b> |               | <b>0.1781</b> | <b>0.1781</b> |                | <b>0.1673</b> | <b>0.1673</b> | <b>0.0000</b> | <b>239.4788</b> | <b>239.4788</b> | <b>0.0589</b> | <b>0.0000</b> | <b>240.7166</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       | 3.0800e-003        | 0.0205        | 0.0443        | 5.0000e-005        | 1.2200e-003   | 2.6000e-004        | 1.4800e-003   | 3.5000e-004        | 2.3000e-004        | 5.8000e-004        | 0.0000        | 4.1073         | 4.1073         | 3.0000e-005        | 0.0000        | 4.1080         |
| Worker       | 3.5800e-003        | 6.3800e-003   | 0.0535        | 1.0000e-004        | 9.1500e-003   | 7.0000e-005        | 9.2100e-003   | 2.4300e-003        | 6.0000e-005        | 2.4900e-003        | 0.0000        | 7.2200         | 7.2200         | 4.2000e-004        | 0.0000        | 7.2288         |
| <b>Total</b> | <b>6.6600e-003</b> | <b>0.0269</b> | <b>0.0978</b> | <b>1.5000e-004</b> | <b>0.0104</b> | <b>3.3000e-004</b> | <b>0.0107</b> | <b>2.7800e-003</b> | <b>2.9000e-004</b> | <b>3.0700e-003</b> | <b>0.0000</b> | <b>11.3273</b> | <b>11.3273</b> | <b>4.5000e-004</b> | <b>0.0000</b> | <b>11.3368</b> |

### 3.4 Building Construction - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.1334        | 1.1630        | 0.8766        | 1.3400e-003        |               | 0.0747        | 0.0747        |                | 0.0702        | 0.0702        | 0.0000        | 118.3848        | 118.3848        | 0.0290        | 0.0000        | 118.9932        |
| <b>Total</b> | <b>0.1334</b> | <b>1.1630</b> | <b>0.8766</b> | <b>1.3400e-003</b> |               | <b>0.0747</b> | <b>0.0747</b> |                | <b>0.0702</b> | <b>0.0702</b> | <b>0.0000</b> | <b>118.3848</b> | <b>118.3848</b> | <b>0.0290</b> | <b>0.0000</b> | <b>118.9932</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       | 1.3500e-003        | 9.3700e-003   | 0.0206        | 2.0000e-005        | 6.1000e-004        | 1.2000e-004        | 7.3000e-004        | 1.7000e-004        | 1.1000e-004        | 2.8000e-004        | 0.0000        | 2.0182        | 2.0182        | 2.0000e-005        | 0.0000        | 2.0186        |
| Worker       | 1.5400e-003        | 2.8300e-003   | 0.0235        | 5.0000e-005        | 4.5700e-003        | 3.0000e-005        | 4.6100e-003        | 1.2200e-003        | 3.0000e-005        | 1.2400e-003        | 0.0000        | 3.4751        | 3.4751        | 1.9000e-004        | 0.0000        | 3.4791        |
| <b>Total</b> | <b>2.8900e-003</b> | <b>0.0122</b> | <b>0.0440</b> | <b>7.0000e-005</b> | <b>5.1800e-003</b> | <b>1.5000e-004</b> | <b>5.3400e-003</b> | <b>1.3900e-003</b> | <b>1.4000e-004</b> | <b>1.5200e-003</b> | <b>0.0000</b> | <b>5.4933</b> | <b>5.4933</b> | <b>2.1000e-004</b> | <b>0.0000</b> | <b>5.4977</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     | 0.1334        | 1.1630        | 0.8766        | 1.3400e-003        |               | 0.0747        | 0.0747        |                | 0.0702        | 0.0702        | 0.0000        | 118.3847        | 118.3847        | 0.0290        | 0.0000        | 118.9931        |
| <b>Total</b> | <b>0.1334</b> | <b>1.1630</b> | <b>0.8766</b> | <b>1.3400e-003</b> |               | <b>0.0747</b> | <b>0.0747</b> |                | <b>0.0702</b> | <b>0.0702</b> | <b>0.0000</b> | <b>118.3847</b> | <b>118.3847</b> | <b>0.0290</b> | <b>0.0000</b> | <b>118.9931</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       | 1.3500e-003        | 9.3700e-003   | 0.0206        | 2.0000e-005        | 6.1000e-004        | 1.2000e-004        | 7.3000e-004        | 1.7000e-004        | 1.1000e-004        | 2.8000e-004        | 0.0000        | 2.0182        | 2.0182        | 2.0000e-005        | 0.0000        | 2.0186        |
| Worker       | 1.5400e-003        | 2.8300e-003   | 0.0235        | 5.0000e-005        | 4.5700e-003        | 3.0000e-005        | 4.6100e-003        | 1.2200e-003        | 3.0000e-005        | 1.2400e-003        | 0.0000        | 3.4751        | 3.4751        | 1.9000e-004        | 0.0000        | 3.4791        |
| <b>Total</b> | <b>2.8900e-003</b> | <b>0.0122</b> | <b>0.0440</b> | <b>7.0000e-005</b> | <b>5.1800e-003</b> | <b>1.5000e-004</b> | <b>5.3400e-003</b> | <b>1.3900e-003</b> | <b>1.4000e-004</b> | <b>1.5200e-003</b> | <b>0.0000</b> | <b>5.4933</b> | <b>5.4933</b> | <b>2.1000e-004</b> | <b>0.0000</b> | <b>5.4977</b> |

### 3.5 Architectural Coating - 2018

#### Unmitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.8166        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 2.9900e-003   | 0.0201        | 0.0185        | 3.0000e-005        |               | 1.5100e-003        | 1.5100e-003        |                | 1.5100e-003        | 1.5100e-003        | 0.0000        | 2.5533        | 2.5533        | 2.4000e-004        | 0.0000        | 2.5584        |
| <b>Total</b>    | <b>0.8196</b> | <b>0.0201</b> | <b>0.0185</b> | <b>3.0000e-005</b> |               | <b>1.5100e-003</b> | <b>1.5100e-003</b> |                | <b>1.5100e-003</b> | <b>1.5100e-003</b> | <b>0.0000</b> | <b>2.5533</b> | <b>2.5533</b> | <b>2.4000e-004</b> | <b>0.0000</b> | <b>2.5584</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       | 6.0000e-005        | 1.1000e-004        | 9.4000e-004        | 0.0000        | 1.8000e-004        | 0.0000        | 1.8000e-004        | 5.0000e-005        | 0.0000        | 5.0000e-005        | 0.0000        | 0.1390        | 0.1390        | 1.0000e-005        | 0.0000        | 0.1392        |
| <b>Total</b> | <b>6.0000e-005</b> | <b>1.1000e-004</b> | <b>9.4000e-004</b> | <b>0.0000</b> | <b>1.8000e-004</b> | <b>0.0000</b> | <b>1.8000e-004</b> | <b>5.0000e-005</b> | <b>0.0000</b> | <b>5.0000e-005</b> | <b>0.0000</b> | <b>0.1390</b> | <b>0.1390</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>0.1392</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 | 0.8166        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 2.9900e-003   | 0.0201        | 0.0185        | 3.0000e-005        |               | 1.5100e-003        | 1.5100e-003        |                | 1.5100e-003        | 1.5100e-003        | 0.0000        | 2.5533        | 2.5533        | 2.4000e-004        | 0.0000        | 2.5584        |
| <b>Total</b>    | <b>0.8196</b> | <b>0.0201</b> | <b>0.0185</b> | <b>3.0000e-005</b> |               | <b>1.5100e-003</b> | <b>1.5100e-003</b> |                | <b>1.5100e-003</b> | <b>1.5100e-003</b> | <b>0.0000</b> | <b>2.5533</b> | <b>2.5533</b> | <b>2.4000e-004</b> | <b>0.0000</b> | <b>2.5584</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       | 6.0000e-005        | 1.1000e-004        | 9.4000e-004        | 0.0000        | 1.8000e-004        | 0.0000        | 1.8000e-004        | 5.0000e-005        | 0.0000        | 5.0000e-005        | 0.0000        | 0.1390        | 0.1390        | 1.0000e-005        | 0.0000        | 0.1392        |
| <b>Total</b> | <b>6.0000e-005</b> | <b>1.1000e-004</b> | <b>9.4000e-004</b> | <b>0.0000</b> | <b>1.8000e-004</b> | <b>0.0000</b> | <b>1.8000e-004</b> | <b>5.0000e-005</b> | <b>0.0000</b> | <b>5.0000e-005</b> | <b>0.0000</b> | <b>0.1390</b> | <b>0.1390</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>0.1392</b> |

### 3.6 Paving - 2018

#### Unmitigated Construction On-Site

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |
|----------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|
| Category | tons/yr |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |         |
| Off-Road | 0.0161  | 0.1716 | 0.1449 | 2.2000e-004 |               | 9.3900e-003  | 9.3900e-003 |                | 8.6400e-003   | 8.6400e-003 | 0.0000   | 20.3687   | 20.3687   | 6.3400e-003 | 0.0000 | 20.5019 |

|              |               |               |               |                    |  |                    |                    |  |                    |                    |               |                |                |                    |               |                |
|--------------|---------------|---------------|---------------|--------------------|--|--------------------|--------------------|--|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| 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>0.0161</b> | <b>0.1716</b> | <b>0.1449</b> | <b>2.2000e-004</b> |  | <b>9.3900e-003</b> | <b>9.3900e-003</b> |  | <b>8.6400e-003</b> | <b>8.6400e-003</b> | <b>0.0000</b> | <b>20.3687</b> | <b>20.3687</b> | <b>6.3400e-003</b> | <b>0.0000</b> | <b>20.5019</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       | 4.6000e-004        | 8.5000e-004        | 7.0400e-003        | 1.0000e-005        | 1.3700e-003        | 1.0000e-005        | 1.3800e-003        | 3.6000e-004        | 1.0000e-005        | 3.7000e-004        | 0.0000        | 1.0425        | 1.0425        | 6.0000e-005        | 0.0000        | 1.0437        |
| <b>Total</b> | <b>4.6000e-004</b> | <b>8.5000e-004</b> | <b>7.0400e-003</b> | <b>1.0000e-005</b> | <b>1.3700e-003</b> | <b>1.0000e-005</b> | <b>1.3800e-003</b> | <b>3.6000e-004</b> | <b>1.0000e-005</b> | <b>3.7000e-004</b> | <b>0.0000</b> | <b>1.0425</b> | <b>1.0425</b> | <b>6.0000e-005</b> | <b>0.0000</b> | <b>1.0437</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     | 0.0161        | 0.1716        | 0.1449        | 2.2000e-004        |               | 9.3900e-003        | 9.3900e-003        |                | 8.6400e-003        | 8.6400e-003        | 0.0000        | 20.3687        | 20.3687        | 6.3400e-003        | 0.0000        | 20.5019        |
| 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>0.0161</b> | <b>0.1716</b> | <b>0.1449</b> | <b>2.2000e-004</b> |               | <b>9.3900e-003</b> | <b>9.3900e-003</b> |                | <b>8.6400e-003</b> | <b>8.6400e-003</b> | <b>0.0000</b> | <b>20.3687</b> | <b>20.3687</b> | <b>6.3400e-003</b> | <b>0.0000</b> | <b>20.5019</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       | 4.6000e-004        | 8.5000e-004        | 7.0400e-003        | 1.0000e-005        | 1.3700e-003        | 1.0000e-005        | 1.3800e-003        | 3.6000e-004        | 1.0000e-005        | 3.7000e-004        | 0.0000        | 1.0425        | 1.0425        | 6.0000e-005        | 0.0000        | 1.0437        |
| <b>Total</b> | <b>4.6000e-004</b> | <b>8.5000e-004</b> | <b>7.0400e-003</b> | <b>1.0000e-005</b> | <b>1.3700e-003</b> | <b>1.0000e-005</b> | <b>1.3800e-003</b> | <b>3.6000e-004</b> | <b>1.0000e-005</b> | <b>3.7000e-004</b> | <b>0.0000</b> | <b>1.0425</b> | <b>1.0425</b> | <b>6.0000e-005</b> | <b>0.0000</b> | <b>1.0437</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   | 0.1537  | 0.3703 | 1.6966 | 3.8600e-003 | 0.2875        | 4.6100e-003  | 0.2921     | 0.0770         | 4.2500e-003   | 0.0812      | 0.0000   | 269.4621  | 269.4621  | 0.0110 | 0.0000 | 269.6935 |
| Unmitigated | 0.1537  | 0.3703 | 1.6966 | 3.8600e-003 | 0.2875        | 4.6100e-003  | 0.2921     | 0.0770         | 4.2500e-003   | 0.0812      | 0.0000   | 269.4621  | 269.4621  | 0.0110 | 0.0000 | 269.6935 |

#### 4.2 Trip Summary Information

| Land Use              | Average Daily Trip Rate |               |               | Unmitigated    | Mitigated      |
|-----------------------|-------------------------|---------------|---------------|----------------|----------------|
|                       | Weekday                 | Saturday      | Sunday        | Annual VMT     | Annual VMT     |
| Single Family Housing | 276.08                  | 276.08        | 276.08        | 761,741        | 761,741        |
| <b>Total</b>          | <b>276.08</b>           | <b>276.08</b> | <b>276.08</b> | <b>761,741</b> | <b>761,741</b> |

### 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 |
| Single Family Housing | 12.30      | 5.90       | 6.40        | 37.50      | 15.00      | 47.50       | 86             | 11       | 3       |

| LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.487496 | 0.036165 | 0.211918 | 0.155307 | 0.049987 | 0.007472 | 0.020097 | 0.014524 | 0.001924 | 0.002186 | 0.008219 | 0.001562 | 0.003145 |

### 5.0 Energy Detail

#### 4.4 Fleet Mix

Historical Energy Use: N

#### 5.1 Mitigation Measures Energy

| 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    |           |           |             |             |         |
| Electricity Mitigated   |             |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 59.6704   | 59.6704   | 2.7000e-003 | 5.6000e-004 | 59.9001 |
| Electricity Unmitigated |             |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 59.6704   | 59.6704   | 2.7000e-003 | 5.6000e-004 | 59.9001 |
| NaturalGas Mitigated    | 5.5200e-003 | 0.0472 | 0.0201 | 3.0000e-004 |               | 3.8100e-003  | 3.8100e-003 |                | 3.8100e-003   | 3.8100e-003 | 0.0000   | 54.6022   | 54.6022   | 1.0500e-003 | 1.0000e-003 | 54.9345 |
| NaturalGas Unmitigated  | 5.5200e-003 | 0.0472 | 0.0201 | 3.0000e-004 |               | 3.8100e-003  | 3.8100e-003 |                | 3.8100e-003   | 3.8100e-003 | 0.0000   | 54.6022   | 54.6022   | 1.0500e-003 | 1.0000e-003 | 54.9345 |

#### 5.2 Energy by Land Use - NaturalGas

##### Unmitigated

|                       | 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         |                |                |                    |                    |                |
| Single Family Housing | 1.02321e+006    | 5.5200e-003        | 0.0472        | 0.0201        | 3.0000e-004        |               | 3.8100e-003        | 3.8100e-003        |                | 3.8100e-003        | 3.8100e-003        | 0.0000        | 54.6022        | 54.6022        | 1.0500e-003        | 1.0000e-003        | 54.9345        |
| <b>Total</b>          |                 | <b>5.5200e-003</b> | <b>0.0472</b> | <b>0.0201</b> | <b>3.0000e-004</b> |               | <b>3.8100e-003</b> | <b>3.8100e-003</b> |                | <b>3.8100e-003</b> | <b>3.8100e-003</b> | <b>0.0000</b> | <b>54.6022</b> | <b>54.6022</b> | <b>1.0500e-003</b> | <b>1.0000e-003</b> | <b>54.9345</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         |                |                |                    |                    |                |
| Single Family Housing | 1.02321e+006    | 5.5200e-003        | 0.0472        | 0.0201        | 3.0000e-004        |               | 3.8100e-003        | 3.8100e-003        |                | 3.8100e-003        | 3.8100e-003        | 0.0000        | 54.6022        | 54.6022        | 1.0500e-003        | 1.0000e-003        | 54.9345        |
| <b>Total</b>          |                 | <b>5.5200e-003</b> | <b>0.0472</b> | <b>0.0201</b> | <b>3.0000e-004</b> |               | <b>3.8100e-003</b> | <b>3.8100e-003</b> |                | <b>3.8100e-003</b> | <b>3.8100e-003</b> | <b>0.0000</b> | <b>54.6022</b> | <b>54.6022</b> | <b>1.0500e-003</b> | <b>1.0000e-003</b> | <b>54.9345</b> |

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

|                       | Electricity Use | Total CO2      | CH4                | N2O                | CO2e           |
|-----------------------|-----------------|----------------|--------------------|--------------------|----------------|
| Land Use              | kWh/yr          | MT/yr          |                    |                    |                |
| Single Family Housing | 205115          | 59.6704        | 2.7000e-003        | 5.6000e-004        | 59.9001        |
| <b>Total</b>          |                 | <b>59.6704</b> | <b>2.7000e-003</b> | <b>5.6000e-004</b> | <b>59.9001</b> |

**Mitigated**

|                       | Electricity Use | Total CO2      | CH4                | N2O                | CO2e           |
|-----------------------|-----------------|----------------|--------------------|--------------------|----------------|
| Land Use              | kWh/yr          | MT/yr          |                    |                    |                |
| Single Family Housing | 205115          | 59.6704        | 2.7000e-003        | 5.6000e-004        | 59.9001        |
| <b>Total</b>          |                 | <b>59.6704</b> | <b>2.7000e-003</b> | <b>5.6000e-004</b> | <b>59.9001</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   | 0.2921  | 2.5000e-003 | 0.2160 | 1.0000e-005 |               | 1.1900e-003  | 1.1900e-003 |                | 1.1900e-003   | 1.1900e-003 | 0.0000   | 0.3517    | 0.3517    | 3.4000e-004 | 0.0000 | 0.3589 |
| Unmitigated | 0.2921  | 2.5000e-003 | 0.2160 | 1.0000e-005 |               | 1.1900e-003  | 1.1900e-003 |                | 1.1900e-003   | 1.1900e-003 | 0.0000   | 0.3517    | 0.3517    | 3.4000e-004 | 0.0000 | 0.3589 |

**6.2 Area by SubCategory**

**Unmitigated**

|                       | ROG           | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| SubCategory           | tons/yr       |                    |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Architectural Coating | 0.0817        |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Consumer Products     | 0.2039        |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Hearth                | 0.0000        | 0.0000             | 0.0000        | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Landscaping           | 6.5800e-003   | 2.5000e-003        | 0.2160        | 1.0000e-005        |               | 1.1900e-003        | 1.1900e-003        |                | 1.1900e-003        | 1.1900e-003        | 0.0000        | 0.3517        | 0.3517        | 3.4000e-004        | 0.0000        | 0.3589        |
| <b>Total</b>          | <b>0.2921</b> | <b>2.5000e-003</b> | <b>0.2160</b> | <b>1.0000e-005</b> |               | <b>1.1900e-003</b> | <b>1.1900e-003</b> |                | <b>1.1900e-003</b> | <b>1.1900e-003</b> | <b>0.0000</b> | <b>0.3517</b> | <b>0.3517</b> | <b>3.4000e-004</b> | <b>0.0000</b> | <b>0.3589</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 | 0.0817        |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Consumer Products     | 0.2039        |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Hearth                | 0.0000        | 0.0000             | 0.0000        | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Landscaping           | 6.5800e-003   | 2.5000e-003        | 0.2160        | 1.0000e-005        |               | 1.1900e-003        | 1.1900e-003        |                | 1.1900e-003        | 1.1900e-003        | 0.0000        | 0.3517        | 0.3517        | 3.4000e-004        | 0.0000        | 0.3589        |
| <b>Total</b>          | <b>0.2921</b> | <b>2.5000e-003</b> | <b>0.2160</b> | <b>1.0000e-005</b> |               | <b>1.1900e-003</b> | <b>1.1900e-003</b> |                | <b>1.1900e-003</b> | <b>1.1900e-003</b> | <b>0.0000</b> | <b>0.3517</b> | <b>0.3517</b> | <b>3.4000e-004</b> | <b>0.0000</b> | <b>0.3589</b> |

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

|             | Total CO2 | CH4         | N2O         | CO2e   |
|-------------|-----------|-------------|-------------|--------|
| Category    | MT/yr     |             |             |        |
| Mitigated   | 3.9054    | 1.9900e-003 | 1.1900e-003 | 4.3176 |
| Unmitigated | 4.8556    | 2.4900e-003 | 1.4900e-003 | 5.3707 |

## 7.2 Water by Land Use

### Unmitigated

|                       | Indoor/Outdoor Use | Total CO2     | CH4                | N2O                | CO2e          |
|-----------------------|--------------------|---------------|--------------------|--------------------|---------------|
| Land Use              | Mgal               | MT/yr         |                    |                    |               |
| Single Family Housing | 1.88947 / 1.19119  | 4.8556        | 2.4900e-003        | 1.4900e-003        | 5.3707        |
| <b>Total</b>          |                    | <b>4.8556</b> | <b>2.4900e-003</b> | <b>1.4900e-003</b> | <b>5.3707</b> |

### Mitigated

|                       | Indoor/Outdoor Use | Total CO2 | CH4         | N2O         | CO2e   |
|-----------------------|--------------------|-----------|-------------|-------------|--------|
| Land Use              | Mgal               | MT/yr     |             |             |        |
| Single Family Housing | 1.51157 / 1.19119  | 3.9054    | 1.9900e-003 | 1.1900e-003 | 4.3176 |

|       |  |        |             |             |        |
|-------|--|--------|-------------|-------------|--------|
| Total |  | 3.9054 | 1.9900e-003 | 1.1900e-003 | 4.3176 |
|-------|--|--------|-------------|-------------|--------|

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

|             | Total CO2 | CH4    | N2O    | CO2e    |
|-------------|-----------|--------|--------|---------|
|             | MT/yr     |        |        |         |
| Mitigated   | 6.5749    | 0.3886 | 0.0000 | 14.7347 |
| Unmitigated | 6.5749    | 0.3886 | 0.0000 | 14.7347 |

### 8.2 Waste by Land Use

#### Unmitigated

|                       | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e           |
|-----------------------|----------------|---------------|---------------|---------------|----------------|
| Land Use              | tons           | MT/yr         |               |               |                |
| Single Family Housing | 32.39          | 6.5749        | 0.3886        | 0.0000        | 14.7347        |
| <b>Total</b>          |                | <b>6.5749</b> | <b>0.3886</b> | <b>0.0000</b> | <b>14.7347</b> |

## Mitigated

|                       | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e           |
|-----------------------|----------------|---------------|---------------|---------------|----------------|
| Land Use              | tons           | MT/yr         |               |               |                |
| Single Family Housing | 32.39          | 6.5749        | 0.3886        | 0.0000        | 14.7347        |
| <b>Total</b>          |                | <b>6.5749</b> | <b>0.3886</b> | <b>0.0000</b> | <b>14.7347</b> |

## 9.0 Operational Offroad

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

## 10.0 Vegetation

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|             | Total CO2 | CH4    | N2O    | CO2e      |
|-------------|-----------|--------|--------|-----------|
| Category    | MT        |        |        |           |
| Unmitigated | -105.1050 | 0.0000 | 0.0000 | -105.1050 |

## 10.1 Vegetation Land Change

### Vegetation Type

|              | Initial/Final   | Total CO2        | CH4           | N2O           | CO2e             |
|--------------|-----------------|------------------|---------------|---------------|------------------|
|              | Acres           | MT               |               |               |                  |
| Scrub        | 16.88 /<br>9.53 | -105.1050        | 0.0000        | 0.0000        | -105.1050        |
| <b>Total</b> |                 | <b>-105.1050</b> | <b>0.0000</b> | <b>0.0000</b> | <b>-105.1050</b> |