

## Appendices

### **Appendix C      AQGHG Modeling Data**

## Appendices

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## CalEEMod Project Characteristics Inputs

**Project Address:** 1221 Monterey Road, Glendale  
**Project Location:** Los Angeles-- South Coast 91206  
**Climate Zone:** 12  
**Land Use Setting:** Urban  
**Operational Year:** 2018  
**Utility Company:** Southern California Edison  
**Air Basin:** South Coast Air Basin  
**Air District:** SCAQMD  
**SRA:** 7

Total Project Site Acreage: 9.93 acres  
 Acreage to be disturbed: 3.85 acres

| <b>Components*</b>              | <b>SQFT</b> | <b>Acres</b> |
|---------------------------------|-------------|--------------|
| Storage Building**              | 1,645       | 0.04         |
| Basketball Courts               | 42,145      | 0.97         |
| New Athletic Fields             | 100,000     | 2.30         |
| Remaining Field and Landscaping | 23,916      | 0.55         |
| <b>Total:</b>                   |             | <b>3.85</b>  |

\*Square footage based on aerial photograph of site

\*\* The Storage Building/Restrooms would be hauled onto the site rather than constructed.

## CalEEMod Land Use Inputs

| <b>Land Use</b>     | <b>Land Use Type</b> | <b>Land Use Subtype</b>    | <b>Unit Amount</b> | <b>Size Metric</b> | <b>Lot Acreage</b> | <b>Square Feet</b> |
|---------------------|----------------------|----------------------------|--------------------|--------------------|--------------------|--------------------|
| Non-Parking Asphalt | Parking              | Other Asphalt Surfaces     | 42.15              | 1000 sqft          | 1.01               | 42,145             |
| Landscape, Turf     | Parking              | Other Non-Asphalt Surfaces | 123.92             | 1000sqft           | 2.84               |                    |
|                     |                      |                            |                    |                    | <b>3.85</b>        | acre               |

## Soil Hauling

| <b>Construction Activity</b> | <b>Export Volume (CY)</b> | <b>Haul Truck Capacity (CY)*</b> | <b>Total Trip Ends</b> | <b>Total Days</b> | <b>Trip Ends/Day</b> |
|------------------------------|---------------------------|----------------------------------|------------------------|-------------------|----------------------|
| Rough Grading                | 13,381                    | 16                               | 1,673                  | 16                | 105                  |

\*CalEEMod Default

## Asphalt Haul

| <b>Construction Activity</b> | <b>Demolition Volume (ton)</b> | <b>Haul Truck Capacity (ton)*</b> | <b>Haul Distance (miles)*</b> | <b>Total Trip Ends</b> | <b>Total Days</b> | <b>Trip Ends/Day</b> |
|------------------------------|--------------------------------|-----------------------------------|-------------------------------|------------------------|-------------------|----------------------|
| Asphalt Demo Debris Haul     | 316                            | 20                                | 20                            | 32                     | 20                | 2                    |

\*CalEEMod Default

## Portable Haul

| <b>Construction Activity</b> | <b>Number of Prefabricated Buildings</b> | <b>Trips per Building</b> | <b>Total Haul Trips</b> |
|------------------------------|--|---------------------------|-------------------------|
| Portable Haul                | 2  | 2                         | 4                       |

Architectural Coating

|  |      |                 |
|--|------|-----------------|
| Non-Residential Architectural Coating      |      |                 |
| Percentage of Buildings' Interior Painted: | 100% |                 |
| Percentage of Buildings' Exterior Painted: | 100% |                 |
| SCAQMD Rule 1113                           |      |                 |
| Interior Paint VOC content:                | 50   | grams per liter |
| Exterior Paint VOC content:                | 50   | grams per liter |

| Nonresidential Structures    | Land Use Square Feet | SCAQMD Factor | Total Paintable Surface Area <sup>2</sup> | Paintable Interior Area <sup>1</sup> | Paintable Exterior Area <sup>1</sup> |
|------------------------------|----------------------|---------------|---|--------------------------------------|--------------------------------------|
| Parking and Asphalt Striping | 42,145               | 0.06          | 2,529                                     |                                      | 2,529                                |
| Prefabricated Buildings      | 1,645                | 2             | 3,290                                     | 2,468                                | 823                                  |

<sup>1</sup> CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively. Architectural coatings for the parking lot is based on CalEEMod methodology applied to a surface parking lot (i.e., striping), in which 6% of surface area is painted.

<sup>2</sup> Applied CalEEMod Methodology in calculating total. The program assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage defined by the user. The default values based on SCAQMD methods used in their coating rules are 75% for the interior surfaces and 25% for the exterior shell

Construction - Unmitigated Run

|                      |                |                |
|----------------------|----------------|----------------|
| SCAQMD Rule 403      |                |                |
| Replace Ground Cover | PM10:          | 5 % Reduction  |
|                      | PM25:          | 5 % Reduction  |
| Water Exposed Area   | Frequency:     | 2 per day      |
|                      | PM10:          | 55 % Reduction |
|                      | PM25:          | 55 % Reduction |
| Unpaved Roads        | Vehicle Speed: | 15 mph         |
| SCAQMD Rule 1186     |                |                |
| Clean Paved Road     | 9              | % PM Reduction |

**CalEEMod Construction Phase Inputs\***

5-Day Work Week/8 hours per day

| Phase Name                 | Phase Type            | Start Date      | End Date         | CalEEMod Total Days | Total Days |
|----------------------------|-----------------------|-----------------|------------------|---------------------|------------|
| Asphalt Demo               | Demolition            | 6/1/2018        | 6/28/2018        | 20                  | 27         |
| <i>Asphalt Demo Haul</i>   | <i>Demolition</i>     | <i>6/1/2018</i> | <i>6/28/2018</i> | <i>20</i>           | <i>27</i>  |
| Site Preparation           | Site Preparation      | 6/29/2018       | 7/5/2018         | 5                   | 6          |
| Rough Grading              | Rough Grading         | 7/6/2018        | 7/27/2018        | 16                  | 21         |
| <i>Rough Grading Haul</i>  | <i>Haul</i>           | <i>7/6/2018</i> | <i>7/27/2018</i> | <i>16</i>           | <i>21</i>  |
| Utility Trenching          | Utility Trenching     | 7/28/2018       | 8/6/2018         | 6                   | 9          |
| Asphalt Paving             | Asphalt Paving        | 8/7/2018        | 8/30/2018        | 18                  | 23         |
| Landscaping/Field Lighting | Construction          | 8/7/2018        | 8/30/2018        | 18                  | 23         |
| Architectural Coating      | Architectural Coating | 8/31/2018       | 9/26/2018        | 18                  | 26         |

\*CalEEMod Defaults Used

# CalEEMod Construction Off-Road Equipment Inputs\*

| Equipment Type                    | CalEEMod Equipment Type   | Unit Amount | Hours/Day | HP  | LF     | Worker Trips | Vendor Trips |
|-----------------------------------|---------------------------|-------------|-----------|-----|--------|--------------|--------------|
| <b>Asphalt Demolition</b>         |                           |             |           |     |        | 15           |              |
| Concrete/Industrial Saws          | Concrete/Industrial Saws  | 1           | 8         | 81  | 0.73   |              |              |
| Excavators                        | Excavators                | 3           | 8         | 158 | 0.38   |              |              |
| Rubber Tired Dozers               | Rubber Tired Dozers       | 2           | 8         | 247 | 0.4    |              |              |
| Water Truck                       |                           |             |           |     |        |              | 4            |
| <b>Site Preparation</b>           |                           |             |           |     |        | 18           |              |
| Rubber Tired Dozers               | Rubber Tired Dozers       | 3           | 8         | 247 | 0.4    |              |              |
| Tractors/Loaders/Backhoes         | Tractors/Loaders/Backhoes | 4           | 8         | 97  | 0.37   |              |              |
| Water Truck                       |                           |             |           |     |        |              | 4            |
| <b>Grading</b>                    |                           |             |           |     |        | 15           |              |
| Excavators                        | Excavators                | 1           | 8         | 158 | 0.38   |              |              |
| Graders                           | Graders                   | 1           | 8         | 187 | 0.41   |              |              |
| Rubber Tired Dozers               | Rubber Tired Dozers       | 1           | 8         | 247 | 0.4    |              |              |
| Tractors/Loaders/Backhoes         | Tractors/Loaders/Backhoes | 3           | 8         | 97  | 0.37   |              |              |
| Water Truck                       |                           |             |           |     |        |              | 4            |
| <b>Utility Trenching</b>          |                           |             |           |     |        | 5            |              |
| Tractors/Loaders/Backhoes         | Tractors/Loaders/Backhoes | 2           | 8         | 97  | 0.37   |              |              |
| Water Truck                       |                           |             |           |     |        |              | 4            |
| <b>Landscaping/Field Lighting</b> |                           |             |           |     |        | 18           |              |
| Rubber Tired Loaders              | Rubber Tired Loaders      | 1           | 8         | 247 | 0.3953 |              |              |
| Cranes                            | Cranes                    | 1           | 6         | 231 | 0.2881 |              |              |
| Forklifts                         | Forklifts                 | 1           | 6         | 89  | 0.201  |              |              |
| <b>Paving</b>                     |                           |             |           |     |        | 20           |              |
| Cement and Mortar Mixers          | Cement and Mortar Mixers  | 2           | 6         | 9   | 0.56   |              |              |
| Pavers                            | Pavers                    | 1           | 8         | 130 | 0.42   |              |              |
| Paving Equipment                  | Paving Equipment          | 2           | 6         | 132 | 0.36   |              |              |
| Rollers                           | Rollers                   | 2           | 6         | 80  | 0.38   |              |              |
| Tractors/Loaders/Backhoes         | Tractors/Loaders/Backhoes | 1           | 8         | 97  | 0.37   |              |              |
| <b>Architectural Coating</b>      |                           |             |           |     |        | 4            |              |
| Air Compressors                   | Air Compressors           | 1           | 6         | 78  | 0.48   |              |              |

\*Equipment mix, Worker Trips, and Vendor Trips based on CalEEMod default

## Pavement Volume to Weight Conversion

| Duration   | Total SF of<br>Parking Lot | Assumed<br>Thickness<br>(foot) <sup>1</sup> | Debris Volume<br>(cu. ft) | Weight of<br>Crushed<br>Asphalt<br>(lbs/cf) <sup>2</sup> | AC Mass<br>(lbs) | AC Mass<br>(tons) |
|------------|----------------------------|---|---------------------------|--|------------------|-------------------|
| Demolition | 42,145                     | 0.33  | 14048                     | 45   | 632,175          | 316.09            |

<sup>1</sup> *Pavements and Surface Materials*. Nonpoint Education for Municipal Officials, Technical Paper Number 8. University of Connecticut Cooperative Extension System, 1999.

<sup>2</sup> <http://www.reade.com/reade-resources/reference-educational/reade-reference-chart-particle-property-briefings/26-weight-per-cubic-foot-and-specific-gravity-metals-minerals-organics-inorganics-ceramics>

CalEEMod Project Characteristics Inputs

Project Address: 1221 Monterey Road, Glendale  
Project Location: Los Angeles-- South Coast 91206  
Climate Zone: 12  
Land Use Setting: Urban  
Operational Year: 2018  
Utility Company: Southern California Edison  
Air Basin: South Coast Air Basin  
Air District: SCAQMD  
SRA: 7

|                             |      |       |
|-----------------------------|------|-------|
| Total Project Site Acreage: | 9.93 | acres |
| Acreage to be distrubed:    | 3.85 | acres |

CalEEMod Land Use Inputs

| Land Use            | Land Use Type | Land Use Subtype           | Unit Amount | Size Metric | Lot Acreage | Square Feet |
|---------------------|---------------|----------------------------|-------------|-------------|-------------|-------------|
| School Buildings    | Educational   | Junior High School         | 1.65        | 1000 sqft   | 0.04        | 1,645       |
| Non-Parking Asphalt | Parking       | Other Asphalt Surfaces     | 42.1        | 1000 sqft   | 0.97        | 42,145      |
| Landscape, Turf     | Parking       | Other Non-Asphalt Surfaces | 123.9       | 1000sqft    | 2.84        | 0           |
|                     |               |                            |             |             | 3.85        | acre        |



**Trip Generation**

|                                       | Weekday       | Weekends      |                           |
|---------------------------------------|---------------|---------------|---------------------------|
| Trip Generation*                      | 182           | 235           | Average Daily Trips (ADT) |
| ITE Manual Highest Scenario Trip Rate | 90.81         | 71.33         | trips/field               |
| Adjusted CalEEMod Trip Rate           | <b>110.64</b> | <b>142.86</b> | trips/1000sqft            |

\*Based on Traffic Impact Analysis for North Elementary School. PlaceWorks, November 2017.

Trip rates based on ITE Trip Generation Manual 9th Edition Soccer Complex land use (code 488). Analysis uses most conservative "Highest Rate" trip generation scenario

**Lighting (Electricity Use)\***

|                    |          |
|--------------------|----------|
| Number of Fixtures | 30       |
| Total Kilowatt     | 34.50 kW |

|              | Hours Per Day | Days Per Year | Total kWh/yr |
|--------------|---------------|---------------|--------------|
| Lighting Use | 5             | 340           | 58,650.00    |

|                      | KWhr/size/yr | Kwh/year       | KWhr/size/yr<br>with Stadium |
|----------------------|--------------|----------------|------------------------------|
| Lighting in CalEEMod | 2.59         | <b>4260.55</b> | <b>38,243.50</b>             |

**Calculation of GHGs from Field Lighting (City of Glendale)**

| CO <sub>2</sub> ** | CH <sub>4</sub> ** | N <sub>2</sub> O** | CO <sub>2</sub> e | CO <sub>2</sub> e |
|--------------------|--------------------|--------------------|-------------------|-------------------|
| lbs/Mwh            | lbs/Mwh            | lbs/Mwh            | lbs/Mwh           | MT/Kwh            |
| 383.88             | 0.095              | 0.012              | 389.95            | 0.000177          |
|                    |                    |                    | CO2 from Lighting | <b>MT/Year</b>    |
|                    |                    |                    |                   | <b>10.37</b>      |

\*Global Warming Potentials from the Climate Change 2007, IPCC Fourth Assessment Report (AR4).

\*\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label.

<http://www.energy.ca.gov/pcl/labels/>

**Solid Waste**

Solid Waste Generation: 0.00 TPY

*\*The project would not result in an increase in long-term solid waste disposal***Water Use**

|                     |        |     |
|---------------------|--------|-----|
| Septic Tank         | 0%     |     |
| Aerobic             | 100%   |     |
| Facultative Lagoons | 0%     |     |
|                     |        |     |
| Indoor Water Use:   | 34,025 | GPY |
| Outdoor Water Use:  | 87,492 | GPY |

*\* Provided by the Applicant***Architectural Coating****Non-Residential Architectural Coating**

|  |      |
|--|------|
| Percentage of Buildings' Interior Painted: | 100% |
| Percentage of Buildings' Exterior Painted: | 100% |

**SCAQMD Rule 1113**

|                             |    |                 |
|-----------------------------|----|-----------------|
| Interior Paint VOC content: | 50 | grams per liter |
| Exterior Paint VOC content: | 50 | grams per liter |

| Nonresidential Structures    | Land Use Square Feet | SCAQMD Factor | Total Paintable Surface Area <sup>2</sup> | Paintable Interior Area <sup>1</sup> | Paintable Exterior Area <sup>1</sup> |
|------------------------------|----------------------|---------------|---|--------------------------------------|--------------------------------------|
| Parking and Asphalt Striping | 42,145               | 0.06          | 2,529                                     |                                      | 2,529                                |
| School Restroom and Shed     | 1,645                | 2             | 3,290                                     | 2,468                                | 823                                  |

<sup>1</sup> CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively. Architectural coatings for the parking lot is based on CalEEMod methodology applied to a surface parking lot (i.e., striping), in which 6% of surface area is painted.

<sup>2</sup> Applied CalEEMod Methodology in calculating total. The program assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage defined by the user. The default values based on SCAQMD methods used in their coating rules are 75% for the interior surfaces and 25% for the exterior shell

**Energy Mitigation****2016 Building Energy Efficiency Standards**

Buildings constructed after January 1, 2017 are required to meet the 2016 Building Energy Efficiency Standards.

Non-Residential Exceed Title 24 5% Improvement over 2013<sup>1</sup>

Sources:

<sup>1</sup> California Energy Commission. 2015a. 2016 Building Energy Efficiency Standards, Adoption Hearing Presentation. <http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/> June 10.

**Water Mitigation**

|  |     |                     |
|--|-----|---------------------|
| Install Low Flow Bathroom Faucet       | 32  | % Reduction in flow |
| Install Low Flow Kitchen Faucet        | 18  | % Reduction in flow |
| Install Low Flow Toilet                | 20  | % Reduction in flow |
| Install Low Flow Shower                | 20  | % Reduction in flow |
| Use Water Efficiency Irrigation System | 6.1 | % Reduction in flow |

## Changes to the CalEEMod Defaults - Fleet Mix 2018 (Proposed)

Trips 182

| Default                   | LDA  | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |      |
|---------------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------|
| FleetMix (Model Default)  | 0.548  | 0.046127 | 0.19933  | 0.125604 | 0.017697 | 0.005953 | 0.01836  | 0.027618 | 0.002341 | 0.002583 | 0.004804 | 0.000667 | 0.000944 | 100% |
| Trips                     | 100  | 8        | 36       | 23       | 3        | 1        | 3        | 5        | 0        | 0        | 1        | 0        | 0        | 182  |
| Percent                   | 80%  |          |          | 13%      | 8%       |          |          |          |          |          |          |          |          | 100% |
| without buses/MH          | 0.547972   | 0.046127 | 0.199330 | 0.125604 | 0.017697 | 0.005953 | 0.018360 | 0.027618 | 0        | 0        | 0.004804 | 0.000000 | 0        | 99%  |
| Percent                   | 80%  |          |          | 13%      | 7%       |          |          |          |          |          |          |          |          | 99%  |
| Adjusted without buses/MH | 0.547972   | 0.046127 | 0.199330 | 0.125604 | 0.019358 | 0.006512 | 0.020083 | 0.030210 | 0.000000 | 0.000000 | 0.005255 | 0.000000 | 0.000000 |      |
| Percent check             | 80%  |          |          | 13%      | 8%       |          |          |          |          |          |          |          |          | 100% |
| Assumed Mix               | 98.0%  |          |          | 1.00%    | 1.00%    |          |          |          |          |          |          |          |          | 100% |
| adjusted with Assumed     | 0.672372   | 0.056599 | 0.244582 | 0.010000 | 0.002542 | 0.000855 | 0.002637 | 0.003967 | 0.000000 | 0.000000 | 0.006448 | 0.000000 | 0.000000 | 100% |
| Trips                     | 122  | 10       | 45       | 2        | 0        | 0        | 0        | 1        | 0        | 0        | 1        | 0        | 0        | 182  |
| Check                     | 178  |          |          | 2        | 2        |          |          |          |          |          |          |          |          |      |
| Source:                   | Traffic Impact Analysis for Wilson Middle School. PlaceWorks, November 2017. |          |          |          |          |          |          |          |          |          |          |          |          |      |

## CITY OF GLENDALE POWER CONTENT

MTCO<sub>2</sub>e

| Source            | Percent* | Adjusted percent | Emission factor<br>(MTCO <sub>2</sub> e/KWH)** |
|-------------------|----------|------------------|--|
| Coal              | 5.00%    | 5.00%            | 0.000981684                                    |
| Large hydro       | 10.00%   | 10.00%           | 0  |
| Natural gas       | 29.00%   | 29.00%           | 0.000387842                                    |
| Nuclear           | 7.00%    | 7.00%            | 0  |
| Oil               | 0.00%    | 0.00%            | 0.00056559                                     |
| Other/unspecified | 1.00%    | 1.00%            | 0.000428                                       |
| Biomass           | 12.00%   | 12.00%           | 7.41486E-05                                    |
| Geothermal        | 2.00%    | 2.00%            | 0.000107172                                    |
| Small hydro       | 8.00%    | 8.00%            | 0  |
| Solar             | 0.00%    | 0.00%            | 5.7828E-06                                     |
| Wind              | 26.00%   | 26.00%           | 0  |
|                   | 100.00%  | 100.00%          |  |

|                        |                    |                         |
|------------------------|--------------------|-------------------------|
| <b>Emission factor</b> | <b>0.000176880</b> | MTCO <sub>2</sub> e/KWH |
|------------------------|--------------------|-------------------------|

Calculation check 0.000176880

0.26

|                         |          |                  |       |
|-------------------------|----------|------------------|-------|
| MTCO <sub>2</sub> e/kWh | 0.000428 | CO <sub>2</sub>  | 83.1  |
|                         |          | CH <sub>4</sub>  | 0.27  |
|                         |          | N <sub>2</sub> O | 0.3   |
|                         |          |                  | 83.67 |

\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label. <http://www.energy.ca.gov/pcl/labels/>

\*\*Global Warming Potentials from the Climate Change 2007, IPCC Fourth Assessment Report (AR4).

## CITY OF GLENDALE POWER CONTENT

MTCO<sub>2</sub>

| Source            | Percent* | Adjusted percent | Emission factor<br>(MTCO <sub>2</sub> /KWH)** |
|-------------------|----------|------------------|---|
| Coal              | 5.00%    | 5.00%            | 0.000974076                                   |
| Large hydro       | 10.00%   | 10.00%           | 0   |
| Natural gas       | 29.00%   | 29.00%           | 0.000387411                                   |
| Nuclear           | 7.00%    | 7.00%            | 0   |
| Oil               | 0.00%    | 0.00%            | 0.000563808                                   |
| Other/unspecified | 1.00%    | 1.00%            | 0.00042508                                    |
| Biomass           | 12.00%   | 12.00%           | 5.5648E-05                                    |
| Geothermal        | 2.00%    | 2.00%            | 0.000107172                                   |
| Small hydro       | 8.00%    | 8.00%            | 0   |
| Solar             | 0.00%    | 0.00%            | 5.77688E-06                                   |
| Wind              | 26.00%   | 26.00%           | 0   |
|                   | 100.00%  | 100.00%          |   |

|                 |   |
|-----------------|---|
| Emission factor | <b>0.000174125</b> MTCO <sub>2</sub> /KWH |
|-----------------|---|

| MTCO <sub>2</sub> e |          | GWP |
|---------------------|----------|-----|
| 0.993187522         | 0.000425 | 1   |
| 0.003226963         | 0.000001 | 25  |
| 0.003585515         | 0.000002 | 298 |

\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label. <http://www.energy.ca.gov/pcl/labels/>

\*\*Global Warming Potentials from the Climate Change 2007, IPCC Fourth Assessment Report (AR4).

## CITY OF GLENDALE POWER CONTENT

MTCH<sub>4</sub>

| Source            | Percent* | Adjusted percent | Emission factor<br>(MTCH <sub>4</sub> /KWH)** |
|-------------------|----------|------------------|---|
| Coal              | 5.00%    | 5.00%            | 1.10044E-07                                   |
| Large hydro       | 10.00%   | 10.00%           | 0   |
| Natural gas       | 29.00%   | 29.00%           | 7.80947E-09                                   |
| Nuclear           | 7.00%    | 7.00%            | 0   |
| Oil               | 0.00%    | 0.00%            | 2.22183E-08                                   |
| Other/unspecified | 1.00%    | 1.00%            | 0.00000006                                    |
| Biomass           | 12.00%   | 12.00%           | 2.88637E-07                                   |
| Geothermal        | 2.00%    | 2.00%            | 0   |
| Small hydro       | 8.00%    | 8.00%            | 0   |
| Solar             | 0.00%    | 0.00%            | 1.08065E-10                                   |
| Wind              | 26.00%   | 26.00%           | 0   |
|                   | 100.00%  | 100.00%          |   |

|                        |                    |                        |
|------------------------|--------------------|------------------------|
| <b>Emission factor</b> | <b>0.000000043</b> | MTCH <sub>4</sub> /KWH |
|------------------------|--------------------|------------------------|

MT/gas

0.00042508

0.00000006

0.00000001

\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label. <http://www.energy.ca.gov/pcl/labels/>

\*\*Global Warming Potentials from the Climate Change 2007, IPCC Fourth Assessment Report (AR4).

## CITY OF GLENDALE POWER CONTENT

MTN<sub>2</sub>O

| Source            | Percent* | Adjusted percent | Emission factor<br>(MTNO <sub>2</sub> /KWH)** |
|-------------------|----------|------------------|---|
| Coal              | 5.00%    | 5.00%            | 1.63004E-08                                   |
| Large hydro       | 10.00%   | 10.00%           | 0   |
| Natural gas       | 29.00%   | 29.00%           | 7.9203E-10                                    |
| Nuclear           | 7.00%    | 7.00%            | 0   |
| Oil               | 0.00%    | 0.00%            | 4.1182E-09                                    |
| Other/unspecified | 1.00%    | 1.00%            | 0.00  |
| Biomass           | 12.00%   | 12.00%           | 3.78679E-08                                   |
| Geothermal        | 2.00%    | 2.00%            | 0   |
| Small hydro       | 8.00%    | 8.00%            | 0   |
| Solar             | 0.00%    | 0.00%            | 1.08002E-11                                   |
| Wind              | 26.00%   | 26.00%           | 0   |
|                   | 100.00%  | 100.00%          |   |

|                 |              |                        |
|-----------------|--------------|------------------------|
| Emission factor | 0.0000000056 | MTN <sub>2</sub> O/KWH |
|-----------------|--------------|------------------------|

\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 Glendale Power Content Label. <http://www.energy.ca.gov/pcl/labels/>

\*\*Global Warming Potentials from the Climate Change 2007, IPCC Fourth Assessment Report (AR4).

Emission Factor Calculator

|             |     |
|-------------|-----|
| Select GWPs | AR4 |
|-------------|-----|

|                  |     |
|------------------|-----|
| CO <sub>2</sub>  | 1   |
| CH <sub>4</sub>  | 25  |
| N <sub>2</sub> O | 298 |

| Fuel type  | MWh generated | lbs CO <sub>2</sub> /kWh | lbs CH <sub>4</sub> /kWh | lbs N <sub>2</sub> O/kWh | lbs CO <sub>2</sub> e/kWh | MTCO <sub>2</sub> e/kWh |
|------------|---------------|--------------------------|--------------------------|--------------------------|---------------------------|-------------------------|
| Biomass    | 6,006,423     | 0.122682                 | 0.000636                 | 0.000083                 | 0.163468                  | 0.000074                |
| Coal       | 835,811       | 2.147448                 | 0.000243                 | 0.000036                 | 2.164222                  | 0.000982                |
| Gas        | 108,673,627   | 0.854086                 | 0.000017                 | 0.000002                 | 0.855036                  | 0.000388                |
| Geothermal | 7,308,060     | 0.236272                 | 0.000000                 | 0.000000                 | 0.236272                  | 0.000107                |
| Hydro      | 14,313,811    | 0.000000                 | 0.000000                 | 0.000000                 | 0.000000                  | -                       |
| Nuclear    | 16,985,978    | 0.000000                 | 0.000000                 | 0.000000                 | 0.000000                  | -                       |
| Oil        | 19,345        | 1.242971                 | 0.000049                 | 0.000009                 | 1.246901                  | 0.000566                |
| Solar      | 7,473,990     | 0.012736                 | 0.000000                 | 0.000000                 | 0.012749                  | 0.000006                |
| Wind       | 12,168,969    | 0.000000                 | 0.000000                 | 0.000000                 | 0.000000                  | -                       |
| Other      | 1,789,739     |                          |                          |                          |                           | 0.000428                |



334,944.51  
815,845.87  
42,189,356.30  
784,860.20  
-  
-  
10,929.49  
43,266.60  
-

<< CARB

AR2  
AR4  
AR5

|                  | AR2 | AR4 | AR5 |
|------------------|-----|-----|-----|
| CO <sub>2</sub>  | 1   | 1   | 1   |
| CH <sub>4</sub>  | 21  | 25  | 28  |
| N <sub>2</sub> O | 310 | 298 | 265 |

|             |           |
|-------------|-----------|
| kWh per MWh | 1,000     |
| kWh per GWh | 1,000,000 |
| lbs per MT  | 2204.6    |

## Regional Construction Emissions Worksheet

### Asphalt Demolition Summer

|              |               | 2018 | ROG           | NOx            | CO             | SO2             | PM10 Total    | PM2.5 Total   |
|--------------|---------------|------|---------------|----------------|----------------|-----------------|---------------|---------------|
| Onsite       |               |      |               |                |                |                 |               |               |
|              | Fugitive Dust |      |               |                |                |                 | 0             | 0             |
|              | Off-Road      |      | 3.719         | 38.3225        | 22.304         | 0.0388          | 1.9386        | 1.8048        |
|              | Total         |      | <b>3.719</b>  | <b>38.3225</b> | <b>22.304</b>  | <b>0.0388</b>   | <b>1.9386</b> | <b>1.8048</b> |
| Offsite      |               |      |               |                |                |                 |               |               |
|              | Hauling       |      | 0             | 0              | 0              | 0               | 0             | 0             |
|              | Vendor        |      | 0.0184        | 0.4902         | 0.134          | 1.06E-03        | 0.0274        | 0.0103        |
|              | Worker        |      | 0.0829        | 0.0625         | 0.8101         | 1.89E-03        | 0.156         | 0.0426        |
|              | Total         |      | <b>0.1013</b> | <b>0.5528</b>  | <b>0.9442</b>  | <b>2.95E-03</b> | <b>0.1835</b> | <b>0.0529</b> |
| <b>TOTAL</b> |               |      | <b>3.8203</b> | <b>38.8753</b> | <b>23.2482</b> | <b>0.0418</b>   | <b>2.1221</b> | <b>1.8577</b> |

### Asphalt Demolition Winter

|              |               | 2018 | ROG           | NOx            | CO             | SO2             | PM10 Total    | PM2.5 Total   |
|--------------|---------------|------|---------------|----------------|----------------|-----------------|---------------|---------------|
| Onsite       |               |      |               |                |                |                 |               |               |
|              | Fugitive Dust |      |               |                |                |                 | 0             | 0             |
|              | Off-Road      |      | 3.719         | 38.3225        | 22.304         | 0.0388          | 1.9386        | 1.8048        |
|              | Total         |      | <b>3.719</b>  | <b>38.3225</b> | <b>22.304</b>  | <b>0.0388</b>   | <b>1.9386</b> | <b>1.8048</b> |
| Offsite      |               |      |               |                |                |                 |               |               |
|              | Hauling       |      | 0             | 0              | 0              | 0               | 0             | 0             |
|              | Vendor        |      | 0.0192        | 0.4913         | 0.1473         | 1.03E-03        | 0.0275        | 0.0103        |
|              | Worker        |      | 0.0917        | 0.0693         | 0.7459         | 1.78E-03        | 0.156         | 0.0426        |
|              | Total         |      | <b>0.1109</b> | <b>0.5606</b>  | <b>0.8932</b>  | <b>2.81E-03</b> | <b>0.1835</b> | <b>0.053</b>  |
| <b>TOTAL</b> |               |      | <b>3.8299</b> | <b>38.8831</b> | <b>23.1972</b> | <b>0.0416</b>   | <b>2.1221</b> | <b>1.8578</b> |

### Asphalt Demolition Haul Summer

|              |               | 2018 | ROG           | NOx           | CO            | SO2             | PM10 Total      | PM2.5 Total     |
|--------------|---------------|------|---------------|---------------|---------------|-----------------|-----------------|-----------------|
| Onsite       |               |      |               |               |               |                 |                 |                 |
|              | Fugitive Dust |      |               |               |               |                 | 1.45E-01        | 2.19E-02        |
|              | Off-Road      |      | 0             | 0             | 0             | 0               | 0               | 0               |
|              | Total         |      | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>        | <b>1.45E-01</b> | <b>2.19E-02</b> |
| Offsite      |               |      |               |               |               |                 |                 |                 |
|              | Hauling       |      | 0.0159        | 0.5169        | 0.107         | 1.30E-03        | 0.028           | 9.08E-03        |
|              | Vendor        |      | 0             | 0             | 0             | 0               | 0               | 0               |
|              | Worker        |      | 0             | 0             | 0             | 0               | 0               | 0               |
|              | Total         |      | <b>0.0159</b> | <b>0.5169</b> | <b>0.107</b>  | <b>1.30E-03</b> | <b>0.028</b>    | <b>9.08E-03</b> |
| <b>TOTAL</b> |               |      | <b>0.0159</b> | <b>0.5169</b> | <b>0.1070</b> | <b>0.0013</b>   | <b>0.1725</b>   | <b>0.0310</b>   |

**Summer Demolition + Haul** **3.8362** **39.3922** **23.3552** **0.0431** **2.2946** **1.8887**

### Asphalt Demolition Haul Winter

|              |               | 2018 | ROG           | NOx           | CO            | SO2             | PM10 Total      | PM2.5 Total     |
|--------------|---------------|------|---------------|---------------|---------------|-----------------|-----------------|-----------------|
| Onsite       |               |      |               |               |               |                 |                 |                 |
|              | Fugitive Dust |      |               |               |               |                 | 1.45E-01        | 2.19E-02        |
|              | Off-Road      |      | 0             | 0             | 0             | 0               | 0               | 0               |
|              | Total         |      | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>        | <b>1.45E-01</b> | <b>2.19E-02</b> |
| Offsite      |               |      |               |               |               |                 |                 |                 |
|              | Hauling       |      | 0.0163        | 0.524         | 0.1144        | 1.28E-03        | 0.0281          | 9.12E-03        |
|              | Vendor        |      | 0             | 0             | 0             | 0               | 0               | 0               |
|              | Worker        |      | 0             | 0             | 0             | 0               | 0               | 0               |
|              | Total         |      | <b>0.0163</b> | <b>0.524</b>  | <b>0.1144</b> | <b>1.28E-03</b> | <b>0.0281</b>   | <b>9.12E-03</b> |
| <b>TOTAL</b> |               |      | <b>0.0163</b> | <b>0.5240</b> | <b>0.1144</b> | <b>0.0013</b>   | <b>0.1726</b>   | <b>0.0310</b>   |

**Winter Demolition Haul** **3.8462** **39.4071** **23.3116** **0.0429** **2.2947** **1.8888**

| Site Preparation Summer  |               |               |                |                |                 |                |                 |
|--------------------------|---------------|---------------|----------------|----------------|-----------------|----------------|-----------------|
|                          |               | ROG           | NOx            | CO             | SO2             | PM10 Total     | PM2.5 Total     |
| Onsite                   | 2018          |               |                |                |                 |                |                 |
|                          | Fugitive Dust |               |                |                |                 | 7.7233         | 4.2454          |
|                          | Off-Road      | 4.5627        | 48.1988        | 22.4763        | 0.038           | 2.5769         | 2.3708          |
|                          | Total         | <b>4.5627</b> | <b>48.1988</b> | <b>22.4763</b> | <b>0.038</b>    | <b>10.3002</b> | <b>6.6161</b>   |
| Offsite                  |               |               |                |                |                 |                |                 |
|                          | Hauling       | 0             | 0              | 0              | 0               | 0              | 0               |
|                          | Vendor        | 0.0184        | 0.4902         | 0.134          | 1.06E-03        | 0.0274         | 0.0103          |
|                          | Worker        | 0.0995        | 0.0751         | 0.9721         | 2.27E-03        | 0.1873         | 0.0512          |
|                          | Total         | <b>0.1179</b> | <b>0.5653</b>  | <b>1.1062</b>  | <b>3.33E-03</b> | <b>0.2147</b>  | <b>0.0614</b>   |
| <b>TOTAL</b>             |               | <b>4.6806</b> | <b>48.7641</b> | <b>23.5825</b> | <b>0.0413</b>   | <b>10.5149</b> | <b>6.6775</b>   |
| Site Preparation Winter  |               |               |                |                |                 |                |                 |
|                          |               | ROG           | NOx            | CO             | SO2             | PM10 Total     | PM2.5 Total     |
| Onsite                   | 2018          |               |                |                |                 |                |                 |
|                          | Fugitive Dust |               |                |                |                 | 7.7233         | 4.2454          |
|                          | Off-Road      | 4.5627        | 48.1988        | 22.4763        | 0.038           | 2.5769         | 2.3708          |
|                          | Total         | <b>4.5627</b> | <b>48.1988</b> | <b>22.4763</b> | <b>0.038</b>    | <b>10.3002</b> | <b>6.6161</b>   |
| Offsite                  |               |               |                |                |                 |                |                 |
|                          | Hauling       | 0             | 0              | 0              | 0               | 0              | 0               |
|                          | Vendor        | 0.0192        | 0.4913         | 0.1473         | 1.03E-03        | 0.0275         | 0.0103          |
|                          | Worker        | 0.1101        | 0.0831         | 0.8951         | 2.14E-03        | 0.1873         | 0.0512          |
|                          | Total         | <b>0.1293</b> | <b>0.5745</b>  | <b>1.0424</b>  | <b>3.17E-03</b> | <b>0.2147</b>  | <b>0.0615</b>   |
| <b>TOTAL</b>             |               | <b>4.6920</b> | <b>48.7733</b> | <b>23.5187</b> | <b>0.0412</b>   | <b>10.5149</b> | <b>6.6776</b>   |
| Grading Summer           |               |               |                |                |                 |                |                 |
|                          |               | ROG           | NOx            | CO             | SO2             | PM10 Total     | PM2.5 Total     |
| Onsite                   | 2018          |               |                |                |                 |                |                 |
|                          | Fugitive Dust |               |                |                |                 | 2.8011         | 1.4396          |
|                          | Off-Road      | 2.7733        | 30.6725        | 16.577         | 0.0297          | 1.5513         | 1.4272          |
|                          | Total         | <b>2.7733</b> | <b>30.6725</b> | <b>16.577</b>  | <b>0.0297</b>   | <b>4.3524</b>  | <b>2.8668</b>   |
| Offsite                  |               |               |                |                |                 |                |                 |
|                          | Hauling       | 0             | 0              | 0              | 0               | 0              | 0               |
|                          | Vendor        | 0.0184        | 0.4902         | 0.134          | 1.06E-03        | 0.0274         | 0.0103          |
|                          | Worker        | 0.0829        | 0.0625         | 0.8101         | 1.89E-03        | 0.156          | 0.0426          |
|                          | Total         | <b>0.1013</b> | <b>0.5528</b>  | <b>0.9442</b>  | <b>2.95E-03</b> | <b>0.1835</b>  | <b>0.0529</b>   |
| <b>TOTAL</b>             |               | <b>2.8746</b> | <b>31.2253</b> | <b>17.5212</b> | <b>0.0327</b>   | <b>4.5359</b>  | <b>2.9197</b>   |
| Grading Winter           |               |               |                |                |                 |                |                 |
|                          |               | ROG           | NOx            | CO             | SO2             | PM10 Total     | PM2.5 Total     |
| Onsite                   | 2018          |               |                |                |                 |                |                 |
|                          | Fugitive Dust |               |                |                |                 | 2.8011         | 1.4396          |
|                          | Off-Road      | 2.7733        | 30.6725        | 16.577         | 0.0297          | 1.5513         | 1.4272          |
|                          | Total         | <b>2.7733</b> | <b>30.6725</b> | <b>16.577</b>  | <b>0.0297</b>   | <b>4.3524</b>  | <b>2.8668</b>   |
| Offsite                  |               |               |                |                |                 |                |                 |
|                          | Hauling       | 0             | 0              | 0              | 0               | 0              | 0               |
|                          | Vendor        | 0.0192        | 0.4913         | 0.1473         | 1.03E-03        | 0.0275         | 0.0103          |
|                          | Worker        | 0.0917        | 0.0693         | 0.7459         | 1.78E-03        | 0.156          | 0.0426          |
|                          | Total         | <b>0.1109</b> | <b>0.5606</b>  | <b>0.8932</b>  | <b>2.81E-03</b> | <b>0.1835</b>  | <b>0.053</b>    |
| <b>TOTAL</b>             |               | <b>2.8842</b> | <b>31.2331</b> | <b>17.4702</b> | <b>0.0325</b>   | <b>4.5359</b>  | <b>2.9198</b>   |
| Grading Soil Haul Summer |               |               |                |                |                 |                |                 |
|                          |               | ROG           | NOx            | CO             | SO2             | PM10 Total     | PM2.5 Total     |
| Onsite                   | 2018          |               |                |                |                 |                |                 |
|                          | Fugitive Dust |               |                |                |                 | 0.0404         | 6.12E-03        |
|                          | Off-Road      | 0             | 0              | 0              | 0               | 0              | 0               |
|                          | Total         | <b>0</b>      | <b>0</b>       | <b>0</b>       | <b>0</b>        | <b>0.0404</b>  | <b>6.12E-03</b> |
| Offsite                  |               |               |                |                |                 |                |                 |
|                          | Hauling       | 1.0379        | 33.7804        | 6.9897         | 0.0848          | 1.8322         | 0.5935          |
|                          | Vendor        | 0             | 0              | 0              | 0               | 0              | 0               |
|                          | Worker        | 0             | 0              | 0              | 0               | 0              | 0               |
|                          | Total         | <b>1.0379</b> | <b>33.7804</b> | <b>6.9897</b>  | <b>0.0848</b>   | <b>1.8322</b>  | <b>0.5935</b>   |
| <b>TOTAL</b>             |               | <b>1.0379</b> | <b>33.7804</b> | <b>6.9897</b>  | <b>0.0848</b>   | <b>1.8726</b>  | <b>0.5996</b>   |
| <b>Grading + Haul</b>    |               | <b>3.9125</b> | <b>65.0057</b> | <b>24.5109</b> | <b>0.1175</b>   | <b>6.4085</b>  | <b>3.5193</b>   |
| Grading Haul Winter      |               |               |                |                |                 |                |                 |
|                          |               | ROG           | NOx            | CO             | SO2             | PM10 Total     | PM2.5 Total     |
| Onsite                   | 2018          |               |                |                |                 |                |                 |
|                          | Fugitive Dust |               |                |                |                 | 0.0404         | 6.12E-03        |
|                          | Off-Road      | 0             | 0              | 0              | 0               | 0              | 0               |
|                          | Total         | <b>0</b>      | <b>0</b>       | <b>0</b>       | <b>0</b>        | <b>0.0404</b>  | <b>6.12E-03</b> |
| Offsite                  |               |               |                |                |                 |                |                 |
|                          | Hauling       | 1.0641        | 34.2431        | 7.4775         | 0.0833          | 1.8347         | 0.5959          |
|                          | Vendor        | 0             | 0              | 0              | 0.00E+00        | 0              | 0               |
|                          | Worker        | 0             | 0              | 0              | 0.00E+00        | 0              | 0               |
|                          | Total         | <b>1.0641</b> | <b>34.2431</b> | <b>7.4775</b>  | <b>8.33E-02</b> | <b>1.8347</b>  | <b>0.5959</b>   |
| <b>TOTAL</b>             |               | <b>1.0641</b> | <b>34.2431</b> | <b>7.4775</b>  | <b>0.0833</b>   | <b>1.8751</b>  | <b>0.6020</b>   |
| <b>Grading + Haul</b>    |               | <b>2.1020</b> | <b>68.0235</b> | <b>14.4672</b> | <b>0.1681</b>   | <b>3.7477</b>  | <b>1.2016</b>   |

| Utility Trenching Summer |          |      |               |               |               |                 |                        |
|--------------------------|----------|------|---------------|---------------|---------------|-----------------|------------------------|
|                          |          | 2018 | ROG           | NOx           | CO            | SO2             | PM10 Total PM2.5 Total |
| Onsite                   |          |      |               |               |               |                 |                        |
|                          | Off-Road |      | 0.5322        | 5.2595        | 4.6734        | 6.21E-03        | 0.3726 0.3428          |
|                          | Total    |      | <b>0.5322</b> | <b>5.2595</b> | <b>4.6734</b> | <b>6.21E-03</b> | <b>0.3726 0.3428</b>   |
| Offsite                  |          |      |               |               |               |                 |                        |
|                          | Hauling  |      | 0             | 0             | 0             | 0               | 0                      |
|                          | Vendor   |      | 0.0184        | 0.4902        | 0.134         | 1.06E-03        | 0.0274 0.0103          |
|                          | Worker   |      | 0.0276        | 0.0209        | 0.27          | 6.30E-04        | 0.052 0.0142           |
|                          | Total    |      | <b>0.046</b>  | <b>0.5111</b> | <b>0.4041</b> | <b>1.69E-03</b> | <b>0.0794 0.0245</b>   |
| <b>TOTAL</b>             |          |      | <b>0.5782</b> | <b>5.7706</b> | <b>5.0775</b> | <b>0.0079</b>   | <b>0.4520 0.3673</b>   |

| Utility Trenching Winter |          |      |               |               |               |                 |                        |
|--------------------------|----------|------|---------------|---------------|---------------|-----------------|------------------------|
|                          |          | 2018 | ROG           | NOx           | CO            | SO2             | PM10 Total PM2.5 Total |
| Onsite                   |          |      |               |               |               |                 |                        |
|                          | Off-Road |      | 0.5322        | 5.2595        | 4.6734        | 6.21E-03        | 0.3726 0.3428          |
|                          | Total    |      | <b>0.5322</b> | <b>5.2595</b> | <b>4.6734</b> | <b>6.21E-03</b> | <b>0.3726 0.3428</b>   |
| Offsite                  |          |      |               |               |               |                 |                        |
|                          | Hauling  |      | 0             | 0             | 0             | 0               | 0                      |
|                          | Vendor   |      | 0.0192        | 0.4913        | 0.1473        | 1.03E-03        | 0.0275 0.0103          |
|                          | Worker   |      | 0.0306        | 0.0231        | 0.2486        | 5.90E-04        | 0.052 0.0142           |
|                          | Total    |      | <b>0.0498</b> | <b>0.5144</b> | <b>0.396</b>  | <b>1.62E-03</b> | <b>0.0795 0.0245</b>   |
| <b>TOTAL</b>             |          |      | <b>0.5820</b> | <b>5.7739</b> | <b>5.0694</b> | <b>0.0078</b>   | <b>0.4521 0.3673</b>   |

| Landscaping + Field Lighting Summer |          |      |               |                |               |                 |                        |
|-------------------------------------|----------|------|---------------|----------------|---------------|-----------------|------------------------|
|                                     |          | 2018 | ROG           | NOx            | CO            | SO2             | PM10 Total PM2.5 Total |
| Onsite                              |          |      |               |                |               |                 |                        |
|                                     | Off-Road |      | 1.5789        | 17.4216        | 6.7126        | 0.0133          | 0.8474 0.7796          |
|                                     | Total    |      | <b>1.5789</b> | <b>17.4216</b> | <b>6.7126</b> | <b>0.0133</b>   | <b>0.8474 0.7796</b>   |
| Offsite                             |          |      |               |                |               |                 |                        |
|                                     | Hauling  |      | 0             | 0              | 0             | 0               | 0                      |
|                                     | Vendor   |      | 0.0322        | 0.8579         | 0.2346        | 1.85E-03        | 0.048 0.018            |
|                                     | Worker   |      | 0.0995        | 0.0751         | 0.9721        | 2.27E-03        | 0.1873 0.0512          |
|                                     | Total    |      | <b>0.1317</b> | <b>0.933</b>   | <b>1.2067</b> | <b>4.12E-03</b> | <b>0.2352 0.0691</b>   |
| <b>TOTAL</b>                        |          |      | <b>1.7106</b> | <b>18.3546</b> | <b>7.9193</b> | <b>0.0174</b>   | <b>1.0826 0.8487</b>   |

|                             |  |  |               |                |                |               |                      |
|-----------------------------|--|--|---------------|----------------|----------------|---------------|----------------------|
| <b>Paving + Landscaping</b> |  |  | <b>3.3920</b> | <b>32.9564</b> | <b>21.4328</b> | <b>0.0388</b> | <b>2.1277 1.6773</b> |
|-----------------------------|--|--|---------------|----------------|----------------|---------------|----------------------|

| Landscaping + Field Lighting Winter |          |      |               |                |               |                 |                        |
|-------------------------------------|----------|------|---------------|----------------|---------------|-----------------|------------------------|
|                                     |          | 2018 | ROG           | NOx            | CO            | SO2             | PM10 Total PM2.5 Total |
| Onsite                              |          |      |               |                |               |                 |                        |
|                                     | Off-Road |      | 1.5789        | 17.4216        | 6.7126        | 0.0133          | 0.8474 0.7796          |
|                                     | Total    |      | <b>1.5789</b> | <b>17.4216</b> | <b>6.7126</b> | <b>0.0133</b>   | <b>0.8474 0.7796</b>   |
| Offsite                             |          |      |               |                |               |                 |                        |
|                                     | Hauling  |      | 0             | 0              | 0             | 0               | 0                      |
|                                     | Vendor   |      | 0.0336        | 0.8599         | 0.2578        | 1.80E-03        | 0.0481 0.0181          |
|                                     | Worker   |      | 0.1101        | 0.0831         | 0.8951        | 2.14E-03        | 0.1873 0.0512          |
|                                     | Total    |      | <b>0.1436</b> | <b>0.943</b>   | <b>1.1529</b> | <b>3.94E-03</b> | <b>0.2353 0.0692</b>   |
| <b>TOTAL</b>                        |          |      | <b>1.7225</b> | <b>18.3646</b> | <b>7.8655</b> | <b>0.0172</b>   | <b>1.0827 0.8488</b>   |

|                             |  |  |               |                |                |               |                      |
|-----------------------------|--|--|---------------|----------------|----------------|---------------|----------------------|
| <b>Paving + Landscaping</b> |  |  | <b>3.4157</b> | <b>32.9753</b> | <b>21.2933</b> | <b>0.0385</b> | <b>2.1278 1.6774</b> |
|-----------------------------|--|--|---------------|----------------|----------------|---------------|----------------------|

| Asphalt Paving Summer |          |      |               |                |                |                 |                        |
|-----------------------|----------|------|---------------|----------------|----------------|-----------------|------------------------|
|                       |          | 2018 | ROG           | NOx            | CO             | SO2             | PM10 Total PM2.5 Total |
| Onsite                |          |      |               |                |                |                 |                        |
|                       | Off-Road |      | 1.4239        | 14.5184        | 12.4333        | 0.0189          | 0.837 0.7718           |
|                       | Paving   |      | 0.147         |                |                |                 | 0                      |
|                       | Total    |      | <b>1.5709</b> | <b>14.5184</b> | <b>12.4333</b> | <b>0.0189</b>   | <b>0.837 0.7718</b>    |
| Offsite               |          |      |               |                |                |                 |                        |
|                       | Hauling  |      | 0             | 0              | 0              | 0               | 0                      |
|                       | Vendor   |      | 0             | 0              | 0              | 0.00E+00        | 0                      |
|                       | Worker   |      | 0.1105        | 0.0834         | 1.0802         | 2.52E-03        | 0.2081 0.0568          |
|                       | Total    |      | <b>0.1105</b> | <b>0.0834</b>  | <b>1.0802</b>  | <b>2.52E-03</b> | <b>0.2081 0.0568</b>   |
| <b>TOTAL</b>          |          |      | <b>1.6814</b> | <b>14.6018</b> | <b>13.5135</b> | <b>0.0214</b>   | <b>1.0451 0.8286</b>   |

| Asphalt Paving Winter |          |      | ROG    | NOx     | CO      | SO2      | PM10 Total | PM2.5 Total |
|-----------------------|----------|------|--------|---------|---------|----------|------------|-------------|
| Onsite                |          | 2018 |        |         |         |          |            |             |
|                       | Off-Road |      | 1.4239 | 14.5184 | 12.4333 | 0.0189   | 0.837      | 0.7718      |
|                       | Paving   |      | 0.147  |         |         |          | 0          | 0           |
|                       | Total    |      | 1.5709 | 14.5184 | 12.4333 | 0.0189   | 0.837      | 0.7718      |
| Offsite               |          |      |        |         |         |          |            |             |
|                       | Hauling  |      | 0      | 0       | 0       | 0        | 0          | 0           |
|                       | Vendor   |      | 0      | 0       | 0       | 0.00E+00 | 0          | 0           |
|                       | Worker   |      | 0.1223 | 0.0923  | 0.9945  | 2.37E-03 | 0.2081     | 0.0568      |
|                       | Total    |      | 0.1223 | 0.0923  | 0.9945  | 2.37E-03 | 0.2081     | 0.0568      |
| <b>TOTAL</b>          |          |      | 1.6932 | 14.6107 | 13.4278 | 0.0213   | 1.0451     | 0.8286      |

| Architectural Coating Summer |                 |               |               |               |                 |               |               |
|------------------------------|-----------------|---------------|---------------|---------------|-----------------|---------------|---------------|
|                              |                 | ROG           | NOx           | CO            | SO2             | PM10 Total    | PM2.5 Total   |
| Onsite                       | 2018            |               |               |               |                 |               |               |
|                              | Archit. Coating | 0.7493        |               |               |                 | 0             | 0             |
|                              | Off-Road        | 0.2986        | 2.0058        | 1.8542        | 2.97E-03        | 0.1506        | 0.1506        |
|                              | Total           | <b>1.048</b>  | <b>2.0058</b> | <b>1.8542</b> | <b>2.97E-03</b> | <b>0.1506</b> | <b>0.1506</b> |
| Offsite                      |                 |               |               |               |                 |               |               |
|                              | Hauling         | 2.21E-03      | 0.0718        | 0.0149        | 1.80E-04        | 3.89E-03      | 1.26E-03      |
|                              | Vendor          | 0             | 0             | 0             | 0.00E+00        | 0             | 0             |
|                              | Worker          | 0.0221        | 0.0167        | 0.216         | 5.00E-04        | 0.0416        | 0.0114        |
|                              | Total           | <b>0.0243</b> | <b>0.0885</b> | <b>0.2309</b> | <b>6.80E-04</b> | <b>0.0455</b> | <b>0.0126</b> |
| <b>TOTAL</b>                 |                 | <b>1.0723</b> | <b>2.0943</b> | <b>2.0851</b> | <b>0.0037</b>   | <b>0.1961</b> | <b>0.1632</b> |

| Architectural Coating Winter |                 |               |               |               |                 |               |               |
|------------------------------|-----------------|---------------|---------------|---------------|-----------------|---------------|---------------|
|                              |                 | ROG           | NOx           | CO            | SO2             | PM10 Total    | PM2.5 Total   |
| Onsite                       | 2018            |               |               |               |                 |               |               |
|                              | Archit. Coating | 0.7493        |               |               |                 | 0             | 0             |
|                              | Off-Road        | 0.2986        | 2.0058        | 1.8542        | 2.97E-03        | 0.1506        | 0.1506        |
|                              | Total           | <b>1.048</b>  | <b>2.0058</b> | <b>1.8542</b> | <b>2.97E-03</b> | <b>0.1506</b> | <b>0.1506</b> |
| Offsite                      |                 |               |               |               |                 |               |               |
|                              | Hauling         | 2.26E-03      | 0.0728        | 0.0159        | 1.80E-04        | 3.90E-03      | 1.27E-03      |
|                              | Vendor          | 0             | 0             | 0             | 0.00E+00        | 0             | 0             |
|                              | Worker          | 0.0245        | 0.0185        | 0.1989        | 4.70E-04        | 0.0416        | 0.0114        |
|                              | Total           | <b>0.0267</b> | <b>0.0913</b> | <b>0.2148</b> | <b>6.50E-04</b> | <b>0.0455</b> | <b>0.0126</b> |
| <b>TOTAL</b>                 |                 | <b>1.0747</b> | <b>2.0971</b> | <b>2.0690</b> | <b>0.0036</b>   | <b>0.1961</b> | <b>0.1632</b> |

|                  |             |              |              |             |              |             |
|------------------|-------------|--------------|--------------|-------------|--------------|-------------|
| <b>MAX DAILY</b> | <b>4.69</b> | <b>68.02</b> | <b>24.51</b> | <b>0.17</b> | <b>10.51</b> | <b>6.68</b> |
|------------------|-------------|--------------|--------------|-------------|--------------|-------------|

|                            |           |            |            |            |            |           |
|----------------------------|-----------|------------|------------|------------|------------|-----------|
| <b>Regional Thresholds</b> | <b>75</b> | <b>100</b> | <b>550</b> | <b>150</b> | <b>150</b> | <b>55</b> |
| Exceeds Thresholds?        | No        | No         | No         | No         | No         | No        |

## Localized Construction Emissions Worksheet

### Asphalt Demolition

|                    |               | NOx     | CO     | PM10 Total | PM2.5 Total |
|--------------------|---------------|---------|--------|------------|-------------|
| Onsite             |               |         |        |            |             |
|                    | <b>2019</b>   |         |        |            |             |
|                    | Fugitive Dust | 0       | 0      | 0          | 0           |
|                    | Off-Road      | 38.3225 | 22.304 | 1.9386     | 1.8048      |
|                    | Total         | 38.3225 | 22.304 | 1.9386     | 1.8048      |
| 1 Acre LSTs        |               | 80      | 498    | 4.00       | 3.00        |
| Exceed Thresholds? |               | No      | No     | No         | No          |

### Asphalt Demo Haul

|        |               | NOx | CO | PM10 Total | PM2.5 Total |
|--------|---------------|-----|----|------------|-------------|
| Onsite |               |     |    |            |             |
|        | <b>2019</b>   |     |    |            |             |
|        | Fugitive Dust | 0   | 0  | 0.1445     | 0.0219      |
|        | Off-Road      | 0   | 0  | 0          | 0           |
|        | Total         | 0   | 0  | 0.1445     | 0.0219      |

|                    |                |                |               |               |
|--------------------|----------------|----------------|---------------|---------------|
| <b>Demo + Haul</b> | <b>38.3225</b> | <b>22.3040</b> | <b>2.0831</b> | <b>1.8267</b> |
|--------------------|----------------|----------------|---------------|---------------|

|                    |    |     |      |      |
|--------------------|----|-----|------|------|
| 1 Acre LSTs        | 80 | 498 | 4.00 | 3.00 |
| Exceed Thresholds? | No | No  | No   | No   |

### Site Preparation

|                    |               | NOx     | CO      | PM10 Total | PM2.5 Total |
|--------------------|---------------|---------|---------|------------|-------------|
| Onsite             |               |         |         |            |             |
|                    | <b>2019</b>   |         |         |            |             |
|                    | Fugitive Dust | 0       | 0       | 7.7233     | 4.2454      |
|                    | Off-Road      | 48.1988 | 22.4763 | 2.5769     | 2.3708      |
|                    | Total         | 48.1988 | 22.4763 | 10.3002    | 6.6161      |
| 3.5-Acre LSTs      |               | 143     | 1,110   | 10.49      | 6.00        |
| Exceed Thresholds? |               | No      | No      | No         | Yes         |



**Grading**

|        |               | NOx         | CO     | PM10 Total | PM2.5 Total |
|--------|---------------|-------------|--------|------------|-------------|
| Onsite |               | <b>2019</b> |        |            |             |
|        | Fugitive Dust | 0           | 0      | 2.8011     | 1.4396      |
|        | Off-Road      | 30.6725     | 16.577 | 1.5513     | 1.4272      |
|        | Total         | 30.6725     | 16.577 | 4.3524     | 2.8668      |

**Grading Haul**

|        |               | NOx         | CO | PM10 Total | PM2.5 Total |
|--------|---------------|-------------|----|------------|-------------|
| Onsite |               | <b>2019</b> |    |            |             |
|        | Fugitive Dust | 0           | 0  | 0.0404     | 0.00612     |
|        | Off-Road      | 0           | 0  | 0          | 0           |
|        | Total         | 0           | 0  | 0.0404     | 0.00612     |

|                       |                |                |               |               |
|-----------------------|----------------|----------------|---------------|---------------|
| <b>Grading + Haul</b> | <b>30.6725</b> | <b>16.5770</b> | <b>4.3928</b> | <b>2.8729</b> |
|-----------------------|----------------|----------------|---------------|---------------|

|                    |     |     |      |      |
|--------------------|-----|-----|------|------|
| 2.5-Acre LSTs      | 124 | 894 | 8.16 | 4.67 |
| Exceed Thresholds? | No  | No  | No   | No   |

**Utility Trenching**

|        |          | NOx         | CO     | PM10 Total | PM2.5 Total |
|--------|----------|-------------|--------|------------|-------------|
| Onsite |          | <b>2019</b> |        |            |             |
|        | Off-Road | 5.2595      | 4.6734 | 0.3726     | 0.3428      |
|        | Total    | 5.2595      | 4.6734 | 0.3726     | 0.3428      |

|                    |    |     |      |      |
|--------------------|----|-----|------|------|
| 1-Acre LSTs        | 80 | 498 | 4.00 | 3.00 |
| Exceed Thresholds? | No | No  | No   | No   |

**Asphalt Paving**

|        |          | NOx         | CO      | PM10 Total | PM2.5 Total |
|--------|----------|-------------|---------|------------|-------------|
| Onsite |          | <b>2020</b> |         |            |             |
|        | Off-Road | 14.5184     | 12.4333 | 0.837      | 0.7718      |
|        | Paving   | 0           | 0       | 0          | 0           |
|        | Total    | 14.5184     | 12.4333 | 0.837      | 0.7718      |

|                    |    |     |      |      |
|--------------------|----|-----|------|------|
| 1-Acre LSTs        | 80 | 498 | 4.00 | 3.00 |
| Exceed Thresholds? | No | No  | No   | No   |

**Lighting Installation**

|        |          | NOx         | CO     | PM10 Total | PM2.5 Total |
|--------|----------|-------------|--------|------------|-------------|
| Onsite |          | <b>2019</b> |        |            |             |
|        | Off-Road | 17.4216     | 6.7126 | 0.8474     | 0.7796      |
|        | Total    | 17.4216     | 6.7126 | 0.8474     | 0.7796      |

|                                       |              |                |               |               |
|---------------------------------------|--------------|----------------|---------------|---------------|
| <b>Paving + Lighting Installation</b> | <b>31.94</b> | <b>19.1459</b> | <b>1.6844</b> | <b>1.5514</b> |
|---------------------------------------|--------------|----------------|---------------|---------------|

|                    |    |     |      |      |
|--------------------|----|-----|------|------|
| 1-Acre LSTs        | 80 | 498 | 4.00 | 3.00 |
| Exceed Thresholds? | No | No  | No   | No   |

**Architectural Coating**

|        |                 | NOx         | CO     | PM10 Total | PM2.5 Total |
|--------|-----------------|-------------|--------|------------|-------------|
| Onsite |                 | <b>2020</b> |        |            |             |
|        | Archit. Coating | 0           | 0      | 0          | 0           |
|        | Off-Road        | 2.0058      | 1.8542 | 0.1506     | 0.1506      |
|        | Total           | 2.0058      | 1.8542 | 0.1506     | 0.1506      |

|                    |    |     |      |      |
|--------------------|----|-----|------|------|
| 1-Acre LSTs        | 80 | 498 | 4.00 | 3.00 |
| Exceed Thresholds? | No | No  | No   | No   |

## Regional Construction Emissions Worksheet

| Asphalt Demolition Summer       |               |      |               |               |                |                 |                          |
|---------------------------------|---------------|------|---------------|---------------|----------------|-----------------|--------------------------|
|                                 |               | 2018 | ROG           | NOx           | CO             | SO2             | PM10 Total PM2.5 Total   |
| Onsite                          |               |      |               |               |                |                 |                          |
|                                 | Fugitive Dust |      |               |               |                | 0               | 0                        |
|                                 | Off-Road      |      | 0.4623        | 2.0032        | 23.2798        | 0.0388          | 0.0616 0.0616            |
|                                 | Total         |      | <b>0.4623</b> | <b>2.0032</b> | <b>23.2798</b> | <b>0.0388</b>   | <b>0.0616 0.0616</b>     |
| Offsite                         |               |      |               |               |                |                 |                          |
|                                 | Hauling       |      | 0             | 0             | 0              | 0               | 0                        |
|                                 | Vendor        |      | 0.0184        | 0.4902        | 0.134          | 1.06E-03        | 0.0274 0.0103            |
|                                 | Worker        |      | 0.0829        | 0.0625        | 0.8101         | 1.89E-03        | 0.156 0.0426             |
|                                 | Total         |      | <b>0.1013</b> | <b>0.5528</b> | <b>0.9442</b>  | <b>2.95E-03</b> | <b>0.1835 0.0529</b>     |
| <b>TOTAL</b>                    |               |      | <b>0.5636</b> | <b>2.5560</b> | <b>24.2240</b> | <b>0.0418</b>   | <b>0.2451 0.1145</b>     |
| Asphalt Demolition Winter       |               |      |               |               |                |                 |                          |
|                                 |               | 2018 | ROG           | NOx           | CO             | SO2             | PM10 Total PM2.5 Total   |
| Onsite                          |               |      |               |               |                |                 |                          |
|                                 | Fugitive Dust |      |               |               |                | 0               | 0                        |
|                                 | Off-Road      |      | 0.4623        | 2.0032        | 23.2798        | 0.0388          | 0.0616 0.0616            |
|                                 | Total         |      | <b>0.4623</b> | <b>2.0032</b> | <b>23.2798</b> | <b>0.0388</b>   | <b>0.0616 0.0616</b>     |
| Offsite                         |               |      |               |               |                |                 |                          |
|                                 | Hauling       |      | 0             | 0             | 0              | 0               | 0                        |
|                                 | Vendor        |      | 0.0192        | 0.4913        | 0.1473         | 1.03E-03        | 0.0275 0.0103            |
|                                 | Worker        |      | 0.0917        | 0.0693        | 0.7459         | 1.78E-03        | 0.156 0.0426             |
|                                 | Total         |      | <b>0.1109</b> | <b>0.5606</b> | <b>0.8932</b>  | <b>2.81E-03</b> | <b>0.1835 0.053</b>      |
| <b>TOTAL</b>                    |               |      | <b>0.5732</b> | <b>2.5638</b> | <b>24.1730</b> | <b>0.0416</b>   | <b>0.2451 0.1146</b>     |
| Asphalt Demolition Haul Summer  |               |      |               |               |                |                 |                          |
|                                 |               | 2018 | ROG           | NOx           | CO             | SO2             | PM10 Total PM2.5 Total   |
| Onsite                          |               |      |               |               |                |                 |                          |
|                                 | Fugitive Dust |      |               |               |                | 1.45E-01        | 2.19E-02                 |
|                                 | Off-Road      |      | 0             | 0             | 0              | 0               | 0                        |
|                                 | Total         |      | <b>0</b>      | <b>0</b>      | <b>0</b>       | <b>0</b>        | <b>1.45E-01 2.19E-02</b> |
| Offsite                         |               |      |               |               |                |                 |                          |
|                                 | Hauling       |      | 0.0159        | 0.5169        | 0.107          | 1.30E-03        | 0.028 9.08E-03           |
|                                 | Vendor        |      | 0             | 0             | 0              | 0               | 0                        |
|                                 | Worker        |      | 0             | 0             | 0              | 0               | 0                        |
|                                 | Total         |      | <b>0.0159</b> | <b>0.5169</b> | <b>0.107</b>   | <b>1.30E-03</b> | <b>0.028 9.08E-03</b>    |
| <b>TOTAL</b>                    |               |      | <b>0.0159</b> | <b>0.5169</b> | <b>0.1070</b>  | <b>0.0013</b>   | <b>0.1725 0.0310</b>     |
| <b>Summer Demolition + Haul</b> |               |      | <b>0.5795</b> | <b>3.0729</b> | <b>24.3310</b> | <b>0.0431</b>   | <b>0.4176 0.1455</b>     |
| Asphalt Demolition Haul Winter  |               |      |               |               |                |                 |                          |
|                                 |               | 2018 | ROG           | NOx           | CO             | SO2             | PM10 Total PM2.5 Total   |
| Onsite                          |               |      |               |               |                |                 |                          |
|                                 | Fugitive Dust |      |               |               |                | 1.45E-01        | 2.19E-02                 |
|                                 | Off-Road      |      | 0             | 0             | 0              | 0               | 0                        |
|                                 | Total         |      | <b>0</b>      | <b>0</b>      | <b>0</b>       | <b>0</b>        | <b>1.45E-01 2.19E-02</b> |
| Offsite                         |               |      |               |               |                |                 |                          |
|                                 | Hauling       |      | 0.0163        | 0.524         | 0.1144         | 1.28E-03        | 0.0281 9.12E-03          |
|                                 | Vendor        |      | 0             | 0             | 0              | 0               | 0                        |
|                                 | Worker        |      | 0             | 0             | 0              | 0               | 0                        |
|                                 | Total         |      | <b>0.0163</b> | <b>0.524</b>  | <b>0.1144</b>  | <b>1.28E-03</b> | <b>0.0281 9.12E-03</b>   |
| <b>TOTAL</b>                    |               |      | <b>0.0163</b> | <b>0.5240</b> | <b>0.1144</b>  | <b>0.0013</b>   | <b>0.1726 0.0310</b>     |
| <b>Winter Demolition Haul</b>   |               |      | <b>0.5895</b> | <b>3.0878</b> | <b>24.2874</b> | <b>0.0429</b>   | <b>0.4177 0.1456</b>     |

| Site Preparation Summer  |               |      |               |                |                |                 |                        |
|--------------------------|---------------|------|---------------|----------------|----------------|-----------------|------------------------|
|                          |               | 2018 | ROG           | NOx            | CO             | SO2             | PM10 Total PM2.5 Total |
| Onsite                   | Fugitive Dust |      |               |                |                |                 | 7.7233 4.2454          |
|                          | Off-Road      |      | 0.4656        | 2.0175         | 20.869         | 0.038           | 0.0621 0.0621          |
|                          | Total         |      | <b>0.4656</b> | <b>2.0175</b>  | <b>20.869</b>  | <b>0.038</b>    | <b>7.7854 4.3075</b>   |
| Offsite                  | Hauling       |      | 0             | 0              | 0              | 0               | 0 0                    |
|                          | Vendor        |      | 0.0184        | 0.4902         | 0.134          | 1.06E-03        | 0.0274 0.0103          |
|                          | Worker        |      | 0.0995        | 0.0751         | 0.9721         | 2.27E-03        | 0.1873 0.0512          |
|                          | Total         |      | <b>0.1179</b> | <b>0.5653</b>  | <b>1.1062</b>  | <b>3.33E-03</b> | <b>0.2147 0.0614</b>   |
| <b>TOTAL</b>             |               |      | <b>0.5835</b> | <b>2.5828</b>  | <b>21.9752</b> | <b>0.0413</b>   | <b>8.0001 4.3689</b>   |
| Site Preparation Winter  |               |      |               |                |                |                 |                        |
|                          |               | 2018 | ROG           | NOx            | CO             | SO2             | PM10 Total PM2.5 Total |
| Onsite                   | Fugitive Dust |      |               |                |                |                 | 7.7233 4.2454          |
|                          | Off-Road      |      | 0.4656        | 2.0175         | 20.869         | 0.038           | 0.0621 0.0621          |
|                          | Total         |      | <b>0.4656</b> | <b>2.0175</b>  | <b>20.869</b>  | <b>0.038</b>    | <b>7.7854 4.3075</b>   |
| Offsite                  | Hauling       |      | 0             | 0              | 0              | 0               | 0 0                    |
|                          | Vendor        |      | 0.0192        | 0.4913         | 0.1473         | 1.03E-03        | 0.0275 0.0103          |
|                          | Worker        |      | 0.1101        | 0.0831         | 0.8951         | 2.14E-03        | 0.1873 0.0512          |
|                          | Total         |      | <b>0.1293</b> | <b>0.5745</b>  | <b>1.0424</b>  | <b>3.17E-03</b> | <b>0.2147 0.0615</b>   |
| <b>TOTAL</b>             |               |      | <b>0.5949</b> | <b>2.5920</b>  | <b>21.9114</b> | <b>0.0412</b>   | <b>8.0001 4.3690</b>   |
| Grading Summer           |               |      |               |                |                |                 |                        |
|                          |               | 2018 | ROG           | NOx            | CO             | SO2             | PM10 Total PM2.5 Total |
| Onsite                   | Fugitive Dust |      |               |                |                |                 | 2.8011 1.4396          |
|                          | Off-Road      |      | 0.3632        | 1.5737         | 17.7527        | 0.0297          | 0.0484 0.0484          |
|                          | Total         |      | <b>0.3632</b> | <b>1.5737</b>  | <b>17.7527</b> | <b>0.0297</b>   | <b>2.8495 1.488</b>    |
| Offsite                  | Hauling       |      | 0             | 0              | 0              | 0               | 0 0                    |
|                          | Vendor        |      | 0.0184        | 0.4902         | 0.134          | 1.06E-03        | 0.0274 0.0103          |
|                          | Worker        |      | 0.0829        | 0.0625         | 0.8101         | 1.89E-03        | 0.156 0.0426           |
|                          | Total         |      | <b>0.1013</b> | <b>0.5528</b>  | <b>0.9442</b>  | <b>2.95E-03</b> | <b>0.1835 0.0529</b>   |
| <b>TOTAL</b>             |               |      | <b>0.4645</b> | <b>2.1265</b>  | <b>18.6969</b> | <b>0.0327</b>   | <b>3.0330 1.5409</b>   |
| Grading Winter           |               |      |               |                |                |                 |                        |
|                          |               | 2018 | ROG           | NOx            | CO             | SO2             | PM10 Total PM2.5 Total |
| Onsite                   | Fugitive Dust |      |               |                |                |                 | 2.8011 1.4396          |
|                          | Off-Road      |      | 0.3632        | 1.5737         | 17.7527        | 0.0297          | 0.0484 0.0484          |
|                          | Total         |      | <b>0.3632</b> | <b>1.5737</b>  | <b>17.7527</b> | <b>0.0297</b>   | <b>2.8495 1.488</b>    |
| Offsite                  | Hauling       |      | 0             | 0              | 0              | 0               | 0 0                    |
|                          | Vendor        |      | 0.0192        | 0.4913         | 0.1473         | 1.03E-03        | 0.0275 0.0103          |
|                          | Worker        |      | 0.0917        | 0.0693         | 0.7459         | 1.78E-03        | 0.156 0.0426           |
|                          | Total         |      | <b>0.1109</b> | <b>0.5606</b>  | <b>0.8932</b>  | <b>2.81E-03</b> | <b>0.1835 0.053</b>    |
| <b>TOTAL</b>             |               |      | <b>0.4741</b> | <b>2.1343</b>  | <b>18.6459</b> | <b>0.0325</b>   | <b>3.0330 1.5410</b>   |
| Grading Soil Haul Summer |               |      |               |                |                |                 |                        |
|                          |               | 2018 | ROG           | NOx            | CO             | SO2             | PM10 Total PM2.5 Total |
| Onsite                   | Fugitive Dust |      |               |                |                |                 | 0.0404 6.12E-03        |
|                          | Off-Road      |      | 0             | 0              | 0              | 0               | 0 0                    |
|                          | Total         |      | <b>0</b>      | <b>0</b>       | <b>0</b>       | <b>0</b>        | <b>0.0404 6.12E-03</b> |
| Offsite                  | Hauling       |      | 1.0379        | 33.7804        | 6.9897         | 0.0848          | 1.8322 0.5935          |
|                          | Vendor        |      | 0             | 0              | 0              | 0               | 0 0                    |
|                          | Worker        |      | 0             | 0              | 0              | 0               | 0 0                    |
|                          | Total         |      | <b>1.0379</b> | <b>33.7804</b> | <b>6.9897</b>  | <b>0.0848</b>   | <b>1.8322 0.5935</b>   |
| <b>TOTAL</b>             |               |      | <b>1.0379</b> | <b>33.7804</b> | <b>6.9897</b>  | <b>0.0848</b>   | <b>1.8726 0.5996</b>   |
| <b>Grading + Haul</b>    |               |      | <b>1.5024</b> | <b>35.9069</b> | <b>25.6866</b> | <b>0.1175</b>   | <b>4.9056 2.1405</b>   |
| Grading Haul Winter      |               |      |               |                |                |                 |                        |
|                          |               | 2018 | ROG           | NOx            | CO             | SO2             | PM10 Total PM2.5 Total |
| Onsite                   | Fugitive Dust |      |               |                |                |                 | 0.0404 6.12E-03        |
|                          | Off-Road      |      | 0             | 0              | 0              | 0               | 0 0                    |
|                          | Total         |      | <b>0</b>      | <b>0</b>       | <b>0</b>       | <b>0</b>        | <b>0.0404 6.12E-03</b> |
| Offsite                  | Hauling       |      | 1.0641        | 34.2431        | 7.4775         | 0.0833          | 1.8347 0.5959          |
|                          | Vendor        |      | 0             | 0              | 0              | 0.00E+00        | 0 0                    |
|                          | Worker        |      | 0             | 0              | 0              | 0.00E+00        | 0 0                    |
|                          | Total         |      | <b>1.0641</b> | <b>34.2431</b> | <b>7.4775</b>  | <b>8.33E-02</b> | <b>1.8347 0.5959</b>   |
| <b>TOTAL</b>             |               |      | <b>1.0641</b> | <b>34.2431</b> | <b>7.4775</b>  | <b>0.0833</b>   | <b>1.8751 0.6020</b>   |
| <b>Grading + Haul</b>    |               |      | <b>1.5382</b> | <b>36.3774</b> | <b>26.1234</b> | <b>0.1158</b>   | <b>4.9081 2.1430</b>   |

| Utility Trenching Summer |          |      |               |               |               |                 |                        |
|--------------------------|----------|------|---------------|---------------|---------------|-----------------|------------------------|
|                          |          | 2018 | ROG           | NOx           | CO            | SO2             | PM10 Total PM2.5 Total |
| Onsite                   |          |      |               |               |               |                 |                        |
|                          | Off-Road |      | 0.076         | 0.3292        | 4.6841        | 6.21E-03        | 0.0101 0.0101          |
|                          | Total    |      | <b>0.076</b>  | <b>0.3292</b> | <b>4.6841</b> | <b>6.21E-03</b> | <b>0.0101 0.0101</b>   |
| Offsite                  |          |      |               |               |               |                 |                        |
|                          | Hauling  |      | 0             | 0             | 0             | 0               | 0                      |
|                          | Vendor   |      | 0.0184        | 0.4902        | 0.134         | 1.06E-03        | 0.0274 0.0103          |
|                          | Worker   |      | 0.0276        | 0.0209        | 0.27          | 6.30E-04        | 0.052 0.0142           |
|                          | Total    |      | <b>0.046</b>  | <b>0.5111</b> | <b>0.4041</b> | <b>1.69E-03</b> | <b>0.0794 0.0245</b>   |
| <b>TOTAL</b>             |          |      | <b>0.1220</b> | <b>0.8403</b> | <b>5.0882</b> | <b>0.0079</b>   | <b>0.0895 0.0346</b>   |

| Utility Trenching Winter |          |      |               |               |               |                 |                        |
|--------------------------|----------|------|---------------|---------------|---------------|-----------------|------------------------|
|                          |          | 2018 | ROG           | NOx           | CO            | SO2             | PM10 Total PM2.5 Total |
| Onsite                   |          |      |               |               |               |                 |                        |
|                          | Off-Road |      | 0.076         | 0.3292        | 4.6841        | 6.21E-03        | 0.0101 0.0101          |
|                          | Total    |      | <b>0.076</b>  | <b>0.3292</b> | <b>4.6841</b> | <b>6.21E-03</b> | <b>0.0101 0.0101</b>   |
| Offsite                  |          |      |               |               |               |                 |                        |
|                          | Hauling  |      | 0             | 0             | 0             | 0               | 0                      |
|                          | Vendor   |      | 0.0192        | 0.4913        | 0.1473        | 1.03E-03        | 0.0275 0.0103          |
|                          | Worker   |      | 0.0306        | 0.0231        | 0.2486        | 5.90E-04        | 0.052 0.0142           |
|                          | Total    |      | <b>0.0498</b> | <b>0.5144</b> | <b>0.396</b>  | <b>1.62E-03</b> | <b>0.0795 0.0245</b>   |
| <b>TOTAL</b>             |          |      | <b>0.1258</b> | <b>0.8436</b> | <b>5.0801</b> | <b>0.0078</b>   | <b>0.0896 0.0346</b>   |

| Landscaping + Field Lighting Summer |          |      |               |               |               |                 |                        |
|-------------------------------------|----------|------|---------------|---------------|---------------|-----------------|------------------------|
|                                     |          | 2018 | ROG           | NOx           | CO            | SO2             | PM10 Total PM2.5 Total |
| Onsite                              |          |      |               |               |               |                 |                        |
|                                     | Off-Road |      | 0.1634        | 0.7082        | 6.3457        | 0.0133          | 0.0218 0.0218          |
|                                     | Total    |      | <b>0.1634</b> | <b>0.7082</b> | <b>6.3457</b> | <b>0.0133</b>   | <b>0.0218 0.0218</b>   |
| Offsite                             |          |      |               |               |               |                 |                        |
|                                     | Hauling  |      | 0             | 0             | 0             | 0               | 0                      |
|                                     | Vendor   |      | 0.0322        | 0.8579        | 0.2346        | 1.85E-03        | 0.048 0.018            |
|                                     | Worker   |      | 0.0995        | 0.0751        | 0.9721        | 2.27E-03        | 0.1873 0.0512          |
|                                     | Total    |      | <b>0.1317</b> | <b>0.933</b>  | <b>1.2067</b> | <b>4.12E-03</b> | <b>0.2352 0.0691</b>   |
| <b>TOTAL</b>                        |          |      | <b>0.2951</b> | <b>1.6412</b> | <b>7.5524</b> | <b>0.0174</b>   | <b>0.2570 0.0909</b>   |

|                             |  |  |               |               |                |               |                      |
|-----------------------------|--|--|---------------|---------------|----------------|---------------|----------------------|
| <b>Paving + Landscaping</b> |  |  | <b>0.8602</b> | <b>3.2278</b> | <b>22.6275</b> | <b>0.0388</b> | <b>0.5161 0.1987</b> |
|-----------------------------|--|--|---------------|---------------|----------------|---------------|----------------------|

| Landscaping + Field Lighting Winter |          |      |               |               |               |                 |                        |
|-------------------------------------|----------|------|---------------|---------------|---------------|-----------------|------------------------|
|                                     |          | 2018 | ROG           | NOx           | CO            | SO2             | PM10 Total PM2.5 Total |
| Onsite                              |          |      |               |               |               |                 |                        |
|                                     | Off-Road |      | 0.1634        | 0.7082        | 6.3457        | 0.0133          | 0.0218 0.0218          |
|                                     | Total    |      | <b>0.1634</b> | <b>0.7082</b> | <b>6.3457</b> | <b>0.0133</b>   | <b>0.0218 0.0218</b>   |
| Offsite                             |          |      |               |               |               |                 |                        |
|                                     | Hauling  |      | 0             | 0             | 0             | 0               | 0                      |
|                                     | Vendor   |      | 0.0336        | 0.8599        | 0.2578        | 1.80E-03        | 0.0481 0.0181          |
|                                     | Worker   |      | 0.1101        | 0.0831        | 0.8951        | 2.14E-03        | 0.1873 0.0512          |
|                                     | Total    |      | <b>0.1436</b> | <b>0.943</b>  | <b>1.1529</b> | <b>3.94E-03</b> | <b>0.2353 0.0692</b>   |
| <b>TOTAL</b>                        |          |      | <b>0.3070</b> | <b>1.6512</b> | <b>7.4986</b> | <b>0.0172</b>   | <b>0.2571 0.0910</b>   |

|                             |  |  |               |               |                |               |                      |
|-----------------------------|--|--|---------------|---------------|----------------|---------------|----------------------|
| <b>Paving + Landscaping</b> |  |  | <b>0.8839</b> | <b>3.2467</b> | <b>22.4880</b> | <b>0.0385</b> | <b>0.5162 0.1988</b> |
|-----------------------------|--|--|---------------|---------------|----------------|---------------|----------------------|

| Asphalt Paving Summer |          |      |               |               |                |                 |                        |
|-----------------------|----------|------|---------------|---------------|----------------|-----------------|------------------------|
|                       |          | 2018 | ROG           | NOx           | CO             | SO2             | PM10 Total PM2.5 Total |
| Onsite                |          |      |               |               |                |                 |                        |
|                       | Off-Road |      | 0.3076        | 1.5032        | 13.9949        | 0.0189          | 0.051 0.051            |
|                       | Paving   |      | 0.147         |               |                |                 | 0                      |
|                       | Total    |      | <b>0.4546</b> | <b>1.5032</b> | <b>13.9949</b> | <b>0.0189</b>   | <b>0.051 0.051</b>     |
| Offsite               |          |      |               |               |                |                 |                        |
|                       | Hauling  |      | 0             | 0             | 0              | 0               | 0                      |
|                       | Vendor   |      | 0             | 0             | 0              | 0.00E+00        | 0                      |
|                       | Worker   |      | 0.1105        | 0.0834        | 1.0802         | 2.52E-03        | 0.2081 0.0568          |
|                       | Total    |      | <b>0.1105</b> | <b>0.0834</b> | <b>1.0802</b>  | <b>2.52E-03</b> | <b>0.2081 0.0568</b>   |
| <b>TOTAL</b>          |          |      | <b>0.5651</b> | <b>1.5866</b> | <b>15.0751</b> | <b>0.0214</b>   | <b>0.2591 0.1078</b>   |

| Asphalt Paving Winter |          |             | ROG           | NOx           | CO             | SO2             | PM10 Total    | PM2.5 Total   |
|-----------------------|----------|-------------|---------------|---------------|----------------|-----------------|---------------|---------------|
| Onsite                |          | <b>2018</b> |               |               |                |                 |               |               |
|                       | Off-Road |             | 0.3076        | 1.5032        | 13.9949        | 0.0189          | 0.051         | 0.051         |
|                       | Paving   |             | 0.147         |               |                |                 | 0             | 0             |
|                       | Total    |             | <b>0.4546</b> | <b>1.5032</b> | <b>13.9949</b> | <b>0.0189</b>   | <b>0.051</b>  | <b>0.051</b>  |
| Offsite               |          |             |               |               |                |                 |               |               |
|                       | Hauling  |             | 0             | 0             | 0              | 0               | 0             | 0             |
|                       | Vendor   |             | 0             | 0             | 0              | 0.00E+00        | 0             | 0             |
|                       | Worker   |             | 0.1223        | 0.0923        | 0.9945         | 2.37E-03        | 0.2081        | 0.0568        |
|                       | Total    |             | <b>0.1223</b> | <b>0.0923</b> | <b>0.9945</b>  | <b>2.37E-03</b> | <b>0.2081</b> | <b>0.0568</b> |
| <b>TOTAL</b>          |          |             | <b>0.5769</b> | <b>1.5955</b> | <b>14.9894</b> | <b>0.0213</b>   | <b>0.2591</b> | <b>0.1078</b> |

| Architectural Coating Summer |                 |               |               |               |                 |                 |                 |
|------------------------------|-----------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|
|                              |                 | ROG           | NOx           | CO            | SO2             | PM10 Total      | PM2.5 Total     |
| Onsite                       | 2018            |               |               |               |                 |                 |                 |
|                              | Archit. Coating | 0.7493        |               |               |                 | 0               | 0               |
|                              | Off-Road        | 0.2986        | 2.0058        | 1.8542        | 2.97E-03        | 1.51E-01        | 1.51E-01        |
|                              | Total           | <b>1.048</b>  | <b>2.0058</b> | <b>1.8542</b> | <b>2.97E-03</b> | <b>1.51E-01</b> | <b>1.51E-01</b> |
| Offsite                      |                 |               |               |               |                 |                 |                 |
|                              | Hauling         | 2.21E-03      | 0.0718        | 0.0149        | 1.80E-04        | 3.89E-03        | 1.26E-03        |
|                              | Vendor          | 0             | 0             | 0             | 0.00E+00        | 0               | 0               |
|                              | Worker          | 0.0221        | 0.0167        | 0.216         | 5.00E-04        | 0.0416          | 0.0114          |
|                              | Total           | <b>0.0243</b> | <b>0.0885</b> | <b>0.2309</b> | <b>6.80E-04</b> | <b>0.0455</b>   | <b>0.0126</b>   |
| <b>TOTAL</b>                 |                 | <b>1.0723</b> | <b>2.0943</b> | <b>2.0851</b> | <b>0.0037</b>   | <b>0.1961</b>   | <b>0.1632</b>   |

| Architectural Coating Winter |                 |               |               |               |                 |                 |                 |
|------------------------------|-----------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|
|                              |                 | ROG           | NOx           | CO            | SO2             | PM10 Total      | PM2.5 Total     |
| Onsite                       | 2018            |               |               |               |                 |                 |                 |
|                              | Archit. Coating | 0.7493        |               |               |                 | 0               | 0               |
|                              | Off-Road        | 0.2986        | 2.0058        | 1.8542        | 2.97E-03        | 1.51E-01        | 1.51E-01        |
|                              | Total           | <b>1.048</b>  | <b>2.0058</b> | <b>1.8542</b> | <b>2.97E-03</b> | <b>1.51E-01</b> | <b>1.51E-01</b> |
| Offsite                      |                 |               |               |               |                 |                 |                 |
|                              | Hauling         | 2.26E-03      | 0.0728        | 0.0159        | 1.80E-04        | 3.90E-03        | 1.27E-03        |
|                              | Vendor          | 0             | 0             | 0             | 0.00E+00        | 0               | 0               |
|                              | Worker          | 0.0245        | 0.0185        | 0.1989        | 4.70E-04        | 0.0416          | 0.0114          |
|                              | Total           | <b>0.0267</b> | <b>0.0913</b> | <b>0.2148</b> | <b>6.50E-04</b> | <b>0.0455</b>   | <b>0.0126</b>   |
| <b>TOTAL</b>                 |                 | <b>1.0747</b> | <b>2.0971</b> | <b>2.0690</b> | <b>0.0036</b>   | <b>0.1961</b>   | <b>0.1632</b>   |

|                  |             |              |              |             |             |             |
|------------------|-------------|--------------|--------------|-------------|-------------|-------------|
| <b>MAX DAILY</b> | <b>1.54</b> | <b>36.38</b> | <b>26.12</b> | <b>0.12</b> | <b>8.00</b> | <b>4.37</b> |
|------------------|-------------|--------------|--------------|-------------|-------------|-------------|

|                            |           |            |            |            |            |           |
|----------------------------|-----------|------------|------------|------------|------------|-----------|
| <b>Regional Thresholds</b> | <b>75</b> | <b>100</b> | <b>550</b> | <b>150</b> | <b>150</b> | <b>55</b> |
| Exceeds Thresholds?        | No        | No         | No         | No         | No         | No        |

## Localized Construction Emissions Worksheet

### Asphalt Demolition

|                    |               | NOx    | CO      | PM10 Total | PM2.5 Total |
|--------------------|---------------|--------|---------|------------|-------------|
| Onsite             |               |        |         |            |             |
|                    | <b>2019</b>   |        |         |            |             |
|                    | Fugitive Dust | 0      | 0       | 0          | 0           |
|                    | Off-Road      | 2.0032 | 23.2798 | 0.0616     | 0.0616      |
|                    | Total         | 2.0032 | 23.2798 | 0.0616     | 0.0616      |
| 1 Acre LSTs        |               | 80     | 498     | 4.00       | 3.00        |
| Exceed Thresholds? |               | No     | No      | No         | No          |

### Asphalt Demo Haul

|        |               | NOx | CO | PM10 Total | PM2.5 Total |
|--------|---------------|-----|----|------------|-------------|
| Onsite |               |     |    |            |             |
|        | <b>2019</b>   |     |    |            |             |
|        | Fugitive Dust | 0   | 0  | 0.1445     | 0.0219      |
|        | Off-Road      | 0   | 0  | 0          | 0           |
|        | Total         | 0   | 0  | 0.1445     | 0.0219      |

|                    |               |                |               |               |
|--------------------|---------------|----------------|---------------|---------------|
| <b>Demo + Haul</b> | <b>2.0032</b> | <b>23.2798</b> | <b>0.2061</b> | <b>0.0835</b> |
|--------------------|---------------|----------------|---------------|---------------|

|                    |    |     |      |      |
|--------------------|----|-----|------|------|
| 1 Acre LSTs        | 80 | 498 | 4.00 | 3.00 |
| Exceed Thresholds? | No | No  | No   | No   |

### Site Preparation

|                    |               | NOx    | CO     | PM10 Total | PM2.5 Total |
|--------------------|---------------|--------|--------|------------|-------------|
| Onsite             |               |        |        |            |             |
|                    | <b>2019</b>   |        |        |            |             |
|                    | Fugitive Dust | 0      | 0      | 7.7233     | 4.2454      |
|                    | Off-Road      | 2.0175 | 20.869 | 0.0621     | 0.0621      |
|                    | Total         | 2.0175 | 20.869 | 7.7854     | 4.3075      |
| 3.5-Acre LSTs      |               | 143    | 1,110  | 10.49      | 6.00        |
| Exceed Thresholds? |               | No     | No     | No         | No          |

**Grading**

|        |               | NOx         | CO      | PM10 Total | PM2.5 Total |
|--------|---------------|-------------|---------|------------|-------------|
| Onsite |               | <b>2019</b> |         |            |             |
|        | Fugitive Dust | 0           | 0       | 2.8011     | 1.4396      |
|        | Off-Road      | 1.5737      | 17.7527 | 0.0484     | 0.0484      |
|        | Total         | 1.5737      | 17.7527 | 2.8495     | 1.488       |

**Grading Haul**

|        |               | NOx         | CO | PM10 Total | PM2.5 Total |
|--------|---------------|-------------|----|------------|-------------|
| Onsite |               | <b>2019</b> |    |            |             |
|        | Fugitive Dust | 0           | 0  | 0.0404     | 0.00612     |
|        | Off-Road      | 0           | 0  | 0          | 0           |
|        | Total         | 0           | 0  | 0.0404     | 0.00612     |

|                       |               |                |               |               |
|-----------------------|---------------|----------------|---------------|---------------|
| <b>Grading + Haul</b> | <b>1.5737</b> | <b>17.7527</b> | <b>2.8899</b> | <b>1.4941</b> |
|-----------------------|---------------|----------------|---------------|---------------|

|                    |     |     |      |      |
|--------------------|-----|-----|------|------|
| 2.5-Acre LSTs      | 124 | 894 | 8.16 | 4.67 |
| Exceed Thresholds? | No  | No  | No   | No   |

**Utility Trenching**

|        |          | NOx         | CO     | PM10 Total | PM2.5 Total |
|--------|----------|-------------|--------|------------|-------------|
| Onsite |          | <b>2019</b> |        |            |             |
|        | Off-Road | 0.3292      | 4.6841 | 0.0101     | 0.0101      |
|        | Total    | 0.3292      | 4.6841 | 0.0101     | 0.0101      |

|                    |    |     |      |      |
|--------------------|----|-----|------|------|
| 1-Acre LSTs        | 80 | 498 | 4.00 | 3.00 |
| Exceed Thresholds? | No | No  | No   | No   |

**Asphalt Paving**

|        |          | NOx         | CO      | PM10 Total | PM2.5 Total |
|--------|----------|-------------|---------|------------|-------------|
| Onsite |          | <b>2020</b> |         |            |             |
|        | Off-Road | 1.5032      | 13.9949 | 0.051      | 0.051       |
|        | Paving   | 0           | 0       | 0          | 0           |
|        | Total    | 1.5032      | 13.9949 | 0.051      | 0.051       |

|                    |    |     |      |      |
|--------------------|----|-----|------|------|
| 1-Acre LSTs        | 80 | 498 | 4.00 | 3.00 |
| Exceed Thresholds? | No | No  | No   | No   |

**Lighting Installation**

|        |          | NOx         | CO     | PM10 Total | PM2.5 Total |
|--------|----------|-------------|--------|------------|-------------|
| Onsite |          | <b>2019</b> |        |            |             |
|        | Off-Road | 0.7082      | 6.3457 | 0.0218     | 0.0218      |
|        | Total    | 0.7082      | 6.3457 | 0.0218     | 0.0218      |

|                                       |               |                |               |               |
|---------------------------------------|---------------|----------------|---------------|---------------|
| <b>Paving + Lighting Installation</b> | <b>2.2114</b> | <b>20.3406</b> | <b>0.0728</b> | <b>0.0728</b> |
|---------------------------------------|---------------|----------------|---------------|---------------|

|                    |    |     |      |      |
|--------------------|----|-----|------|------|
| 1-Acre LSTs        | 80 | 498 | 4.00 | 3.00 |
| Exceed Thresholds? | No | No  | No   | No   |

**Architectural Coating**

|        |                 | NOx         | CO     | PM10 Total | PM2.5 Total |
|--------|-----------------|-------------|--------|------------|-------------|
| Onsite |                 | <b>2020</b> |        |            |             |
|        | Archit. Coating | 0           | 0      | 0          | 0           |
|        | Off-Road        | 2.0058      | 1.8542 | 0.1506     | 0.1506      |
|        | Total           | 2.0058      | 1.8542 | 0.1506     | 0.1506      |

|                    |    |     |      |      |
|--------------------|----|-----|------|------|
| 1-Acre LSTs        | 80 | 498 | 4.00 | 3.00 |
| Exceed Thresholds? | No | No  | No   | No   |



## Regional Operational Emissions Worksheet

| Summer       | ROG          | NOx           | CO            | SO2         | PM10 Total    | PM2.5 Total   |
|--------------|--------------|---------------|---------------|-------------|---------------|---------------|
| Area         | 0.053        | 1.60E-04      | 0.0174        | 0.00E+00    | 6.00E-05      | 6.00E-05      |
| Energy       | 5.10E-04     | 4.61E-03      | 3.87E-03      | 3.00E-05    | 3.50E-04      | 3.50E-04      |
| Mobile       | 0.5396       | 0.8452        | 7.7641        | 0.02        | 1.7928        | 0.4859        |
| <b>Total</b> | <b>0.593</b> | <b>0.8499</b> | <b>7.7853</b> | <b>0.02</b> | <b>1.7932</b> | <b>0.4864</b> |

| Winter       | ROG           | NOx           | CO            | SO2           | PM10 Total    | PM2.5 Total   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Area         | 0.053         | 1.60E-04      | 0.0174        | 0.00E+00      | 6.00E-05      | 6.00E-05      |
| Energy       | 5.10E-04      | 4.61E-03      | 3.87E-03      | 3.00E-05      | 3.50E-04      | 3.50E-04      |
| Mobile       | 0.5228        | 0.9079        | 7.3005        | 0.0188        | 1.7928        | 0.486         |
| <b>Total</b> | <b>0.5763</b> | <b>0.9127</b> | <b>7.3217</b> | <b>0.0189</b> | <b>1.7932</b> | <b>0.4864</b> |

| Max Daily    | ROG          | NOx          | CO           | SO2          | PM10 Total   | PM2.5 Total  |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Area         | 0.053        | 0.000        | 0.017        | 0.000        | 0.000        | 0.000        |
| Energy       | 0.001        | 0.005        | 0.004        | 0.000        | 0.000        | 0.000        |
| Mobile       | 0.540        | 0.908        | 7.764        | 0.020        | 1.793        | 0.486        |
| <b>Total</b> | <b>0.593</b> | <b>0.913</b> | <b>7.785</b> | <b>0.020</b> | <b>1.793</b> | <b>0.486</b> |

|                            |           |           |            |            |            |            |
|----------------------------|-----------|-----------|------------|------------|------------|------------|
| <b>Regional Thresholds</b> | <b>55</b> | <b>55</b> | <b>550</b> | <b>150</b> | <b>150</b> | <b>550</b> |
| Exceeds Thresholds?        | No        | No        | No         | No         | No         | No         |

## Localized Operational Emissions Worksheet

| Max Daily    | NOx          | CO           | PM10 Total   | PM2.5 Total  |
|--------------|--------------|--------------|--------------|--------------|
| Area         | 0.000        | 0.017        | 0.000        | 0.000        |
| Energy       | 0.005        | 0.004        | 0.000        | 0.000        |
| <b>Total</b> | <b>0.005</b> | <b>0.021</b> | <b>0.000</b> | <b>0.000</b> |

|                     |            |              |             |             |
|---------------------|------------|--------------|-------------|-------------|
| LSTs                | <b>172</b> | <b>1,434</b> | <b>4.00</b> | <b>2.00</b> |
| Exceeds Thresholds? | No         | No           | No          | No          |

## GHG Emissions Worksheet

| MTons Total                       |            |                  |
|-----------------------------------|------------|------------------|
| 2019 Construction                 | 176        |                  |
| Amortized Emissions               | 6          |                  |
| Source                            | MTons/Year | Percent of Total |
| Area                              | 0.004      | 0.002%           |
| Energy                            | 3          | 1%               |
| <i>Stadium Lighting</i>           | <i>10</i>  | <i>4%</i>        |
| Mobile                            | 264        | 93%              |
| Waste                             | 0          | 0                |
| Water                             | 0.2        | 0.001            |
| Amortized Construction Emissions* | 6          | 2%               |
| Total All Sectors                 | 283        | 100%             |

## Wilson Middle School Construction - Los Angeles-South Coast County, Annual

## Wilson Middle School Construction

### Los Angeles-South Coast County, Annual

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses                  | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|----------------------------|--------|----------|-------------|--------------------|------------|
| Other Asphalt Surfaces     | 42.15  | 1000sqft | 1.01        | 42,145.00          | 0          |
| Other Non-Asphalt Surfaces | 123.92 | 1000sqft | 2.84        | 0.00               | 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>                 | 12           |                                     |       | <b>Operational Year</b>             | 2019  |
| <b>Utility Company</b>              | User Defined |                                     |       |                                     |       |
| <b>CO2 Intensity<br/>(lb/MW hr)</b> | 383.88       | <b>CH4 Intensity<br/>(lb/MW hr)</b> | 0.095 | <b>N2O Intensity<br/>(lb/MW hr)</b> | 0.012 |

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

Project Characteristics - \*\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label: <http://www.sce.com/labels/>  
 Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - Haul

Off-road Equipment - Haul

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - CalEEMod assumptions

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating - See CalEEMod Assumptions

Vehicle Trips -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

| Table Name              | Column Name                       | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 0.00          | 823.00    |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 0.00          | 2,468.00  |
| tblArchitecturalCoating | EF_Nonresidential_Exterior        | 100.00        | 50.00     |
| tblArchitecturalCoating | EF_Nonresidential_Interior        | 100.00        | 50.00     |
| tblArchitecturalCoating | EF_Parking                        | 100.00        | 50.00     |
| tblConstDustMitigation  | CleanPavedRoadPercentReduction    | 0             | 9         |
| tblConstDustMitigation  | WaterUnpavedRoadVehicleSpeed      | 0             | 15        |
| tblConstructionPhase    | NumDays                           | 8.00          | 16.00     |
| tblConstructionPhase    | NumDays                           | 8.00          | 16.00     |
| tblConstructionPhase    | NumDays                           | 230.00        | 18.00     |
| tblGrading              | MaterialExported                  | 0.00          | 13,381.00 |
| tblLandUse              | LandUseSquareFeet                 | 42,150.00     | 42,145.00 |
| tblLandUse              | LandUseSquareFeet                 | 123,920.00    | 0.00      |
| tblLandUse              | LotAcreage                        | 0.97          | 1.01      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 1.00          | 0.00      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 3.00          | 0.00      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 1.00          | 0.00      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 3.00          | 1.00      |

|                           |                            |       |        |
|---------------------------|----------------------------|-------|--------|
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 2.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 3.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 3.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | UsageHours                 | 7.00  | 8.00   |
| tblOffRoadEquipment       | UsageHours                 | 8.00  | 6.00   |
| tblProjectCharacteristics | CH4IntensityFactor         | 0     | 0.095  |
| tblProjectCharacteristics | CO2IntensityFactor         | 0     | 383.88 |
| tblProjectCharacteristics | N2OIntensityFactor         | 0     | 0.012  |
| tblTripsAndVMT            | HaulingTripNumber          | 31.00 | 32.00  |
| tblTripsAndVMT            | HaulingTripNumber          | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |

## 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    |           |           |        |        |          |
| 2018    | 0.1234  | 1.3788 | 0.7154 | 1.8700e-003 | 0.1252        | 0.0571       | 0.1823     | 0.0588         | 0.0530        | 0.1117      | 0.0000   | 174.8133  | 174.8133  | 0.0332 | 0.0000 | 175.6442 |
| Maximum | 0.1234  | 1.3788 | 0.7154 | 1.8700e-003 | 0.1252        | 0.0571       | 0.1823     | 0.0588         | 0.0530        | 0.1117      | 0.0000   | 174.8133  | 174.8133  | 0.0332 | 0.0000 | 175.6442 |

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    |           |           |        |        |          |
| 2018    | 0.1234  | 1.3788 | 0.7154 | 1.8700e-003 | 0.0653        | 0.0571       | 0.1224     | 0.0284         | 0.0530        | 0.0813      | 0.0000   | 174.8132  | 174.8132  | 0.0332 | 0.0000 | 175.6441 |
| Maximum | 0.1234  | 1.3788 | 0.7154 | 1.8700e-003 | 0.0653        | 0.0571       | 0.1224     | 0.0284         | 0.0530        | 0.0813      | 0.0000   | 174.8132  | 174.8132  | 0.0332 | 0.0000 | 175.6441 |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 47.85         | 0.00         | 32.86      | 51.73          | 0.00          | 27.21       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

| Quarter | Start Date | End Date  | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|-----------|--|--|
| 1       | 6-1-2018   | 8-31-2018 | 1.7205                                       | 1.7205                                     |
| 2       | 9-1-2018   | 9-30-2018 | 0.0294                                       | 0.0294                                     |
|         |            | Highest   | 1.7205                                       | 1.7205                                     |

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name                   | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|------------------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Asphalt Demo                 | Demolition            | 6/1/2018   | 6/28/2018 | 5             | 20       |                   |
| 2            | Asphalt Demo Haul            | Demolition            | 6/1/2018   | 6/28/2018 | 5             | 20       |                   |
| 3            | Site Preparation             | Site Preparation      | 6/29/2018  | 7/5/2018  | 5             | 5        |                   |
| 4            | Grading                      | Grading               | 7/6/2018   | 7/27/2018 | 5             | 16       |                   |
| 5            | Grading Haul                 | Grading               | 7/6/2018   | 7/27/2018 | 5             | 16       |                   |
| 6            | Trenching                    | Trenching             | 7/28/2018  | 8/6/2018  | 5             | 6        |                   |
| 7            | Landscaping & Field Lighting | Building Construction | 8/7/2018   | 8/30/2018 | 5             | 18       |                   |
| 8            | Paving                       | Paving                | 8/7/2018   | 8/30/2018 | 5             | 18       |                   |
| 9            | Architectural Coating        | Architectural Coating | 9/1/2018   | 9/26/2018 | 5             | 18       |                   |

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

**Acres of Grading (Grading Phase): 8**

**Acres of Paving: 3.85**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,468; Non-Residential Outdoor: 823; Striped Parking Area: 2,529**

#### OffRoad Equipment

| Phase Name        | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|-------------------|---------------------------|--------|-------------|-------------|-------------|
| Asphalt Demo      | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Asphalt Demo      | Excavators                | 3      | 8.00        | 158         | 0.38        |
| Asphalt Demo      | Rubber Tired Dozers       | 2      | 8.00        | 247         | 0.40        |
| Asphalt Demo Haul | Concrete/Industrial Saws  | 0      | 8.00        | 81          | 0.73        |
| Asphalt Demo Haul | Excavators                | 0      | 8.00        | 158         | 0.38        |
| Asphalt Demo Haul | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Site Preparation  | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation  | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading           | Excavators                | 1      | 8.00        | 158         | 0.38        |

|                              |                           |   |      |     |      |
|------------------------------|---------------------------|---|------|-----|------|
| Grading                      | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Grading                      | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Grading                      | Tractors/Loaders/Backhoes | 3 | 8.00 | 97  | 0.37 |
| Grading Haul                 | Excavators                | 0 | 8.00 | 158 | 0.38 |
| Grading Haul                 | Graders                   | 0 | 8.00 | 187 | 0.41 |
| Grading Haul                 | Rubber Tired Dozers       | 0 | 8.00 | 247 | 0.40 |
| Grading Haul                 | Tractors/Loaders/Backhoes | 0 | 8.00 | 97  | 0.37 |
| Trenching                    | Tractors/Loaders/Backhoes | 2 | 8.00 | 97  | 0.37 |
| Landscaping & Field Lighting | Cranes                    | 1 | 8.00 | 231 | 0.29 |
| Landscaping & Field Lighting | Forklifts                 | 1 | 6.00 | 89  | 0.20 |
| Landscaping & Field Lighting | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| Landscaping & Field Lighting | Rubber Tired Dozers       | 1 | 6.00 | 247 | 0.40 |
| Landscaping & Field Lighting | Tractors/Loaders/Backhoes | 0 | 7.00 | 97  | 0.37 |
| Landscaping & Field Lighting | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Paving                       | Cement and Mortar Mixers  | 2 | 6.00 | 9   | 0.56 |
| Paving                       | Pavers                    | 1 | 8.00 | 130 | 0.42 |
| Paving                       | Paving Equipment          | 2 | 6.00 | 132 | 0.36 |
| Paving                       | Rollers                   | 2 | 6.00 | 80  | 0.38 |
| Paving                       | 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 |
|------------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Asphalt Demo                 | 6                       | 15.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Asphalt Demo Haul            | 0                       | 0.00               | 0.00               | 32.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation             | 7                       | 18.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                      | 6                       | 15.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading Haul                 | 0                       | 0.00               | 0.00               | 1,673.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Trenching                    | 2                       | 5.00               | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Landscaping & Field Lighting | 3                       | 18.00              | 7.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                       | 8                       | 20.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating        | 1                       | 4.00               | 0.00               | 4.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

### 3.2 Asphalt Demo - 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         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0372        | 0.3832        | 0.2230        | 3.9000e-004        |               | 0.0194        | 0.0194        |                | 0.0181        | 0.0181        | 0.0000        | 35.1241        | 35.1241        | 9.6800e-003        | 0.0000        | 35.3660        |
| <b>Total</b>  | <b>0.0372</b> | <b>0.3832</b> | <b>0.2230</b> | <b>3.9000e-004</b> | <b>0.0000</b> | <b>0.0194</b> | <b>0.0194</b> | <b>0.0000</b>  | <b>0.0181</b> | <b>0.0181</b> | <b>0.0000</b> | <b>35.1241</b> | <b>35.1241</b> | <b>9.6800e-003</b> | <b>0.0000</b> | <b>35.3660</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       | 1.9000e-004        | 5.0100e-003        | 1.4100e-003        | 1.0000e-005        | 2.5000e-004        | 3.0000e-005        | 2.9000e-004        | 7.0000e-005        | 3.0000e-005        | 1.1000e-004        | 0.0000        | 1.0107        | 1.0107        | 7.0000e-005        | 0.0000        | 1.0124        |
| Worker       | 8.3000e-004        | 7.1000e-004        | 7.6500e-003        | 2.0000e-005        | 1.6400e-003        | 1.0000e-005        | 1.6600e-003        | 4.4000e-004        | 1.0000e-005        | 4.5000e-004        | 0.0000        | 1.6332        | 1.6332        | 6.0000e-005        | 0.0000        | 1.6347        |
| <b>Total</b> | <b>1.0200e-003</b> | <b>5.7200e-003</b> | <b>9.0600e-003</b> | <b>3.0000e-005</b> | <b>1.8900e-003</b> | <b>4.0000e-005</b> | <b>1.9500e-003</b> | <b>5.1000e-004</b> | <b>4.0000e-005</b> | <b>5.6000e-004</b> | <b>0.0000</b> | <b>2.6439</b> | <b>2.6439</b> | <b>1.3000e-004</b> | <b>0.0000</b> | <b>2.6471</b> |

Mitigated Construction On-Site

|               | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |
|---------------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|
| Category      | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |             |        |         |
| Fugitive Dust |         |        |        |             | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000  |
| Off-Road      | 0.0372  | 0.3832 | 0.2230 | 3.9000e-004 |               | 0.0194       | 0.0194     |                | 0.0181        | 0.0181      | 0.0000   | 35.1240   | 35.1240   | 9.6800e-003 | 0.0000 | 35.3660 |
| Total         | 0.0372  | 0.3832 | 0.2230 | 3.9000e-004 | 0.0000        | 0.0194       | 0.0194     | 0.0000         | 0.0181        | 0.0181      | 0.0000   | 35.1240   | 35.1240   | 9.6800e-003 | 0.0000 | 35.3660 |

Mitigated Construction Off-Site

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |        |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Vendor   | 1.9000e-004 | 5.0100e-003 | 1.4100e-003 | 1.0000e-005 | 2.4000e-004   | 3.0000e-005  | 2.7000e-004 | 7.0000e-005    | 3.0000e-005   | 1.0000e-004 | 0.0000   | 1.0107    | 1.0107    | 7.0000e-005 | 0.0000 | 1.0124 |
| Worker   | 8.3000e-004 | 7.1000e-004 | 7.6500e-003 | 2.0000e-005 | 1.5200e-003   | 1.0000e-005  | 1.5300e-003 | 4.1000e-004    | 1.0000e-005   | 4.2000e-004 | 0.0000   | 1.6332    | 1.6332    | 6.0000e-005 | 0.0000 | 1.6347 |
| Total    | 1.0200e-003 | 5.7200e-003 | 9.0600e-003 | 3.0000e-005 | 1.7600e-003   | 4.0000e-005  | 1.8000e-003 | 4.8000e-004    | 4.0000e-005   | 5.2000e-004 | 0.0000   | 2.6439    | 2.6439    | 1.3000e-004 | 0.0000 | 2.6471 |

### 3.3 Asphalt Demo Haul - 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         |               |               |               |               |               |
| Fugitive Dust |               |               |               |               | 3.3800e-003        | 0.0000        | 3.3800e-003        | 5.1000e-004        | 0.0000        | 5.1000e-004        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| Off-Road      | 0.0000        | 0.0000        | 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>3.3800e-003</b> | <b>0.0000</b> | <b>3.3800e-003</b> | <b>5.1000e-004</b> | <b>0.0000</b> | <b>5.1000e-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> |

#### Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 1.6000e-004        | 5.3400e-003        | 1.1000e-003        | 1.0000e-005        | 2.7000e-004        | 2.0000e-005        | 2.9000e-004        | 8.0000e-005        | 2.0000e-005        | 9.0000e-005        | 0.0000        | 1.2620        | 1.2620        | 9.0000e-005        | 0.0000        | 1.2642        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 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>1.6000e-004</b> | <b>5.3400e-003</b> | <b>1.1000e-003</b> | <b>1.0000e-005</b> | <b>2.7000e-004</b> | <b>2.0000e-005</b> | <b>2.9000e-004</b> | <b>8.0000e-005</b> | <b>2.0000e-005</b> | <b>9.0000e-005</b> | <b>0.0000</b> | <b>1.2620</b> | <b>1.2620</b> | <b>9.0000e-005</b> | <b>0.0000</b> | <b>1.2642</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 |         |        |        |        | 1.4500e-003   | 0.0000       | 1.4500e-003 | 2.2000e-004    | 0.0000        | 2.2000e-004 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Off-Road      | 0.0000  | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Total         | 0.0000  | 0.0000 | 0.0000 | 0.0000 | 1.4500e-003   | 0.0000       | 1.4500e-003 | 2.2000e-004    | 0.0000        | 2.2000e-004 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

Mitigated Construction Off-Site

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |        |
| Hauling  | 1.6000e-004 | 5.3400e-003 | 1.1000e-003 | 1.0000e-005 | 2.6000e-004   | 2.0000e-005  | 2.8000e-004 | 7.0000e-005    | 2.0000e-005   | 9.0000e-005 | 0.0000   | 1.2620    | 1.2620    | 9.0000e-005 | 0.0000 | 1.2642 |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 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 |
| Total    | 1.6000e-004 | 5.3400e-003 | 1.1000e-003 | 1.0000e-005 | 2.6000e-004   | 2.0000e-005  | 2.8000e-004 | 7.0000e-005    | 2.0000e-005   | 9.0000e-005 | 0.0000   | 1.2620    | 1.2620    | 9.0000e-005 | 0.0000 | 1.2642 |

### 3.4 Site Preparation - 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         |               |               |                    |               |               |
| Fugitive Dust |               |               |               |                    | 0.0452        | 0.0000             | 0.0452        | 0.0248         | 0.0000             | 0.0248        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road      | 0.0114        | 0.1205        | 0.0562        | 1.0000e-004        |               | 6.4400e-003        | 6.4400e-003   |                | 5.9300e-003        | 5.9300e-003   | 0.0000        | 8.6900        | 8.6900        | 2.7100e-003        | 0.0000        | 8.7576        |
| <b>Total</b>  | <b>0.0114</b> | <b>0.1205</b> | <b>0.0562</b> | <b>1.0000e-004</b> | <b>0.0452</b> | <b>6.4400e-003</b> | <b>0.0516</b> | <b>0.0248</b>  | <b>5.9300e-003</b> | <b>0.0308</b> | <b>0.0000</b> | <b>8.6900</b> | <b>8.6900</b> | <b>2.7100e-003</b> | <b>0.0000</b> | <b>8.7576</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       | 5.0000e-005        | 1.2500e-003        | 3.5000e-004        | 0.0000             | 6.0000e-005        | 1.0000e-005        | 7.0000e-005        | 2.0000e-005        | 1.0000e-005        | 3.0000e-005        | 0.0000        | 0.2527        | 0.2527        | 2.0000e-005        | 0.0000        | 0.2531        |
| Worker       | 2.5000e-004        | 2.1000e-004        | 2.2900e-003        | 1.0000e-005        | 4.9000e-004        | 0.0000             | 5.0000e-004        | 1.3000e-004        | 0.0000             | 1.4000e-004        | 0.0000        | 0.4900        | 0.4900        | 2.0000e-005        | 0.0000        | 0.4904        |
| <b>Total</b> | <b>3.0000e-004</b> | <b>1.4600e-003</b> | <b>2.6400e-003</b> | <b>1.0000e-005</b> | <b>5.5000e-004</b> | <b>1.0000e-005</b> | <b>5.7000e-004</b> | <b>1.5000e-004</b> | <b>1.0000e-005</b> | <b>1.7000e-004</b> | <b>0.0000</b> | <b>0.7426</b> | <b>0.7426</b> | <b>4.0000e-005</b> | <b>0.0000</b> | <b>0.7435</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 |         |        |        |             | 0.0193        | 0.0000       | 0.0193      | 0.0106         | 0.0000        | 0.0106      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Off-Road      | 0.0114  | 0.1205 | 0.0562 | 1.0000e-004 |               | 6.4400e-003  | 6.4400e-003 |                | 5.9300e-003   | 5.9300e-003 | 0.0000   | 8.6900    | 8.6900    | 2.7100e-003 | 0.0000 | 8.7576 |
| Total         | 0.0114  | 0.1205 | 0.0562 | 1.0000e-004 | 0.0193        | 6.4400e-003  | 0.0258      | 0.0106         | 5.9300e-003   | 0.0165      | 0.0000   | 8.6900    | 8.6900    | 2.7100e-003 | 0.0000 | 8.7576 |

### Mitigated Construction Off-Site

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | 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   | 5.0000e-005 | 1.2500e-003 | 3.5000e-004 | 0.0000      | 6.0000e-005   | 1.0000e-005  | 7.0000e-005 | 2.0000e-005    | 1.0000e-005   | 3.0000e-005 | 0.0000   | 0.2527    | 0.2527    | 2.0000e-005 | 0.0000 | 0.2531 |
| Worker   | 2.5000e-004 | 2.1000e-004 | 2.2900e-003 | 1.0000e-005 | 4.5000e-004   | 0.0000       | 4.6000e-004 | 1.2000e-004    | 0.0000        | 1.3000e-004 | 0.0000   | 0.4900    | 0.4900    | 2.0000e-005 | 0.0000 | 0.4904 |
| Total    | 3.0000e-004 | 1.4600e-003 | 2.6400e-003 | 1.0000e-005 | 5.1000e-004   | 1.0000e-005  | 5.3000e-004 | 1.4000e-004    | 1.0000e-005   | 1.6000e-004 | 0.0000   | 0.7426    | 0.7426    | 4.0000e-005 | 0.0000 | 0.7435 |

### 3.5 Grading - 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         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0524        | 0.0000        | 0.0524        | 0.0269         | 0.0000        | 0.0269        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0222        | 0.2454        | 0.1326        | 2.4000e-004        |               | 0.0124        | 0.0124        |                | 0.0114        | 0.0114        | 0.0000        | 21.6855        | 21.6855        | 6.7500e-003        | 0.0000        | 21.8543        |
| <b>Total</b>  | <b>0.0222</b> | <b>0.2454</b> | <b>0.1326</b> | <b>2.4000e-004</b> | <b>0.0524</b> | <b>0.0124</b> | <b>0.0648</b> | <b>0.0269</b>  | <b>0.0114</b> | <b>0.0384</b> | <b>0.0000</b> | <b>21.6855</b> | <b>21.6855</b> | <b>6.7500e-003</b> | <b>0.0000</b> | <b>21.8543</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       | 1.5000e-004        | 4.0100e-003        | 1.1300e-003        | 1.0000e-005        | 2.0000e-004        | 3.0000e-005        | 2.3000e-004        | 6.0000e-005        | 3.0000e-005        | 8.0000e-005        | 0.0000        | 0.8085        | 0.8085        | 6.0000e-005        | 0.0000        | 0.8099        |
| Worker       | 6.6000e-004        | 5.7000e-004        | 6.1200e-003        | 1.0000e-005        | 1.3100e-003        | 1.0000e-005        | 1.3300e-003        | 3.5000e-004        | 1.0000e-005        | 3.6000e-004        | 0.0000        | 1.3066        | 1.3066        | 5.0000e-005        | 0.0000        | 1.3078        |
| <b>Total</b> | <b>8.1000e-004</b> | <b>4.5800e-003</b> | <b>7.2500e-003</b> | <b>2.0000e-005</b> | <b>1.5100e-003</b> | <b>4.0000e-005</b> | <b>1.5600e-003</b> | <b>4.1000e-004</b> | <b>4.0000e-005</b> | <b>4.4000e-004</b> | <b>0.0000</b> | <b>2.1151</b> | <b>2.1151</b> | <b>1.1000e-004</b> | <b>0.0000</b> | <b>2.1177</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 |         |        |        |             | 0.0224        | 0.0000       | 0.0224     | 0.0115         | 0.0000        | 0.0115      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000  |
| Off-Road      | 0.0222  | 0.2454 | 0.1326 | 2.4000e-004 |               | 0.0124       | 0.0124     |                | 0.0114        | 0.0114      | 0.0000   | 21.6855   | 21.6855   | 6.7500e-003 | 0.0000 | 21.8543 |
| Total         | 0.0222  | 0.2454 | 0.1326 | 2.4000e-004 | 0.0224        | 0.0124       | 0.0348     | 0.0115         | 0.0114        | 0.0229      | 0.0000   | 21.6855   | 21.6855   | 6.7500e-003 | 0.0000 | 21.8543 |

**Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | 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   | 1.5000e-004 | 4.0100e-003 | 1.1300e-003 | 1.0000e-005 | 1.9000e-004   | 3.0000e-005  | 2.2000e-004 | 6.0000e-005    | 3.0000e-005   | 8.0000e-005 | 0.0000   | 0.8085    | 0.8085    | 6.0000e-005 | 0.0000 | 0.8099 |
| Worker   | 6.6000e-004 | 5.7000e-004 | 6.1200e-003 | 1.0000e-005 | 1.2100e-003   | 1.0000e-005  | 1.2200e-003 | 3.2000e-004    | 1.0000e-005   | 3.4000e-004 | 0.0000   | 1.3066    | 1.3066    | 5.0000e-005 | 0.0000 | 1.3078 |
| Total    | 8.1000e-004 | 4.5800e-003 | 7.2500e-003 | 2.0000e-005 | 1.4000e-003   | 4.0000e-005  | 1.4400e-003 | 3.8000e-004    | 4.0000e-005   | 4.2000e-004 | 0.0000   | 2.1151    | 2.1151    | 1.1000e-004 | 0.0000 | 2.1177 |

### 3.6 Grading Haul - 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         |               |               |               |               |               |
| Fugitive Dust |               |               |               |               | 7.6000e-004        | 0.0000        | 7.6000e-004        | 1.1000e-004        | 0.0000        | 1.1000e-004        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| Off-Road      | 0.0000        | 0.0000        | 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>7.6000e-004</b> | <b>0.0000</b> | <b>7.6000e-004</b> | <b>1.1000e-004</b> | <b>0.0000</b> | <b>1.1000e-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> |

#### Unmitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 8.3900e-003        | 0.2794        | 0.0576        | 6.7000e-004        | 0.0144        | 1.0400e-003        | 0.0154        | 3.9500e-003        | 9.9000e-004        | 4.9400e-003        | 0.0000        | 65.9799        | 65.9799        | 4.6500e-003        | 0.0000        | 66.0963        |
| Vendor       | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 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>8.3900e-003</b> | <b>0.2794</b> | <b>0.0576</b> | <b>6.7000e-004</b> | <b>0.0144</b> | <b>1.0400e-003</b> | <b>0.0154</b> | <b>3.9500e-003</b> | <b>9.9000e-004</b> | <b>4.9400e-003</b> | <b>0.0000</b> | <b>65.9799</b> | <b>65.9799</b> | <b>4.6500e-003</b> | <b>0.0000</b> | <b>66.0963</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 |         |        |        |        | 3.2000e-004   | 0.0000       | 3.2000e-004 | 5.0000e-005    | 0.0000        | 5.0000e-005 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Off-Road      | 0.0000  | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Total         | 0.0000  | 0.0000 | 0.0000 | 0.0000 | 3.2000e-004   | 0.0000       | 3.2000e-004 | 5.0000e-005    | 0.0000        | 5.0000e-005 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

Mitigated Construction Off-Site

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |
|----------|-------------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|
| Category | tons/yr     |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |             |        |         |
| Hauling  | 8.3900e-003 | 0.2794 | 0.0576 | 6.7000e-004 | 0.0134        | 1.0400e-003  | 0.0144     | 3.7100e-003    | 9.9000e-004   | 4.7000e-003 | 0.0000   | 65.9799   | 65.9799   | 4.6500e-003 | 0.0000 | 66.0963 |
| Vendor   | 0.0000      | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 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  |
| Total    | 8.3900e-003 | 0.2794 | 0.0576 | 6.7000e-004 | 0.0134        | 1.0400e-003  | 0.0144     | 3.7100e-003    | 9.9000e-004   | 4.7000e-003 | 0.0000   | 65.9799   | 65.9799   | 4.6500e-003 | 0.0000 | 66.0963 |

### 3.7 Trenching - 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     | 1.6000e-003        | 0.0158        | 0.0140        | 2.0000e-005        |               | 1.1200e-003        | 1.1200e-003        |                | 1.0300e-003        | 1.0300e-003        | 0.0000        | 1.7025        | 1.7025        | 5.3000e-004        | 0.0000        | 1.7157        |
| <b>Total</b> | <b>1.6000e-003</b> | <b>0.0158</b> | <b>0.0140</b> | <b>2.0000e-005</b> |               | <b>1.1200e-003</b> | <b>1.1200e-003</b> |                | <b>1.0300e-003</b> | <b>1.0300e-003</b> | <b>0.0000</b> | <b>1.7025</b> | <b>1.7025</b> | <b>5.3000e-004</b> | <b>0.0000</b> | <b>1.7157</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       | 6.0000e-005        | 1.5000e-003        | 4.2000e-004        | 0.0000        | 8.0000e-005        | 1.0000e-005        | 9.0000e-005        | 2.0000e-005        | 1.0000e-005        | 3.0000e-005        | 0.0000        | 0.3032        | 0.3032        | 2.0000e-005        | 0.0000        | 0.3037        |
| Worker       | 8.0000e-005        | 7.0000e-005        | 7.6000e-004        | 0.0000        | 1.6000e-004        | 0.0000             | 1.7000e-004        | 4.0000e-005        | 0.0000             | 5.0000e-005        | 0.0000        | 0.1633        | 0.1633        | 1.0000e-005        | 0.0000        | 0.1635        |
| <b>Total</b> | <b>1.4000e-004</b> | <b>1.5700e-003</b> | <b>1.1800e-003</b> | <b>0.0000</b> | <b>2.4000e-004</b> | <b>1.0000e-005</b> | <b>2.6000e-004</b> | <b>6.0000e-005</b> | <b>1.0000e-005</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>0.4665</b> | <b>0.4665</b> | <b>3.0000e-005</b> | <b>0.0000</b> | <b>0.4672</b> |

Mitigated Construction On-Site

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr     |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |        |
| Off-Road | 1.6000e-003 | 0.0158 | 0.0140 | 2.0000e-005 |               | 1.1200e-003  | 1.1200e-003 |                | 1.0300e-003   | 1.0300e-003 | 0.0000   | 1.7025    | 1.7025    | 5.3000e-004 | 0.0000 | 1.7157 |
| Total    | 1.6000e-003 | 0.0158 | 0.0140 | 2.0000e-005 |               | 1.1200e-003  | 1.1200e-003 |                | 1.0300e-003   | 1.0300e-003 | 0.0000   | 1.7025    | 1.7025    | 5.3000e-004 | 0.0000 | 1.7157 |

Mitigated Construction Off-Site

|          | ROG         | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|----------|-------------|-------------|-------------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr     |             |             |        |               |              |             |                |               |             | MT/yr    |           |           |             |        |        |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000 | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Vendor   | 6.0000e-005 | 1.5000e-003 | 4.2000e-004 | 0.0000 | 7.0000e-005   | 1.0000e-005  | 8.0000e-005 | 2.0000e-005    | 1.0000e-005   | 3.0000e-005 | 0.0000   | 0.3032    | 0.3032    | 2.0000e-005 | 0.0000 | 0.3037 |
| Worker   | 8.0000e-005 | 7.0000e-005 | 7.6000e-004 | 0.0000 | 1.5000e-004   | 0.0000       | 1.5000e-004 | 4.0000e-005    | 0.0000        | 4.0000e-005 | 0.0000   | 0.1633    | 0.1633    | 1.0000e-005 | 0.0000 | 0.1635 |
| Total    | 1.4000e-004 | 1.5700e-003 | 1.1800e-003 | 0.0000 | 2.2000e-004   | 1.0000e-005  | 2.3000e-004 | 6.0000e-005    | 1.0000e-005   | 7.0000e-005 | 0.0000   | 0.4665    | 0.4665    | 3.0000e-005 | 0.0000 | 0.4672 |

### 3.8 Landscaping & Field Lighting - 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     | 0.0142        | 0.1568        | 0.0604        | 1.2000e-004        |               | 7.6300e-003        | 7.6300e-003        |                | 7.0200e-003        | 7.0200e-003        | 0.0000        | 10.9494        | 10.9494        | 3.4100e-003        | 0.0000        | 11.0346        |
| <b>Total</b> | <b>0.0142</b> | <b>0.1568</b> | <b>0.0604</b> | <b>1.2000e-004</b> |               | <b>7.6300e-003</b> | <b>7.6300e-003</b> |                | <b>7.0200e-003</b> | <b>7.0200e-003</b> | <b>0.0000</b> | <b>10.9494</b> | <b>10.9494</b> | <b>3.4100e-003</b> | <b>0.0000</b> | <b>11.0346</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       | 3.0000e-004        | 7.8900e-003        | 2.2200e-003   | 2.0000e-005        | 4.0000e-004        | 5.0000e-005        | 4.5000e-004        | 1.1000e-004        | 5.0000e-005        | 1.7000e-004        | 0.0000        | 1.5918        | 1.5918        | 1.1000e-004        | 0.0000        | 1.5945        |
| Worker       | 9.0000e-004        | 7.7000e-004        | 8.2600e-003   | 2.0000e-005        | 1.7800e-003        | 2.0000e-005        | 1.7900e-003        | 4.7000e-004        | 1.0000e-005        | 4.9000e-004        | 0.0000        | 1.7639        | 1.7639        | 7.0000e-005        | 0.0000        | 1.7655        |
| <b>Total</b> | <b>1.2000e-003</b> | <b>8.6600e-003</b> | <b>0.0105</b> | <b>4.0000e-005</b> | <b>2.1800e-003</b> | <b>7.0000e-005</b> | <b>2.2400e-003</b> | <b>5.8000e-004</b> | <b>6.0000e-005</b> | <b>6.6000e-004</b> | <b>0.0000</b> | <b>3.3557</b> | <b>3.3557</b> | <b>1.8000e-004</b> | <b>0.0000</b> | <b>3.3600</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 | 0.0142  | 0.1568 | 0.0604 | 1.2000e-004 |               | 7.6300e-003  | 7.6300e-003 |                | 7.0200e-003   | 7.0200e-003 | 0.0000   | 10.9494   | 10.9494   | 3.4100e-003 | 0.0000 | 11.0346 |
| Total    | 0.0142  | 0.1568 | 0.0604 | 1.2000e-004 |               | 7.6300e-003  | 7.6300e-003 |                | 7.0200e-003   | 7.0200e-003 | 0.0000   | 10.9494   | 10.9494   | 3.4100e-003 | 0.0000 | 11.0346 |

**Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | 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   | 3.0000e-004 | 7.8900e-003 | 2.2200e-003 | 2.0000e-005 | 3.7000e-004   | 5.0000e-005  | 4.3000e-004 | 1.1000e-004    | 5.0000e-005   | 1.6000e-004 | 0.0000   | 1.5918    | 1.5918    | 1.1000e-004 | 0.0000 | 1.5945 |
| Worker   | 9.0000e-004 | 7.7000e-004 | 8.2600e-003 | 2.0000e-005 | 1.6400e-003   | 2.0000e-005  | 1.6500e-003 | 4.4000e-004    | 1.0000e-005   | 4.5000e-004 | 0.0000   | 1.7639    | 1.7639    | 7.0000e-005 | 0.0000 | 1.7655 |
| Total    | 1.2000e-003 | 8.6600e-003 | 0.0105      | 4.0000e-005 | 2.0100e-003   | 7.0000e-005  | 2.0800e-003 | 5.5000e-004    | 6.0000e-005   | 6.1000e-004 | 0.0000   | 3.3557    | 3.3557    | 1.8000e-004 | 0.0000 | 3.3600 |

### 3.9 Paving - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 0.0128        | 0.1307        | 0.1119        | 1.7000e-004        |               | 7.5300e-003        | 7.5300e-003        |                | 6.9500e-003        | 6.9500e-003        | 0.0000        | 15.2887        | 15.2887        | 4.6300e-003        | 0.0000        | 15.4045        |
| Paving       | 1.3200e-003   |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| <b>Total</b> | <b>0.0141</b> | <b>0.1307</b> | <b>0.1119</b> | <b>1.7000e-004</b> |               | <b>7.5300e-003</b> | <b>7.5300e-003</b> |                | <b>6.9500e-003</b> | <b>6.9500e-003</b> | <b>0.0000</b> | <b>15.2887</b> | <b>15.2887</b> | <b>4.6300e-003</b> | <b>0.0000</b> | <b>15.4045</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       | 1.0000e-003        | 8.5000e-004        | 9.1800e-003        | 2.0000e-005        | 1.9700e-003        | 2.0000e-005        | 1.9900e-003        | 5.2000e-004        | 2.0000e-005        | 5.4000e-004        | 0.0000        | 1.9598        | 1.9598        | 7.0000e-005        | 0.0000        | 1.9617        |
| <b>Total</b> | <b>1.0000e-003</b> | <b>8.5000e-004</b> | <b>9.1800e-003</b> | <b>2.0000e-005</b> | <b>1.9700e-003</b> | <b>2.0000e-005</b> | <b>1.9900e-003</b> | <b>5.2000e-004</b> | <b>2.0000e-005</b> | <b>5.4000e-004</b> | <b>0.0000</b> | <b>1.9598</b> | <b>1.9598</b> | <b>7.0000e-005</b> | <b>0.0000</b> | <b>1.9617</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 | 0.0128      | 0.1307 | 0.1119 | 1.7000e-004 |               | 7.5300e-003  | 7.5300e-003 |                | 6.9500e-003   | 6.9500e-003 | 0.0000   | 15.2887   | 15.2887   | 4.6300e-003 | 0.0000 | 15.4045 |
| Paving   | 1.3200e-003 |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000  |
| Total    | 0.0141      | 0.1307 | 0.1119 | 1.7000e-004 |               | 7.5300e-003  | 7.5300e-003 |                | 6.9500e-003   | 6.9500e-003 | 0.0000   | 15.2887   | 15.2887   | 4.6300e-003 | 0.0000 | 15.4045 |

**Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | 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   | 1.0000e-003 | 8.5000e-004 | 9.1800e-003 | 2.0000e-005 | 1.8200e-003   | 2.0000e-005  | 1.8400e-003 | 4.9000e-004    | 2.0000e-005   | 5.0000e-004 | 0.0000   | 1.9598    | 1.9598    | 7.0000e-005 | 0.0000 | 1.9617 |
| Total    | 1.0000e-003 | 8.5000e-004 | 9.1800e-003 | 2.0000e-005 | 1.8200e-003   | 2.0000e-005  | 1.8400e-003 | 4.9000e-004    | 2.0000e-005   | 5.0000e-004 | 0.0000   | 1.9598    | 1.9598    | 7.0000e-005 | 0.0000 | 1.9617 |

### 3.10 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 | 6.7400e-003        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 2.6900e-003        | 0.0181        | 0.0167        | 3.0000e-005        |               | 1.3500e-003        | 1.3500e-003        |                | 1.3500e-003        | 1.3500e-003        | 0.0000        | 2.2979        | 2.2979        | 2.2000e-004        | 0.0000        | 2.3034        |
| <b>Total</b>    | <b>9.4300e-003</b> | <b>0.0181</b> | <b>0.0167</b> | <b>3.0000e-005</b> |               | <b>1.3500e-003</b> | <b>1.3500e-003</b> |                | <b>1.3500e-003</b> | <b>1.3500e-003</b> | <b>0.0000</b> | <b>2.2979</b> | <b>2.2979</b> | <b>2.2000e-004</b> | <b>0.0000</b> | <b>2.3034</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      | 2.0000e-005        | 6.7000e-004        | 1.4000e-004        | 0.0000        | 3.0000e-005        | 0.0000        | 4.0000e-005        | 1.0000e-005        | 0.0000        | 1.0000e-005        | 0.0000        | 0.1578        | 0.1578        | 1.0000e-005        | 0.0000        | 0.1580        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 2.0000e-004        | 1.7000e-004        | 1.8400e-003        | 0.0000        | 3.9000e-004        | 0.0000        | 4.0000e-004        | 1.0000e-004        | 0.0000        | 1.1000e-004        | 0.0000        | 0.3920        | 0.3920        | 1.0000e-005        | 0.0000        | 0.3923        |
| <b>Total</b> | <b>2.2000e-004</b> | <b>8.4000e-004</b> | <b>1.9800e-003</b> | <b>0.0000</b> | <b>4.2000e-004</b> | <b>0.0000</b> | <b>4.4000e-004</b> | <b>1.1000e-004</b> | <b>0.0000</b> | <b>1.2000e-004</b> | <b>0.0000</b> | <b>0.5497</b> | <b>0.5497</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>0.5504</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 | 6.7400e-003 |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Off-Road        | 2.6900e-003 | 0.0181 | 0.0167 | 3.0000e-005 |               | 1.3500e-003  | 1.3500e-003 |                | 1.3500e-003   | 1.3500e-003 | 0.0000   | 2.2979    | 2.2979    | 2.2000e-004 | 0.0000 | 2.3034 |
| Total           | 9.4300e-003 | 0.0181 | 0.0167 | 3.0000e-005 |               | 1.3500e-003  | 1.3500e-003 |                | 1.3500e-003   | 1.3500e-003 | 0.0000   | 2.2979    | 2.2979    | 2.2000e-004 | 0.0000 | 2.3034 |

**Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|----------|-------------|-------------|-------------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr     |             |             |        |               |              |             |                |               |             | MT/yr    |           |           |             |        |        |
| Hauling  | 2.0000e-005 | 6.7000e-004 | 1.4000e-004 | 0.0000 | 3.0000e-005   | 0.0000       | 3.0000e-005 | 1.0000e-005    | 0.0000        | 1.0000e-005 | 0.0000   | 0.1578    | 0.1578    | 1.0000e-005 | 0.0000 | 0.1580 |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000 | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Worker   | 2.0000e-004 | 1.7000e-004 | 1.8400e-003 | 0.0000 | 3.6000e-004   | 0.0000       | 3.7000e-004 | 1.0000e-004    | 0.0000        | 1.0000e-004 | 0.0000   | 0.3920    | 0.3920    | 1.0000e-005 | 0.0000 | 0.3923 |
| Total    | 2.2000e-004 | 8.4000e-004 | 1.9800e-003 | 0.0000 | 3.9000e-004   | 0.0000       | 4.0000e-004 | 1.1000e-004    | 0.0000        | 1.1000e-004 | 0.0000   | 0.5497    | 0.5497    | 2.0000e-005 | 0.0000 | 0.5504 |

Wilson Middle School Construction - Los Angeles-South Coast County, Summer

## Wilson Middle School Construction

### Los Angeles-South Coast County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses                  | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|----------------------------|--------|----------|-------------|--------------------|------------|
| Other Asphalt Surfaces     | 42.15  | 1000sqft | 1.01        | 42,145.00          | 0          |
| Other Non-Asphalt Surfaces | 123.92 | 1000sqft | 2.84        | 0.00               | 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>                 | 12           |                                     |       | <b>Operational Year</b>             | 2019  |
| <b>Utility Company</b>              | User Defined |                                     |       |                                     |       |
| <b>CO2 Intensity<br/>(lb/MW hr)</b> | 383.88       | <b>CH4 Intensity<br/>(lb/MW hr)</b> | 0.095 | <b>N2O Intensity<br/>(lb/MW hr)</b> | 0.012 |

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

Project Characteristics - \*\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label: <http://www.sce.com/labels/>

Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - Haul

Off-road Equipment - Haul

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - CalEEMod assumptions

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating - See CalEEMod Assumptions

Vehicle Trips -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

| Table Name              | Column Name                       | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 0.00          | 823.00    |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 0.00          | 2,468.00  |
| tblArchitecturalCoating | EF_Nonresidential_Exterior        | 100.00        | 50.00     |
| tblArchitecturalCoating | EF_Nonresidential_Interior        | 100.00        | 50.00     |
| tblArchitecturalCoating | EF_Parking                        | 100.00        | 50.00     |
| tblConstDustMitigation  | CleanPavedRoadPercentReduction    | 0             | 9         |
| tblConstDustMitigation  | WaterUnpavedRoadVehicleSpeed      | 0             | 15        |
| tblConstructionPhase    | NumDays                           | 8.00          | 16.00     |
| tblConstructionPhase    | NumDays                           | 8.00          | 16.00     |
| tblConstructionPhase    | NumDays                           | 230.00        | 18.00     |
| tblGrading              | MaterialExported                  | 0.00          | 13,381.00 |
| tblLandUse              | LandUseSquareFeet                 | 42,150.00     | 42,145.00 |
| tblLandUse              | LandUseSquareFeet                 | 123,920.00    | 0.00      |
| tblLandUse              | LotAcreage                        | 0.97          | 1.01      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 1.00          | 0.00      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 3.00          | 0.00      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 1.00          | 0.00      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 3.00          | 1.00      |

|                           |                            |       |        |
|---------------------------|----------------------------|-------|--------|
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 2.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 3.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 3.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | UsageHours                 | 7.00  | 8.00   |
| tblOffRoadEquipment       | UsageHours                 | 8.00  | 6.00   |
| tblProjectCharacteristics | CH4IntensityFactor         | 0     | 0.095  |
| tblProjectCharacteristics | CO2IntensityFactor         | 0     | 383.88 |
| tblProjectCharacteristics | N2OIntensityFactor         | 0     | 0.012  |
| tblTripsAndVMT            | HaulingTripNumber          | 31.00 | 32.00  |
| tblTripsAndVMT            | HaulingTripNumber          | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

|                | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total    | Bio- CO2      | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|----------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| Year           | lb/day        |                |                |               |                |               |                |                |               |                | lb/day        |                    |                    |               |               |                    |
| 2018           | 4.6806        | 65.0057        | 24.5108        | 0.1174        | 18.2931        | 2.5822        | 20.8752        | 9.9914         | 2.3757        | 12.3671        | 0.0000        | 12,444.3917        | 12,444.3917        | 1.5750        | 0.0000        | 12,483.7660        |
| <b>Maximum</b> | <b>4.6806</b> | <b>65.0057</b> | <b>24.5108</b> | <b>0.1174</b> | <b>18.2931</b> | <b>2.5822</b> | <b>20.8752</b> | <b>9.9914</b>  | <b>2.3757</b> | <b>12.3671</b> | <b>0.0000</b> | <b>12,444.3917</b> | <b>12,444.3917</b> | <b>1.5750</b> | <b>0.0000</b> | <b>12,483.7660</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    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |             |             |        |        |             |
| 2018    | 4.6806 | 65.0057 | 24.5108 | 0.1174 | 7.9328        | 2.5822       | 10.5149    | 4.3018         | 2.3757        | 6.6776      | 0.0000   | 12,444.3917 | 12,444.3917 | 1.5750 | 0.0000 | 12,483.7660 |
| Maximum | 4.6806 | 65.0057 | 24.5108 | 0.1174 | 7.9328        | 2.5822       | 10.5149    | 4.3018         | 2.3757        | 6.6776      | 0.0000   | 12,444.3917 | 12,444.3917 | 1.5750 | 0.0000 | 12,483.7660 |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 56.64         | 0.00         | 49.63      | 56.94          | 0.00          | 46.01       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

### 3.0 Construction Detail

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#### Construction Phase

| Phase Number | Phase Name                   | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|------------------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Asphalt Demo                 | Demolition            | 6/1/2018   | 6/28/2018 | 5             | 20       |                   |
| 2            | Asphalt Demo Haul            | Demolition            | 6/1/2018   | 6/28/2018 | 5             | 20       |                   |
| 3            | Site Preparation             | Site Preparation      | 6/29/2018  | 7/5/2018  | 5             | 5        |                   |
| 4            | Grading                      | Grading               | 7/6/2018   | 7/27/2018 | 5             | 16       |                   |
| 5            | Grading Haul                 | Grading               | 7/6/2018   | 7/27/2018 | 5             | 16       |                   |
| 6            | Trenching                    | Trenching             | 7/28/2018  | 8/6/2018  | 5             | 6        |                   |
| 7            | Landscaping & Field Lighting | Building Construction | 8/7/2018   | 8/30/2018 | 5             | 18       |                   |
| 8            | Paving                       | Paving                | 8/7/2018   | 8/30/2018 | 5             | 18       |                   |
| 9            | Architectural Coating        | Architectural Coating | 9/1/2018   | 9/26/2018 | 5             | 18       |                   |

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

**Acres of Grading (Grading Phase): 8**

**Acres of Paving: 3.85**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,468; Non-Residential Outdoor: 823; Striped Parking Area: 2,529**

#### OffRoad Equipment



| Phase Name                   | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------------------------|---------------------------|--------|-------------|-------------|-------------|
| Asphalt Demo                 | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Asphalt Demo                 | Excavators                | 3      | 8.00        | 158         | 0.38        |
| Asphalt Demo                 | Rubber Tired Dozers       | 2      | 8.00        | 247         | 0.40        |
| Asphalt Demo Haul            | Concrete/Industrial Saws  | 0      | 8.00        | 81          | 0.73        |
| Asphalt Demo Haul            | Excavators                | 0      | 8.00        | 158         | 0.38        |
| Asphalt Demo Haul            | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Site Preparation             | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation             | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading                      | Excavators                | 1      | 8.00        | 158         | 0.38        |
| Grading                      | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading                      | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading                      | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Grading Haul                 | Excavators                | 0      | 8.00        | 158         | 0.38        |
| Grading Haul                 | Graders                   | 0      | 8.00        | 187         | 0.41        |
| Grading Haul                 | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Grading Haul                 | Tractors/Loaders/Backhoes | 0      | 8.00        | 97          | 0.37        |
| Trenching                    | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Landscaping & Field Lighting | Cranes                    | 1      | 8.00        | 231         | 0.29        |
| Landscaping & Field Lighting | Forklifts                 | 1      | 6.00        | 89          | 0.20        |
| Landscaping & Field Lighting | Generator Sets            | 0      | 8.00        | 84          | 0.74        |
| Landscaping & Field Lighting | Rubber Tired Dozers       | 1      | 6.00        | 247         | 0.40        |
| Landscaping & Field Lighting | Tractors/Loaders/Backhoes | 0      | 7.00        | 97          | 0.37        |
| Landscaping & Field Lighting | Welders                   | 0      | 8.00        | 46          | 0.45        |
| Paving                       | Cement and Mortar Mixers  | 2      | 6.00        | 9           | 0.56        |
| Paving                       | Pavers                    | 1      | 8.00        | 130         | 0.42        |
| Paving                       | Paving Equipment          | 2      | 6.00        | 132         | 0.36        |
| Paving                       | Rollers                   | 2      | 6.00        | 80          | 0.38        |
| Paving                       | 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 |
|------------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Asphalt Demo                 | 6                       | 15.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Asphalt Demo Haul            | 0                       | 0.00               | 0.00               | 32.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation             | 7                       | 18.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                      | 6                       | 15.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading Haul                 | 0                       | 0.00               | 0.00               | 1,673.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Trenching                    | 2                       | 5.00               | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Landscaping & Field Lighting | 3                       | 18.00              | 7.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                       | 8                       | 20.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating        | 1                       | 4.00               | 0.00               | 4.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

### 3.2 Asphalt Demo - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 3.7190        | 38.3225        | 22.3040        | 0.0388        |               | 1.9386        | 1.9386        |                | 1.8048        | 1.8048        |          | 3,871.7665        | 3,871.7665        | 1.0667        |     | 3,898.4344        |
| <b>Total</b>  | <b>3.7190</b> | <b>38.3225</b> | <b>22.3040</b> | <b>0.0388</b> | <b>0.0000</b> | <b>1.9386</b> | <b>1.9386</b> | <b>0.0000</b>  | <b>1.8048</b> | <b>1.8048</b> |          | <b>3,871.7665</b> | <b>3,871.7665</b> | <b>1.0667</b> |     | <b>3,898.4344</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0184        | 0.4902        | 0.1340        | 1.0600e-003        | 0.0256        | 3.4500e-003        | 0.0291        | 7.3700e-003    | 3.3000e-003        | 0.0107        |          | 112.6718        | 112.6718        | 7.4200e-003   |     | 112.8572        |
| Worker       | 0.0829        | 0.0625        | 0.8101        | 1.8900e-003        | 0.1677        | 1.4900e-003        | 0.1692        | 0.0445         | 1.3800e-003        | 0.0458        |          | 188.0535        | 188.0535        | 7.0500e-003   |     | 188.2298        |
| <b>Total</b> | <b>0.1013</b> | <b>0.5528</b> | <b>0.9442</b> | <b>2.9500e-003</b> | <b>0.1933</b> | <b>4.9400e-003</b> | <b>0.1982</b> | <b>0.0518</b>  | <b>4.6800e-003</b> | <b>0.0565</b> |          | <b>300.7252</b> | <b>300.7252</b> | <b>0.0145</b> |     | <b>301.0871</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      | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |         |         |        | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 3.7190 | 38.3225 | 22.3040 | 0.0388 |               | 1.9386       | 1.9386     |                | 1.8048        | 1.8048      | 0.0000   | 3,871.7665 | 3,871.7665 | 1.0667 |     | 3,898.4344 |
| Total         | 3.7190 | 38.3225 | 22.3040 | 0.0388 | 0.0000        | 1.9386       | 1.9386     | 0.0000         | 1.8048        | 1.8048      | 0.0000   | 3,871.7665 | 3,871.7665 | 1.0667 |     | 3,898.4344 |

### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0184 | 0.4902 | 0.1340 | 1.0600e-003 | 0.0240        | 3.4500e-003  | 0.0274     | 6.9700e-003    | 3.3000e-003   | 0.0103      |          | 112.6718  | 112.6718  | 7.4200e-003 |     | 112.8572 |
| Worker   | 0.0829 | 0.0625 | 0.8101 | 1.8900e-003 | 0.1546        | 1.4900e-003  | 0.1560     | 0.0413         | 1.3800e-003   | 0.0426      |          | 188.0535  | 188.0535  | 7.0500e-003 |     | 188.2298 |
| Total    | 0.1013 | 0.5528 | 0.9442 | 2.9500e-003 | 0.1785        | 4.9400e-003  | 0.1835     | 0.0482         | 4.6800e-003   | 0.0529      |          | 300.7252  | 300.7252  | 0.0145      |     | 301.0871 |

### 3.3 Asphalt Demo Haul - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O | CO2e          |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|-----|---------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.3381        | 0.0000        | 0.3381        | 0.0512         | 0.0000        | 0.0512        |          |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 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>0.3381</b> | <b>0.0000</b> | <b>0.3381</b> | <b>0.0512</b>  | <b>0.0000</b> | <b>0.0512</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</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     | lb/day        |               |               |                    |               |                    |               |                    |                    |                    | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0159        | 0.5169        | 0.1070        | 1.3000e-003        | 0.0280        | 1.9700e-003        | 0.0299        | 7.6700e-003        | 1.8800e-003        | 9.5500e-003        |          | 140.0983        | 140.0983        | 9.6400e-003        |     | 140.3395        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 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          |
| <b>Total</b> | <b>0.0159</b> | <b>0.5169</b> | <b>0.1070</b> | <b>1.3000e-003</b> | <b>0.0280</b> | <b>1.9700e-003</b> | <b>0.0299</b> | <b>7.6700e-003</b> | <b>1.8800e-003</b> | <b>9.5500e-003</b> |          | <b>140.0983</b> | <b>140.0983</b> | <b>9.6400e-003</b> |     | <b>140.3395</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      | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |     |        |
| Fugitive Dust |        |        |        |        | 0.1445        | 0.0000       | 0.1445     | 0.0219         | 0.0000        | 0.0219      |          |           | 0.0000    |        |     | 0.0000 |
| Off-Road      | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Total         | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1445        | 0.0000       | 0.1445     | 0.0219         | 0.0000        | 0.0219      | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |

### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0159 | 0.5169 | 0.1070 | 1.3000e-003 | 0.0261        | 1.9700e-003  | 0.0280     | 7.2000e-003    | 1.8800e-003   | 9.0800e-003 |          | 140.0983  | 140.0983  | 9.6400e-003 |     | 140.3395 |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 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   |
| Total    | 0.0159 | 0.5169 | 0.1070 | 1.3000e-003 | 0.0261        | 1.9700e-003  | 0.0280     | 7.2000e-003    | 1.8800e-003   | 9.0800e-003 |          | 140.0983  | 140.0983  | 9.6400e-003 |     | 140.3395 |

### 3.4 Site Preparation - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total    | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |                |               |                |                |               |                | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 18.0663        | 0.0000        | 18.0663        | 9.9307         | 0.0000        | 9.9307         |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 4.5627        | 48.1988        | 22.4763        | 0.0380        |                | 2.5769        | 2.5769         |                | 2.3708        | 2.3708         |          | 3,831.6239        | 3,831.6239        | 1.1928        |     | 3,861.4448        |
| <b>Total</b>  | <b>4.5627</b> | <b>48.1988</b> | <b>22.4763</b> | <b>0.0380</b> | <b>18.0663</b> | <b>2.5769</b> | <b>20.6432</b> | <b>9.9307</b>  | <b>2.3708</b> | <b>12.3014</b> |          | <b>3,831.6239</b> | <b>3,831.6239</b> | <b>1.1928</b> |     | <b>3,861.4448</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0184        | 0.4902        | 0.1340        | 1.0600e-003        | 0.0256        | 3.4500e-003        | 0.0291        | 7.3700e-003    | 3.3000e-003        | 0.0107        |          | 112.6718        | 112.6718        | 7.4200e-003   |     | 112.8572        |
| Worker       | 0.0995        | 0.0751        | 0.9721        | 2.2700e-003        | 0.2012        | 1.7900e-003        | 0.2030        | 0.0534         | 1.6500e-003        | 0.0550        |          | 225.6642        | 225.6642        | 8.4600e-003   |     | 225.8758        |
| <b>Total</b> | <b>0.1179</b> | <b>0.5653</b> | <b>1.1062</b> | <b>3.3300e-003</b> | <b>0.2268</b> | <b>5.2400e-003</b> | <b>0.2321</b> | <b>0.0607</b>  | <b>4.9500e-003</b> | <b>0.0657</b> |          | <b>338.3359</b> | <b>338.3359</b> | <b>0.0159</b> |     | <b>338.7330</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      | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |         |         |        | 7.7233        | 0.0000       | 7.7233     | 4.2454         | 0.0000        | 4.2454      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 4.5627 | 48.1988 | 22.4763 | 0.0380 |               | 2.5769       | 2.5769     |                | 2.3708        | 2.3708      | 0.0000   | 3,831.6239 | 3,831.6239 | 1.1928 |     | 3,861.4448 |
| Total         | 4.5627 | 48.1988 | 22.4763 | 0.0380 | 7.7233        | 2.5769       | 10.3002    | 4.2454         | 2.3708        | 6.6161      | 0.0000   | 3,831.6239 | 3,831.6239 | 1.1928 |     | 3,861.4448 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0184 | 0.4902 | 0.1340 | 1.0600e-003 | 0.0240        | 3.4500e-003  | 0.0274     | 6.9700e-003    | 3.3000e-003   | 0.0103      |          | 112.6718  | 112.6718  | 7.4200e-003 |     | 112.8572 |
| Worker   | 0.0995 | 0.0751 | 0.9721 | 2.2700e-003 | 0.1855        | 1.7900e-003  | 0.1873     | 0.0495         | 1.6500e-003   | 0.0512      |          | 225.6642  | 225.6642  | 8.4600e-003 |     | 225.8758 |
| Total    | 0.1179 | 0.5653 | 1.1062 | 3.3300e-003 | 0.2094        | 5.2400e-003  | 0.2147     | 0.0565         | 4.9500e-003   | 0.0614      |          | 338.3359  | 338.3359  | 0.0159      |     | 338.7330 |



### 3.5 Grading - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 6.5523        | 0.0000        | 6.5523        | 3.3675         | 0.0000        | 3.3675        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 2.7733        | 30.6725        | 16.5770        | 0.0297        |               | 1.5513        | 1.5513        |                | 1.4272        | 1.4272        |          | 2,988.0216        | 2,988.0216        | 0.9302        |     | 3,011.2769        |
| <b>Total</b>  | <b>2.7733</b> | <b>30.6725</b> | <b>16.5770</b> | <b>0.0297</b> | <b>6.5523</b> | <b>1.5513</b> | <b>8.1037</b> | <b>3.3675</b>  | <b>1.4272</b> | <b>4.7947</b> |          | <b>2,988.0216</b> | <b>2,988.0216</b> | <b>0.9302</b> |     | <b>3,011.2769</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0184        | 0.4902        | 0.1340        | 1.0600e-003        | 0.0256        | 3.4500e-003        | 0.0291        | 7.3700e-003    | 3.3000e-003        | 0.0107        |          | 112.6718        | 112.6718        | 7.4200e-003   |     | 112.8572        |
| Worker       | 0.0829        | 0.0625        | 0.8101        | 1.8900e-003        | 0.1677        | 1.4900e-003        | 0.1692        | 0.0445         | 1.3800e-003        | 0.0458        |          | 188.0535        | 188.0535        | 7.0500e-003   |     | 188.2298        |
| <b>Total</b> | <b>0.1013</b> | <b>0.5528</b> | <b>0.9442</b> | <b>2.9500e-003</b> | <b>0.1933</b> | <b>4.9400e-003</b> | <b>0.1982</b> | <b>0.0518</b>  | <b>4.6800e-003</b> | <b>0.0565</b> |          | <b>300.7252</b> | <b>300.7252</b> | <b>0.0145</b> |     | <b>301.0871</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      | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |         |         |        | 2.8011        | 0.0000       | 2.8011     | 1.4396         | 0.0000        | 1.4396      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 2.7733 | 30.6725 | 16.5770 | 0.0297 |               | 1.5513       | 1.5513     |                | 1.4272        | 1.4272      | 0.0000   | 2,988.0216 | 2,988.0216 | 0.9302 |     | 3,011.2769 |
| Total         | 2.7733 | 30.6725 | 16.5770 | 0.0297 | 2.8011        | 1.5513       | 4.3524     | 1.4396         | 1.4272        | 2.8668      | 0.0000   | 2,988.0216 | 2,988.0216 | 0.9302 |     | 3,011.2769 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0184 | 0.4902 | 0.1340 | 1.0600e-003 | 0.0240        | 3.4500e-003  | 0.0274     | 6.9700e-003    | 3.3000e-003   | 0.0103      |          | 112.6718  | 112.6718  | 7.4200e-003 |     | 112.8572 |
| Worker   | 0.0829 | 0.0625 | 0.8101 | 1.8900e-003 | 0.1546        | 1.4900e-003  | 0.1560     | 0.0413         | 1.3800e-003   | 0.0426      |          | 188.0535  | 188.0535  | 7.0500e-003 |     | 188.2298 |
| Total    | 0.1013 | 0.5528 | 0.9442 | 2.9500e-003 | 0.1785        | 4.9400e-003  | 0.1835     | 0.0482         | 4.6800e-003   | 0.0529      |          | 300.7252  | 300.7252  | 0.0145      |     | 301.0871 |

### 3.6 Grading Haul - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O | CO2e          |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|-----|---------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.0946        | 0.0000        | 0.0946        | 0.0143         | 0.0000        | 0.0143        |          |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 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>0.0946</b> | <b>0.0000</b> | <b>0.0946</b> | <b>0.0143</b>  | <b>0.0000</b> | <b>0.0143</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</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     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Hauling      | 1.0379        | 33.7804        | 6.9897        | 0.0848        | 1.8281        | 0.1285        | 1.9566        | 0.5011         | 0.1229        | 0.6240        |          | 9,155.6448        | 9,155.6448        | 0.6303        |     | 9,171.4020        |
| Vendor       | 0.0000        | 0.0000         | 0.0000        | 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            |
| <b>Total</b> | <b>1.0379</b> | <b>33.7804</b> | <b>6.9897</b> | <b>0.0848</b> | <b>1.8281</b> | <b>0.1285</b> | <b>1.9566</b> | <b>0.5011</b>  | <b>0.1229</b> | <b>0.6240</b> |          | <b>9,155.6448</b> | <b>9,155.6448</b> | <b>0.6303</b> |     | <b>9,171.4020</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      | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |     |        |
| Fugitive Dust |        |        |        |        | 0.0404        | 0.0000       | 0.0404     | 6.1200e-003    | 0.0000        | 6.1200e-003 |          |           | 0.0000    |        |     | 0.0000 |
| Off-Road      | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Total         | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0404        | 0.0000       | 0.0404     | 6.1200e-003    | 0.0000        | 6.1200e-003 | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |

Mitigated Construction Off-Site

|          | ROG    | NOx     | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O | CO2e       |
|----------|--------|---------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day |         |        |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Hauling  | 1.0379 | 33.7804 | 6.9897 | 0.0848 | 1.7037        | 0.1285       | 1.8322     | 0.4706         | 0.1229        | 0.5935      |          | 9,155.6448 | 9,155.6448 | 0.6303 |     | 9,171.4020 |
| Vendor   | 0.0000 | 0.0000  | 0.0000 | 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     |
| Total    | 1.0379 | 33.7804 | 6.9897 | 0.0848 | 1.7037        | 0.1285       | 1.8322     | 0.4706         | 0.1229        | 0.5935      |          | 9,155.6448 | 9,155.6448 | 0.6303 |     | 9,171.4020 |

### 3.7 Trenching - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Off-Road     | 0.5322        | 5.2595        | 4.6734        | 6.2100e-003        |               | 0.3726        | 0.3726        |                | 0.3428        | 0.3428        |          | 625.5519        | 625.5519        | 0.1947        |     | 630.4205        |
| <b>Total</b> | <b>0.5322</b> | <b>5.2595</b> | <b>4.6734</b> | <b>6.2100e-003</b> |               | <b>0.3726</b> | <b>0.3726</b> |                | <b>0.3428</b> | <b>0.3428</b> |          | <b>625.5519</b> | <b>625.5519</b> | <b>0.1947</b> |     | <b>630.4205</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Vendor       | 0.0184        | 0.4902        | 0.1340        | 1.0600e-003        | 0.0256        | 3.4500e-003        | 0.0291        | 7.3700e-003    | 3.3000e-003        | 0.0107        |          | 112.6718        | 112.6718        | 7.4200e-003        |     | 112.8572        |
| Worker       | 0.0276        | 0.0209        | 0.2700        | 6.3000e-004        | 0.0559        | 5.0000e-004        | 0.0564        | 0.0148         | 4.6000e-004        | 0.0153        |          | 62.6845         | 62.6845         | 2.3500e-003        |     | 62.7433         |
| <b>Total</b> | <b>0.0460</b> | <b>0.5111</b> | <b>0.4041</b> | <b>1.6900e-003</b> | <b>0.0815</b> | <b>3.9500e-003</b> | <b>0.0855</b> | <b>0.0222</b>  | <b>3.7600e-003</b> | <b>0.0260</b> |          | <b>175.3563</b> | <b>175.3563</b> | <b>9.7700e-003</b> |     | <b>175.6005</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     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Off-Road     | 0.5322        | 5.2595        | 4.6734        | 6.2100e-003        |               | 0.3726        | 0.3726        |                | 0.3428        | 0.3428        | 0.0000        | 625.5519        | 625.5519        | 0.1947        |     | 630.4205        |
| <b>Total</b> | <b>0.5322</b> | <b>5.2595</b> | <b>4.6734</b> | <b>6.2100e-003</b> |               | <b>0.3726</b> | <b>0.3726</b> |                | <b>0.3428</b> | <b>0.3428</b> | <b>0.0000</b> | <b>625.5519</b> | <b>625.5519</b> | <b>0.1947</b> |     | <b>630.4205</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Vendor       | 0.0184        | 0.4902        | 0.1340        | 1.0600e-003        | 0.0240        | 3.4500e-003        | 0.0274        | 6.9700e-003    | 3.3000e-003        | 0.0103        |          | 112.6718        | 112.6718        | 7.4200e-003        |     | 112.8572        |
| Worker       | 0.0276        | 0.0209        | 0.2700        | 6.3000e-004        | 0.0515        | 5.0000e-004        | 0.0520        | 0.0138         | 4.6000e-004        | 0.0142        |          | 62.6845         | 62.6845         | 2.3500e-003        |     | 62.7433         |
| <b>Total</b> | <b>0.0460</b> | <b>0.5111</b> | <b>0.4041</b> | <b>1.6900e-003</b> | <b>0.0755</b> | <b>3.9500e-003</b> | <b>0.0794</b> | <b>0.0207</b>  | <b>3.7600e-003</b> | <b>0.0245</b> |          | <b>175.3563</b> | <b>175.3563</b> | <b>9.7700e-003</b> |     | <b>175.6005</b> |

### 3.8 Landscaping & Field Lighting - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.5789        | 17.4216        | 6.7126        | 0.0133        |               | 0.8474        | 0.8474        |                | 0.7796        | 0.7796        |          | 1,341.0686        | 1,341.0686        | 0.4175        |     | 1,351.5059        |
| <b>Total</b> | <b>1.5789</b> | <b>17.4216</b> | <b>6.7126</b> | <b>0.0133</b> |               | <b>0.8474</b> | <b>0.8474</b> |                | <b>0.7796</b> | <b>0.7796</b> |          | <b>1,341.0686</b> | <b>1,341.0686</b> | <b>0.4175</b> |     | <b>1,351.5059</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0322        | 0.8579        | 0.2346        | 1.8500e-003        | 0.0448        | 6.0500e-003        | 0.0509        | 0.0129         | 5.7800e-003        | 0.0187        |          | 197.1756        | 197.1756        | 0.0130        |     | 197.5002        |
| Worker       | 0.0995        | 0.0751        | 0.9721        | 2.2700e-003        | 0.2012        | 1.7900e-003        | 0.2030        | 0.0534         | 1.6500e-003        | 0.0550        |          | 225.6642        | 225.6642        | 8.4600e-003   |     | 225.8758        |
| <b>Total</b> | <b>0.1317</b> | <b>0.9330</b> | <b>1.2067</b> | <b>4.1200e-003</b> | <b>0.2460</b> | <b>7.8400e-003</b> | <b>0.2539</b> | <b>0.0663</b>  | <b>7.4300e-003</b> | <b>0.0737</b> |          | <b>422.8398</b> | <b>422.8398</b> | <b>0.0214</b> |     | <b>423.3759</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     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 1.5789        | 17.4216        | 6.7126        | 0.0133        |               | 0.8474        | 0.8474        |                | 0.7796        | 0.7796        | 0.0000        | 1,341.0686        | 1,341.0686        | 0.4175        |     | 1,351.5059        |
| <b>Total</b> | <b>1.5789</b> | <b>17.4216</b> | <b>6.7126</b> | <b>0.0133</b> |               | <b>0.8474</b> | <b>0.8474</b> |                | <b>0.7796</b> | <b>0.7796</b> | <b>0.0000</b> | <b>1,341.0686</b> | <b>1,341.0686</b> | <b>0.4175</b> |     | <b>1,351.5059</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0322        | 0.8579        | 0.2346        | 1.8500e-003        | 0.0419        | 6.0500e-003        | 0.0480        | 0.0122         | 5.7800e-003        | 0.0180        |          | 197.1756        | 197.1756        | 0.0130        |     | 197.5002        |
| Worker       | 0.0995        | 0.0751        | 0.9721        | 2.2700e-003        | 0.1855        | 1.7900e-003        | 0.1873        | 0.0495         | 1.6500e-003        | 0.0512        |          | 225.6642        | 225.6642        | 8.4600e-003   |     | 225.8758        |
| <b>Total</b> | <b>0.1317</b> | <b>0.9330</b> | <b>1.2067</b> | <b>4.1200e-003</b> | <b>0.2274</b> | <b>7.8400e-003</b> | <b>0.2352</b> | <b>0.0617</b>  | <b>7.4300e-003</b> | <b>0.0691</b> |          | <b>422.8398</b> | <b>422.8398</b> | <b>0.0214</b> |     | <b>423.3759</b> |



### 3.9 Paving - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.4239        | 14.5184        | 12.4333        | 0.0189        |               | 0.8370        | 0.8370        |                | 0.7718        | 0.7718        |          | 1,872.5505        | 1,872.5505        | 0.5672        |     | 1,886.7312        |
| Paving       | 0.1470        |                |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| <b>Total</b> | <b>1.5709</b> | <b>14.5184</b> | <b>12.4333</b> | <b>0.0189</b> |               | <b>0.8370</b> | <b>0.8370</b> |                | <b>0.7718</b> | <b>0.7718</b> |          | <b>1,872.5505</b> | <b>1,872.5505</b> | <b>0.5672</b> |     | <b>1,886.7312</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Worker       | 0.1105        | 0.0834        | 1.0802        | 2.5200e-003        | 0.2236        | 1.9900e-003        | 0.2256        | 0.0593         | 1.8400e-003        | 0.0611        |          | 250.7380        | 250.7380        | 9.4000e-003        |     | 250.9731        |
| <b>Total</b> | <b>0.1105</b> | <b>0.0834</b> | <b>1.0802</b> | <b>2.5200e-003</b> | <b>0.2236</b> | <b>1.9900e-003</b> | <b>0.2256</b> | <b>0.0593</b>  | <b>1.8400e-003</b> | <b>0.0611</b> |          | <b>250.7380</b> | <b>250.7380</b> | <b>9.4000e-003</b> |     | <b>250.9731</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 | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Off-Road | 1.4239 | 14.5184 | 12.4333 | 0.0189 |               | 0.8370       | 0.8370     |                | 0.7718        | 0.7718      | 0.0000   | 1,872.5505 | 1,872.5505 | 0.5672 |     | 1,886.7312 |
| Paving   | 0.1470 |         |         |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          |            | 0.0000     |        |     | 0.0000     |
| Total    | 1.5709 | 14.5184 | 12.4333 | 0.0189 |               | 0.8370       | 0.8370     |                | 0.7718        | 0.7718      | 0.0000   | 1,872.5505 | 1,872.5505 | 0.5672 |     | 1,886.7312 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Worker   | 0.1105 | 0.0834 | 1.0802 | 2.5200e-003 | 0.2061        | 1.9900e-003  | 0.2081     | 0.0550         | 1.8400e-003   | 0.0568      |          | 250.7380  | 250.7380  | 9.4000e-003 |     | 250.9731 |
| Total    | 0.1105 | 0.0834 | 1.0802 | 2.5200e-003 | 0.2061        | 1.9900e-003  | 0.2081     | 0.0550         | 1.8400e-003   | 0.0568      |          | 250.7380  | 250.7380  | 9.4000e-003 |     | 250.9731 |

### 3.10 Architectural Coating - 2018

#### Unmitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Archit. Coating | 0.7493        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.2986        | 2.0058        | 1.8542        | 2.9700e-003        |               | 0.1506        | 0.1506        |                | 0.1506        | 0.1506        |          | 281.4485        | 281.4485        | 0.0267        |     | 282.1171        |
| <b>Total</b>    | <b>1.0480</b> | <b>2.0058</b> | <b>1.8542</b> | <b>2.9700e-003</b> |               | <b>0.1506</b> | <b>0.1506</b> |                | <b>0.1506</b> | <b>0.1506</b> |          | <b>281.4485</b> | <b>281.4485</b> | <b>0.0267</b> |     | <b>282.1171</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                |                |                    |     |                |
| Hauling      | 2.2100e-003   | 0.0718        | 0.0149        | 1.8000e-004        | 3.8900e-003   | 2.7000e-004        | 4.1600e-003   | 1.0600e-003    | 2.6000e-004        | 1.3300e-003   |          | 19.4581        | 19.4581        | 1.3400e-003        |     | 19.4916        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |
| Worker       | 0.0221        | 0.0167        | 0.2160        | 5.0000e-004        | 0.0447        | 4.0000e-004        | 0.0451        | 0.0119         | 3.7000e-004        | 0.0122        |          | 50.1476        | 50.1476        | 1.8800e-003        |     | 50.1946        |
| <b>Total</b> | <b>0.0243</b> | <b>0.0885</b> | <b>0.2309</b> | <b>6.8000e-004</b> | <b>0.0486</b> | <b>6.7000e-004</b> | <b>0.0493</b> | <b>0.0129</b>  | <b>6.3000e-004</b> | <b>0.0136</b> |          | <b>69.6057</b> | <b>69.6057</b> | <b>3.2200e-003</b> |     | <b>69.6862</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        | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |        |     |          |
| Archit. Coating | 0.7493 |        |        |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          |           | 0.0000    |        |     | 0.0000   |
| Off-Road        | 0.2986 | 2.0058 | 1.8542 | 2.9700e-003 |               | 0.1506       | 0.1506     |                | 0.1506        | 0.1506      | 0.0000   | 281.4485  | 281.4485  | 0.0267 |     | 282.1171 |
| Total           | 1.0480 | 2.0058 | 1.8542 | 2.9700e-003 |               | 0.1506       | 0.1506     |                | 0.1506        | 0.1506      | 0.0000   | 281.4485  | 281.4485  | 0.0267 |     | 282.1171 |

### Mitigated Construction Off-Site

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e    |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|---------|
| Category | lb/day      |        |        |             |               |              |             |                |               |             | lb/day   |           |           |             |     |         |
| Hauling  | 2.2100e-003 | 0.0718 | 0.0149 | 1.8000e-004 | 3.6200e-003   | 2.7000e-004  | 3.8900e-003 | 1.0000e-003    | 2.6000e-004   | 1.2600e-003 |          | 19.4581   | 19.4581   | 1.3400e-003 |     | 19.4916 |
| Vendor   | 0.0000      | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |
| Worker   | 0.0221      | 0.0167 | 0.2160 | 5.0000e-004 | 0.0412        | 4.0000e-004  | 0.0416      | 0.0110         | 3.7000e-004   | 0.0114      |          | 50.1476   | 50.1476   | 1.8800e-003 |     | 50.1946 |
| Total    | 0.0243      | 0.0885 | 0.2309 | 6.8000e-004 | 0.0448        | 6.7000e-004  | 0.0455      | 0.0120         | 6.3000e-004   | 0.0126      |          | 69.6057   | 69.6057   | 3.2200e-003 |     | 69.6862 |

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Wilson Midle School Construction - Los Angeles-South Coast County, Winter

## Wilson Midle School Construction

### Los Angeles-South Coast County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses                  | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|----------------------------|--------|----------|-------------|--------------------|------------|
| Other Asphalt Surfaces     | 42.15  | 1000sqft | 1.01        | 42,145.00          | 0          |
| Other Non-Asphalt Surfaces | 123.92 | 1000sqft | 2.84        | 0.00               | 0          |

### 1.2 Other Project Characteristics

|                             |              |                             |       |                             |       |
|-----------------------------|--------------|-----------------------------|-------|-----------------------------|-------|
| Urbanization                | Urban        | Wind Speed (m/s)            | 2.2   | Precipitation Freq (Days)   | 33    |
| Climate Zone                | 12           |                             |       | Operational Year            | 2019  |
| Utility Company             | User Defined |                             |       |                             |       |
| CO2 Intensity<br>(lb/MW hr) | 383.88       | CH4 Intensity<br>(lb/MW hr) | 0.095 | N2O Intensity<br>(lb/MW hr) | 0.012 |

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

Project Characteristics - \*\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label: <http://www.energy.ca.gov/data/labels/>

Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - Haul

Off-road Equipment - Haul

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - CalEEMod assumptions

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating - See CalEEMod Assumptions

Vehicle Trips -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

| Table Name              | Column Name                       | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 0.00          | 823.00    |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 0.00          | 2,468.00  |
| tblArchitecturalCoating | EF_Nonresidential_Exterior        | 100.00        | 50.00     |
| tblArchitecturalCoating | EF_Nonresidential_Interior        | 100.00        | 50.00     |
| tblArchitecturalCoating | EF_Parking                        | 100.00        | 50.00     |
| tblConstDustMitigation  | CleanPavedRoadPercentReduction    | 0             | 9         |
| tblConstDustMitigation  | WaterUnpavedRoadVehicleSpeed      | 0             | 15        |
| tblConstructionPhase    | NumDays                           | 8.00          | 16.00     |
| tblConstructionPhase    | NumDays                           | 8.00          | 16.00     |
| tblConstructionPhase    | NumDays                           | 230.00        | 18.00     |
| tblGrading              | MaterialExported                  | 0.00          | 13,381.00 |
| tblLandUse              | LandUseSquareFeet                 | 42,150.00     | 42,145.00 |
| tblLandUse              | LandUseSquareFeet                 | 123,920.00    | 0.00      |
| tblLandUse              | LotAcreage                        | 0.97          | 1.01      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 1.00          | 0.00      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 3.00          | 0.00      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 1.00          | 0.00      |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount        | 3.00          | 1.00      |

|                           |                            |       |        |
|---------------------------|----------------------------|-------|--------|
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 2.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 3.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 3.00  | 0.00   |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00  | 0.00   |
| tblOffRoadEquipment       | UsageHours                 | 7.00  | 8.00   |
| tblOffRoadEquipment       | UsageHours                 | 8.00  | 6.00   |
| tblProjectCharacteristics | CH4IntensityFactor         | 0     | 0.095  |
| tblProjectCharacteristics | CO2IntensityFactor         | 0     | 383.88 |
| tblProjectCharacteristics | N2OIntensityFactor         | 0     | 0.012  |
| tblTripsAndVMT            | HaulingTripNumber          | 31.00 | 32.00  |
| tblTripsAndVMT            | HaulingTripNumber          | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber           | 0.00  | 4.00   |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O    | CO2e        |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |             |             |        |        |             |
| 2018    | 4.6920 | 65.4762 | 24.9477 | 0.1158 | 18.2931       | 2.5822       | 20.8753    | 9.9914         | 2.3758        | 12.3672     | 0.0000   | 12,277.2140 | 12,277.2140 | 1.5997 | 0.0000 | 12,317.2058 |
| Maximum | 4.6920 | 65.4762 | 24.9477 | 0.1158 | 18.2931       | 2.5822       | 20.8753    | 9.9914         | 2.3758        | 12.3672     | 0.0000   | 12,277.2140 | 12,277.2140 | 1.5997 | 0.0000 | 12,317.2058 |

Mitigated Construction

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O    | CO2e        |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |             |             |        |        |             |
| 2018    | 4.6920 | 65.4762 | 24.9477 | 0.1158 | 7.9328        | 2.5822       | 10.5150    | 4.3018         | 2.3758        | 6.6776      | 0.0000   | 12,277.2140 | 12,277.2140 | 1.5997 | 0.0000 | 12,317.2058 |
| Maximum | 4.6920 | 65.4762 | 24.9477 | 0.1158 | 7.9328        | 2.5822       | 10.5150    | 4.3018         | 2.3758        | 6.6776      | 0.0000   | 12,277.2140 | 12,277.2140 | 1.5997 | 0.0000 | 12,317.2058 |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 56.64         | 0.00         | 49.63      | 56.94          | 0.00          | 46.01       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |



### 3.0 Construction Detail

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#### Construction Phase

| Phase Number | Phase Name                   | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|------------------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Asphalt Demo                 | Demolition            | 6/1/2018   | 6/28/2018 | 5             | 20       |                   |
| 2            | Asphalt Demo Haul            | Demolition            | 6/1/2018   | 6/28/2018 | 5             | 20       |                   |
| 3            | Site Preparation             | Site Preparation      | 6/29/2018  | 7/5/2018  | 5             | 5        |                   |
| 4            | Grading                      | Grading               | 7/6/2018   | 7/27/2018 | 5             | 16       |                   |
| 5            | Grading Haul                 | Grading               | 7/6/2018   | 7/27/2018 | 5             | 16       |                   |
| 6            | Trenching                    | Trenching             | 7/28/2018  | 8/6/2018  | 5             | 6        |                   |
| 7            | Landscaping & Field Lighting | Building Construction | 8/7/2018   | 8/30/2018 | 5             | 18       |                   |
| 8            | Paving                       | Paving                | 8/7/2018   | 8/30/2018 | 5             | 18       |                   |
| 9            | Architectural Coating        | Architectural Coating | 9/1/2018   | 9/26/2018 | 5             | 18       |                   |

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

**Acres of Grading (Grading Phase): 8**

**Acres of Paving: 3.85**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,468; Non-Residential Outdoor: 823; Striped Parking Area: 2,529**

**OffRoad Equipment**

| Phase Name                   | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------------------------|---------------------------|--------|-------------|-------------|-------------|
| Asphalt Demo                 | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Asphalt Demo                 | Excavators                | 3      | 8.00        | 158         | 0.38        |
| Asphalt Demo                 | Rubber Tired Dozers       | 2      | 8.00        | 247         | 0.40        |
| Asphalt Demo Haul            | Concrete/Industrial Saws  | 0      | 8.00        | 81          | 0.73        |
| Asphalt Demo Haul            | Excavators                | 0      | 8.00        | 158         | 0.38        |
| Asphalt Demo Haul            | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Site Preparation             | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation             | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading                      | Excavators                | 1      | 8.00        | 158         | 0.38        |
| Grading                      | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading                      | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading                      | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Grading Haul                 | Excavators                | 0      | 8.00        | 158         | 0.38        |
| Grading Haul                 | Graders                   | 0      | 8.00        | 187         | 0.41        |
| Grading Haul                 | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Grading Haul                 | Tractors/Loaders/Backhoes | 0      | 8.00        | 97          | 0.37        |
| Trenching                    | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Landscaping & Field Lighting | Cranes                    | 1      | 8.00        | 231         | 0.29        |
| Landscaping & Field Lighting | Forklifts                 | 1      | 6.00        | 89          | 0.20        |
| Landscaping & Field Lighting | Generator Sets            | 0      | 8.00        | 84          | 0.74        |
| Landscaping & Field Lighting | Rubber Tired Dozers       | 1      | 6.00        | 247         | 0.40        |
| Landscaping & Field Lighting | Tractors/Loaders/Backhoes | 0      | 7.00        | 97          | 0.37        |
| Landscaping & Field Lighting | Welders                   | 0      | 8.00        | 46          | 0.45        |
| Paving                       | Cement and Mortar Mixers  | 2      | 6.00        | 9           | 0.56        |
| Paving                       | Pavers                    | 1      | 8.00        | 130         | 0.42        |
| Paving                       | Paving Equipment          | 2      | 6.00        | 132         | 0.36        |
| Paving                       | Rollers                   | 2      | 6.00        | 80          | 0.38        |
| Paving                       | 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 |
|------------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Asphalt Demo                 | 6                       | 15.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Asphalt Demo Haul            | 0                       | 0.00               | 0.00               | 32.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation             | 7                       | 18.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                      | 6                       | 15.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading Haul                 | 0                       | 0.00               | 0.00               | 1,673.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Trenching                    | 2                       | 5.00               | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Landscaping & Field Lighting | 3                       | 18.00              | 7.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                       | 8                       | 20.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating        | 1                       | 4.00               | 0.00               | 4.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

### 3.2 Asphalt Demo - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 3.7190        | 38.3225        | 22.3040        | 0.0388        |               | 1.9386        | 1.9386        |                | 1.8048        | 1.8048        |          | 3,871.7665        | 3,871.7665        | 1.0667        |     | 3,898.4344        |
| <b>Total</b>  | <b>3.7190</b> | <b>38.3225</b> | <b>22.3040</b> | <b>0.0388</b> | <b>0.0000</b> | <b>1.9386</b> | <b>1.9386</b> | <b>0.0000</b>  | <b>1.8048</b> | <b>1.8048</b> |          | <b>3,871.7665</b> | <b>3,871.7665</b> | <b>1.0667</b> |     | <b>3,898.4344</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0192        | 0.4913        | 0.1473        | 1.0300e-003        | 0.0256        | 3.5100e-003        | 0.0291        | 7.3700e-003    | 3.3600e-003        | 0.0107        |          | 109.6599        | 109.6599        | 7.9100e-003   |     | 109.8578        |
| Worker       | 0.0917        | 0.0693        | 0.7459        | 1.7800e-003        | 0.1677        | 1.4900e-003        | 0.1692        | 0.0445         | 1.3800e-003        | 0.0458        |          | 177.0864        | 177.0864        | 6.6600e-003   |     | 177.2530        |
| <b>Total</b> | <b>0.1109</b> | <b>0.5606</b> | <b>0.8932</b> | <b>2.8100e-003</b> | <b>0.1933</b> | <b>5.0000e-003</b> | <b>0.1983</b> | <b>0.0518</b>  | <b>4.7400e-003</b> | <b>0.0566</b> |          | <b>286.7463</b> | <b>286.7463</b> | <b>0.0146</b> |     | <b>287.1108</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      | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |         |         |        | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 3.7190 | 38.3225 | 22.3040 | 0.0388 |               | 1.9386       | 1.9386     |                | 1.8048        | 1.8048      | 0.0000   | 3,871.7665 | 3,871.7665 | 1.0667 |     | 3,898.4344 |
| Total         | 3.7190 | 38.3225 | 22.3040 | 0.0388 | 0.0000        | 1.9386       | 1.9386     | 0.0000         | 1.8048        | 1.8048      | 0.0000   | 3,871.7665 | 3,871.7665 | 1.0667 |     | 3,898.4344 |

Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0192 | 0.4913 | 0.1473 | 1.0300e-003 | 0.0240        | 3.5100e-003  | 0.0275     | 6.9700e-003    | 3.3600e-003   | 0.0103      |          | 109.6599  | 109.6599  | 7.9100e-003 |     | 109.8578 |
| Worker   | 0.0917 | 0.0693 | 0.7459 | 1.7800e-003 | 0.1546        | 1.4900e-003  | 0.1560     | 0.0413         | 1.3800e-003   | 0.0426      |          | 177.0864  | 177.0864  | 6.6600e-003 |     | 177.2530 |
| Total    | 0.1109 | 0.5606 | 0.8932 | 2.8100e-003 | 0.1785        | 5.0000e-003  | 0.1835     | 0.0482         | 4.7400e-003   | 0.0530      |          | 286.7463  | 286.7463  | 0.0146      |     | 287.1108 |

### 3.3 Asphalt Demo Haul - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O | CO2e          |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|-----|---------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.3381        | 0.0000        | 0.3381        | 0.0512         | 0.0000        | 0.0512        |          |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 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>0.3381</b> | <b>0.0000</b> | <b>0.3381</b> | <b>0.0512</b>  | <b>0.0000</b> | <b>0.0512</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</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     | lb/day        |               |               |                    |               |                    |               |                    |                    |                    | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0163        | 0.5240        | 0.1144        | 1.2800e-003        | 0.0280        | 2.0000e-003        | 0.0300        | 7.6700e-003        | 1.9200e-003        | 9.5900e-003        |          | 137.7541        | 137.7541        | 0.0100        |     | 138.0046        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 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          |
| <b>Total</b> | <b>0.0163</b> | <b>0.5240</b> | <b>0.1144</b> | <b>1.2800e-003</b> | <b>0.0280</b> | <b>2.0000e-003</b> | <b>0.0300</b> | <b>7.6700e-003</b> | <b>1.9200e-003</b> | <b>9.5900e-003</b> |          | <b>137.7541</b> | <b>137.7541</b> | <b>0.0100</b> |     | <b>138.0046</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      | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |     |        |
| Fugitive Dust |        |        |        |        | 0.1445        | 0.0000       | 0.1445     | 0.0219         | 0.0000        | 0.0219      |          |           | 0.0000    |        |     | 0.0000 |
| Off-Road      | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Total         | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1445        | 0.0000       | 0.1445     | 0.0219         | 0.0000        | 0.0219      | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |

Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |        |     |          |
| Hauling  | 0.0163 | 0.5240 | 0.1144 | 1.2800e-003 | 0.0261        | 2.0000e-003  | 0.0281     | 7.2000e-003    | 1.9200e-003   | 9.1200e-003 |          | 137.7541  | 137.7541  | 0.0100 |     | 138.0046 |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 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   |
| Total    | 0.0163 | 0.5240 | 0.1144 | 1.2800e-003 | 0.0261        | 2.0000e-003  | 0.0281     | 7.2000e-003    | 1.9200e-003   | 9.1200e-003 |          | 137.7541  | 137.7541  | 0.0100 |     | 138.0046 |

### 3.4 Site Preparation - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total    | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |                |               |                |                |               |                | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 18.0663        | 0.0000        | 18.0663        | 9.9307         | 0.0000        | 9.9307         |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 4.5627        | 48.1988        | 22.4763        | 0.0380        |                | 2.5769        | 2.5769         |                | 2.3708        | 2.3708         |          | 3,831.6239        | 3,831.6239        | 1.1928        |     | 3,861.4448        |
| <b>Total</b>  | <b>4.5627</b> | <b>48.1988</b> | <b>22.4763</b> | <b>0.0380</b> | <b>18.0663</b> | <b>2.5769</b> | <b>20.6432</b> | <b>9.9307</b>  | <b>2.3708</b> | <b>12.3014</b> |          | <b>3,831.6239</b> | <b>3,831.6239</b> | <b>1.1928</b> |     | <b>3,861.4448</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0192        | 0.4913        | 0.1473        | 1.0300e-003        | 0.0256        | 3.5100e-003        | 0.0291        | 7.3700e-003    | 3.3600e-003        | 0.0107        |          | 109.6599        | 109.6599        | 7.9100e-003   |     | 109.8578        |
| Worker       | 0.1101        | 0.0831        | 0.8951        | 2.1400e-003        | 0.2012        | 1.7900e-003        | 0.2030        | 0.0534         | 1.6500e-003        | 0.0550        |          | 212.5037        | 212.5037        | 8.0000e-003   |     | 212.7036        |
| <b>Total</b> | <b>0.1293</b> | <b>0.5745</b> | <b>1.0424</b> | <b>3.1700e-003</b> | <b>0.2268</b> | <b>5.3000e-003</b> | <b>0.2321</b> | <b>0.0607</b>  | <b>5.0100e-003</b> | <b>0.0657</b> |          | <b>322.1636</b> | <b>322.1636</b> | <b>0.0159</b> |     | <b>322.5614</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      | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |         |         |        | 7.7233        | 0.0000       | 7.7233     | 4.2454         | 0.0000        | 4.2454      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 4.5627 | 48.1988 | 22.4763 | 0.0380 |               | 2.5769       | 2.5769     |                | 2.3708        | 2.3708      | 0.0000   | 3,831.6239 | 3,831.6239 | 1.1928 |     | 3,861.4448 |
| Total         | 4.5627 | 48.1988 | 22.4763 | 0.0380 | 7.7233        | 2.5769       | 10.3002    | 4.2454         | 2.3708        | 6.6161      | 0.0000   | 3,831.6239 | 3,831.6239 | 1.1928 |     | 3,861.4448 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0192 | 0.4913 | 0.1473 | 1.0300e-003 | 0.0240        | 3.5100e-003  | 0.0275     | 6.9700e-003    | 3.3600e-003   | 0.0103      |          | 109.6599  | 109.6599  | 7.9100e-003 |     | 109.8578 |
| Worker   | 0.1101 | 0.0831 | 0.8951 | 2.1400e-003 | 0.1855        | 1.7900e-003  | 0.1873     | 0.0495         | 1.6500e-003   | 0.0512      |          | 212.5037  | 212.5037  | 8.0000e-003 |     | 212.7036 |
| Total    | 0.1293 | 0.5745 | 1.0424 | 3.1700e-003 | 0.2094        | 5.3000e-003  | 0.2147     | 0.0565         | 5.0100e-003   | 0.0615      |          | 322.1636  | 322.1636  | 0.0159      |     | 322.5614 |

### 3.5 Grading - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 6.5523        | 0.0000        | 6.5523        | 3.3675         | 0.0000        | 3.3675        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 2.7733        | 30.6725        | 16.5770        | 0.0297        |               | 1.5513        | 1.5513        |                | 1.4272        | 1.4272        |          | 2,988.0216        | 2,988.0216        | 0.9302        |     | 3,011.2769        |
| <b>Total</b>  | <b>2.7733</b> | <b>30.6725</b> | <b>16.5770</b> | <b>0.0297</b> | <b>6.5523</b> | <b>1.5513</b> | <b>8.1037</b> | <b>3.3675</b>  | <b>1.4272</b> | <b>4.7947</b> |          | <b>2,988.0216</b> | <b>2,988.0216</b> | <b>0.9302</b> |     | <b>3,011.2769</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0192        | 0.4913        | 0.1473        | 1.0300e-003        | 0.0256        | 3.5100e-003        | 0.0291        | 7.3700e-003    | 3.3600e-003        | 0.0107        |          | 109.6599        | 109.6599        | 7.9100e-003   |     | 109.8578        |
| Worker       | 0.0917        | 0.0693        | 0.7459        | 1.7800e-003        | 0.1677        | 1.4900e-003        | 0.1692        | 0.0445         | 1.3800e-003        | 0.0458        |          | 177.0864        | 177.0864        | 6.6600e-003   |     | 177.2530        |
| <b>Total</b> | <b>0.1109</b> | <b>0.5606</b> | <b>0.8932</b> | <b>2.8100e-003</b> | <b>0.1933</b> | <b>5.0000e-003</b> | <b>0.1983</b> | <b>0.0518</b>  | <b>4.7400e-003</b> | <b>0.0566</b> |          | <b>286.7463</b> | <b>286.7463</b> | <b>0.0146</b> |     | <b>287.1108</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      | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |         |         |        | 2.8011        | 0.0000       | 2.8011     | 1.4396         | 0.0000        | 1.4396      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 2.7733 | 30.6725 | 16.5770 | 0.0297 |               | 1.5513       | 1.5513     |                | 1.4272        | 1.4272      | 0.0000   | 2,988.0216 | 2,988.0216 | 0.9302 |     | 3,011.2769 |
| Total         | 2.7733 | 30.6725 | 16.5770 | 0.0297 | 2.8011        | 1.5513       | 4.3524     | 1.4396         | 1.4272        | 2.8668      | 0.0000   | 2,988.0216 | 2,988.0216 | 0.9302 |     | 3,011.2769 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0192 | 0.4913 | 0.1473 | 1.0300e-003 | 0.0240        | 3.5100e-003  | 0.0275     | 6.9700e-003    | 3.3600e-003   | 0.0103      |          | 109.6599  | 109.6599  | 7.9100e-003 |     | 109.8578 |
| Worker   | 0.0917 | 0.0693 | 0.7459 | 1.7800e-003 | 0.1546        | 1.4900e-003  | 0.1560     | 0.0413         | 1.3800e-003   | 0.0426      |          | 177.0864  | 177.0864  | 6.6600e-003 |     | 177.2530 |
| Total    | 0.1109 | 0.5606 | 0.8932 | 2.8100e-003 | 0.1785        | 5.0000e-003  | 0.1835     | 0.0482         | 4.7400e-003   | 0.0530      |          | 286.7463  | 286.7463  | 0.0146      |     | 287.1108 |

### 3.6 Grading Haul - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O | CO2e          |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|-----|---------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.0946        | 0.0000        | 0.0946        | 0.0143         | 0.0000        | 0.0143        |          |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 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>0.0946</b> | <b>0.0000</b> | <b>0.0946</b> | <b>0.0143</b>  | <b>0.0000</b> | <b>0.0143</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</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     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                        |                   |               |     |                        |
| Hauling      | 1.0641        | 34.2431        | 7.4775        | 0.0833        | 1.8281        | 0.1310        | 1.9591        | 0.5011         | 0.1253        | 0.6264        |          | 9,002.446<br>1         | 9,002.4461        | 0.6549        |     | 9,018.818<br>2         |
| Vendor       | 0.0000        | 0.0000         | 0.0000        | 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                 |
| <b>Total</b> | <b>1.0641</b> | <b>34.2431</b> | <b>7.4775</b> | <b>0.0833</b> | <b>1.8281</b> | <b>0.1310</b> | <b>1.9591</b> | <b>0.5011</b>  | <b>0.1253</b> | <b>0.6264</b> |          | <b>9,002.446<br/>1</b> | <b>9,002.4461</b> | <b>0.6549</b> |     | <b>9,018.818<br/>2</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      | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |     |        |
| Fugitive Dust |        |        |        |        | 0.0404        | 0.0000       | 0.0404     | 6.1200e-003    | 0.0000        | 6.1200e-003 |          |           | 0.0000    |        |     | 0.0000 |
| Off-Road      | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Total         | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0404        | 0.0000       | 0.0404     | 6.1200e-003    | 0.0000        | 6.1200e-003 | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |

Mitigated Construction Off-Site

|          | ROG    | NOx     | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O | CO2e       |
|----------|--------|---------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day |         |        |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Hauling  | 1.0641 | 34.2431 | 7.4775 | 0.0833 | 1.7037        | 0.1310       | 1.8347     | 0.4706         | 0.1253        | 0.5959      |          | 9,002.4461 | 9,002.4461 | 0.6549 |     | 9,018.8182 |
| Vendor   | 0.0000 | 0.0000  | 0.0000 | 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     |
| Total    | 1.0641 | 34.2431 | 7.4775 | 0.0833 | 1.7037        | 0.1310       | 1.8347     | 0.4706         | 0.1253        | 0.5959      |          | 9,002.4461 | 9,002.4461 | 0.6549 |     | 9,018.8182 |

### 3.7 Trenching - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Off-Road     | 0.5322        | 5.2595        | 4.6734        | 6.2100e-003        |               | 0.3726        | 0.3726        |                | 0.3428        | 0.3428        |          | 625.5519        | 625.5519        | 0.1947        |     | 630.4205        |
| <b>Total</b> | <b>0.5322</b> | <b>5.2595</b> | <b>4.6734</b> | <b>6.2100e-003</b> |               | <b>0.3726</b> | <b>0.3726</b> |                | <b>0.3428</b> | <b>0.3428</b> |          | <b>625.5519</b> | <b>625.5519</b> | <b>0.1947</b> |     | <b>630.4205</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0192        | 0.4913        | 0.1473        | 1.0300e-003        | 0.0256        | 3.5100e-003        | 0.0291        | 7.3700e-003    | 3.3600e-003        | 0.0107        |          | 109.6599        | 109.6599        | 7.9100e-003   |     | 109.8578        |
| Worker       | 0.0306        | 0.0231        | 0.2486        | 5.9000e-004        | 0.0559        | 5.0000e-004        | 0.0564        | 0.0148         | 4.6000e-004        | 0.0153        |          | 59.0288         | 59.0288         | 2.2200e-003   |     | 59.0843         |
| <b>Total</b> | <b>0.0498</b> | <b>0.5144</b> | <b>0.3960</b> | <b>1.6200e-003</b> | <b>0.0815</b> | <b>4.0100e-003</b> | <b>0.0855</b> | <b>0.0222</b>  | <b>3.8200e-003</b> | <b>0.0260</b> |          | <b>168.6887</b> | <b>168.6887</b> | <b>0.0101</b> |     | <b>168.9421</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     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Off-Road     | 0.5322        | 5.2595        | 4.6734        | 6.2100e-003        |               | 0.3726        | 0.3726        |                | 0.3428        | 0.3428        | 0.0000        | 625.5519        | 625.5519        | 0.1947        |     | 630.4205        |
| <b>Total</b> | <b>0.5322</b> | <b>5.2595</b> | <b>4.6734</b> | <b>6.2100e-003</b> |               | <b>0.3726</b> | <b>0.3726</b> |                | <b>0.3428</b> | <b>0.3428</b> | <b>0.0000</b> | <b>625.5519</b> | <b>625.5519</b> | <b>0.1947</b> |     | <b>630.4205</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0192        | 0.4913        | 0.1473        | 1.0300e-003        | 0.0240        | 3.5100e-003        | 0.0275        | 6.9700e-003    | 3.3600e-003        | 0.0103        |          | 109.6599        | 109.6599        | 7.9100e-003   |     | 109.8578        |
| Worker       | 0.0306        | 0.0231        | 0.2486        | 5.9000e-004        | 0.0515        | 5.0000e-004        | 0.0520        | 0.0138         | 4.6000e-004        | 0.0142        |          | 59.0288         | 59.0288         | 2.2200e-003   |     | 59.0843         |
| <b>Total</b> | <b>0.0498</b> | <b>0.5144</b> | <b>0.3960</b> | <b>1.6200e-003</b> | <b>0.0755</b> | <b>4.0100e-003</b> | <b>0.0795</b> | <b>0.0207</b>  | <b>3.8200e-003</b> | <b>0.0245</b> |          | <b>168.6887</b> | <b>168.6887</b> | <b>0.0101</b> |     | <b>168.9421</b> |

### 3.8 Landscaping & Field Lighting - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.5789        | 17.4216        | 6.7126        | 0.0133        |               | 0.8474        | 0.8474        |                | 0.7796        | 0.7796        |          | 1,341.0686        | 1,341.0686        | 0.4175        |     | 1,351.5059        |
| <b>Total</b> | <b>1.5789</b> | <b>17.4216</b> | <b>6.7126</b> | <b>0.0133</b> |               | <b>0.8474</b> | <b>0.8474</b> |                | <b>0.7796</b> | <b>0.7796</b> |          | <b>1,341.0686</b> | <b>1,341.0686</b> | <b>0.4175</b> |     | <b>1,351.5059</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0336        | 0.8599        | 0.2578        | 1.8000e-003        | 0.0448        | 6.1400e-003        | 0.0510        | 0.0129         | 5.8800e-003        | 0.0188        |          | 191.9049        | 191.9049        | 0.0139        |     | 192.2511        |
| Worker       | 0.1101        | 0.0831        | 0.8951        | 2.1400e-003        | 0.2012        | 1.7900e-003        | 0.2030        | 0.0534         | 1.6500e-003        | 0.0550        |          | 212.5037        | 212.5037        | 8.0000e-003   |     | 212.7036        |
| <b>Total</b> | <b>0.1436</b> | <b>0.9430</b> | <b>1.1529</b> | <b>3.9400e-003</b> | <b>0.2460</b> | <b>7.9300e-003</b> | <b>0.2539</b> | <b>0.0663</b>  | <b>7.5300e-003</b> | <b>0.0738</b> |          | <b>404.4086</b> | <b>404.4086</b> | <b>0.0219</b> |     | <b>404.9547</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 | lb/day |         |        |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Off-Road | 1.5789 | 17.4216 | 6.7126 | 0.0133 |               | 0.8474       | 0.8474     |                | 0.7796        | 0.7796      | 0.0000   | 1,341.0686 | 1,341.0686 | 0.4175 |     | 1,351.5059 |
| Total    | 1.5789 | 17.4216 | 6.7126 | 0.0133 |               | 0.8474       | 0.8474     |                | 0.7796        | 0.7796      | 0.0000   | 1,341.0686 | 1,341.0686 | 0.4175 |     | 1,351.5059 |

### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0336 | 0.8599 | 0.2578 | 1.8000e-003 | 0.0419        | 6.1400e-003  | 0.0481     | 0.0122         | 5.8800e-003   | 0.0181      |          | 191.9049  | 191.9049  | 0.0139      |     | 192.2511 |
| Worker   | 0.1101 | 0.0831 | 0.8951 | 2.1400e-003 | 0.1855        | 1.7900e-003  | 0.1873     | 0.0495         | 1.6500e-003   | 0.0512      |          | 212.5037  | 212.5037  | 8.0000e-003 |     | 212.7036 |
| Total    | 0.1436 | 0.9430 | 1.1529 | 3.9400e-003 | 0.2274        | 7.9300e-003  | 0.2353     | 0.0617         | 7.5300e-003   | 0.0692      |          | 404.4086  | 404.4086  | 0.0219      |     | 404.9547 |

### 3.9 Paving - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.4239        | 14.5184        | 12.4333        | 0.0189        |               | 0.8370        | 0.8370        |                | 0.7718        | 0.7718        |          | 1,872.5505        | 1,872.5505        | 0.5672        |     | 1,886.7312        |
| Paving       | 0.1470        |                |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| <b>Total</b> | <b>1.5709</b> | <b>14.5184</b> | <b>12.4333</b> | <b>0.0189</b> |               | <b>0.8370</b> | <b>0.8370</b> |                | <b>0.7718</b> | <b>0.7718</b> |          | <b>1,872.5505</b> | <b>1,872.5505</b> | <b>0.5672</b> |     | <b>1,886.7312</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Worker       | 0.1223        | 0.0923        | 0.9945        | 2.3700e-003        | 0.2236        | 1.9900e-003        | 0.2256        | 0.0593         | 1.8400e-003        | 0.0611        |          | 236.1152        | 236.1152        | 8.8900e-003        |     | 236.3373        |
| <b>Total</b> | <b>0.1223</b> | <b>0.0923</b> | <b>0.9945</b> | <b>2.3700e-003</b> | <b>0.2236</b> | <b>1.9900e-003</b> | <b>0.2256</b> | <b>0.0593</b>  | <b>1.8400e-003</b> | <b>0.0611</b> |          | <b>236.1152</b> | <b>236.1152</b> | <b>8.8900e-003</b> |     | <b>236.3373</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 | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Off-Road | 1.4239 | 14.5184 | 12.4333 | 0.0189 |               | 0.8370       | 0.8370     |                | 0.7718        | 0.7718      | 0.0000   | 1,872.5505 | 1,872.5505 | 0.5672 |     | 1,886.7312 |
| Paving   | 0.1470 |         |         |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          |            | 0.0000     |        |     | 0.0000     |
| Total    | 1.5709 | 14.5184 | 12.4333 | 0.0189 |               | 0.8370       | 0.8370     |                | 0.7718        | 0.7718      | 0.0000   | 1,872.5505 | 1,872.5505 | 0.5672 |     | 1,886.7312 |

### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Worker   | 0.1223 | 0.0923 | 0.9945 | 2.3700e-003 | 0.2061        | 1.9900e-003  | 0.2081     | 0.0550         | 1.8400e-003   | 0.0568      |          | 236.1152  | 236.1152  | 8.8900e-003 |     | 236.3373 |
| Total    | 0.1223 | 0.0923 | 0.9945 | 2.3700e-003 | 0.2061        | 1.9900e-003  | 0.2081     | 0.0550         | 1.8400e-003   | 0.0568      |          | 236.1152  | 236.1152  | 8.8900e-003 |     | 236.3373 |

### 3.10 Architectural Coating - 2018

#### Unmitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Archit. Coating | 0.7493        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.2986        | 2.0058        | 1.8542        | 2.9700e-003        |               | 0.1506        | 0.1506        |                | 0.1506        | 0.1506        |          | 281.4485        | 281.4485        | 0.0267        |     | 282.1171        |
| <b>Total</b>    | <b>1.0480</b> | <b>2.0058</b> | <b>1.8542</b> | <b>2.9700e-003</b> |               | <b>0.1506</b> | <b>0.1506</b> |                | <b>0.1506</b> | <b>0.1506</b> |          | <b>281.4485</b> | <b>281.4485</b> | <b>0.0267</b> |     | <b>282.1171</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                |                |                    |     |                |
| Hauling      | 2.2600e-003   | 0.0728        | 0.0159        | 1.8000e-004        | 3.8900e-003   | 2.8000e-004        | 4.1600e-003   | 1.0600e-003    | 2.7000e-004        | 1.3300e-003   |          | 19.1325        | 19.1325        | 1.3900e-003        |     | 19.1673        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |
| Worker       | 0.0245        | 0.0185        | 0.1989        | 4.7000e-004        | 0.0447        | 4.0000e-004        | 0.0451        | 0.0119         | 3.7000e-004        | 0.0122        |          | 47.2230        | 47.2230        | 1.7800e-003        |     | 47.2675        |
| <b>Total</b> | <b>0.0267</b> | <b>0.0913</b> | <b>0.2148</b> | <b>6.5000e-004</b> | <b>0.0486</b> | <b>6.8000e-004</b> | <b>0.0493</b> | <b>0.0129</b>  | <b>6.4000e-004</b> | <b>0.0136</b> |          | <b>66.3556</b> | <b>66.3556</b> | <b>3.1700e-003</b> |     | <b>66.4348</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        | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |        |     |          |
| Archit. Coating | 0.7493 |        |        |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          |           | 0.0000    |        |     | 0.0000   |
| Off-Road        | 0.2986 | 2.0058 | 1.8542 | 2.9700e-003 |               | 0.1506       | 0.1506     |                | 0.1506        | 0.1506      | 0.0000   | 281.4485  | 281.4485  | 0.0267 |     | 282.1171 |
| Total           | 1.0480 | 2.0058 | 1.8542 | 2.9700e-003 |               | 0.1506       | 0.1506     |                | 0.1506        | 0.1506      | 0.0000   | 281.4485  | 281.4485  | 0.0267 |     | 282.1171 |

### Mitigated Construction Off-Site

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e    |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|---------|
| Category | lb/day      |        |        |             |               |              |             |                |               |             | lb/day   |           |           |             |     |         |
| Hauling  | 2.2600e-003 | 0.0728 | 0.0159 | 1.8000e-004 | 3.6200e-003   | 2.8000e-004  | 3.9000e-003 | 1.0000e-003    | 2.7000e-004   | 1.2700e-003 |          | 19.1325   | 19.1325   | 1.3900e-003 |     | 19.1673 |
| Vendor   | 0.0000      | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |
| Worker   | 0.0245      | 0.0185 | 0.1989 | 4.7000e-004 | 0.0412        | 4.0000e-004  | 0.0416      | 0.0110         | 3.7000e-004   | 0.0114      |          | 47.2230   | 47.2230   | 1.7800e-003 |     | 47.2675 |
| Total    | 0.0267      | 0.0913 | 0.2148 | 6.5000e-004 | 0.0448        | 6.8000e-004  | 0.0455      | 0.0120         | 6.4000e-004   | 0.0126      |          | 66.3556   | 66.3556   | 3.1700e-003 |     | 66.4348 |

Wilson Midle School Construction - Los Angeles-South Coast County, Summer

## Wilson Midle School Construction-- Mitigated

### Los Angeles-South Coast County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses                  | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|----------------------------|--------|----------|-------------|--------------------|------------|
| Other Asphalt Surfaces     | 42.15  | 1000sqft | 1.01        | 42,145.00          | 0          |
| Other Non-Asphalt Surfaces | 123.92 | 1000sqft | 2.84        | 0.00               | 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>                 | 12           |                                     |       | <b>Operational Year</b>             | 2019  |
| <b>Utility Company</b>              | User Defined |                                     |       |                                     |       |
| <b>CO2 Intensity<br/>(lb/MW hr)</b> | 383.88       | <b>CH4 Intensity<br/>(lb/MW hr)</b> | 0.095 | <b>N2O Intensity<br/>(lb/MW hr)</b> | 0.012 |

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

Project Characteristics - \*\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label: <http://www.sce.com/california/>

Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - Haul

Off-road Equipment - Haul

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - CalEEMod assumptions

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating - See CalEEMod Assumptions

Vehicle Trips -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

| Table Name              | Column Name                          | Default Value | New Value |
|-------------------------|--------------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior    | 0.00          | 823.00    |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior    | 0.00          | 2,468.00  |
| tblArchitecturalCoating | EF_Nonresidential_Exterior           | 100.00        | 50.00     |
| tblArchitecturalCoating | EF_Nonresidential_Interior           | 100.00        | 50.00     |
| tblArchitecturalCoating | EF_Parking                           | 100.00        | 50.00     |
| tblConstDustMitigation  | CleanPavedRoadPercentReduction       | 0             | 9         |
| tblConstDustMitigation  | WaterExposedAreaPM10PercentReduction | 61            | 55        |
| tblConstDustMitigation  | WaterExposedAreaPM25PercentReduction | 61            | 55        |
| tblConstDustMitigation  | WaterUnpavedRoadVehicleSpeed         | 0             | 15        |
| tblConstEquipMitigation | NumberOfEquipmentMitigated           | 0.00          | 1.00      |
| tblConstEquipMitigation | NumberOfEquipmentMitigated           | 0.00          | 1.00      |
| tblConstEquipMitigation | NumberOfEquipmentMitigated           | 0.00          | 1.00      |
| tblConstEquipMitigation | NumberOfEquipmentMitigated           | 0.00          | 4.00      |
| 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          | 2.00      |

|                         |                            |            |              |
|-------------------------|----------------------------|------------|--------------|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00       | 7.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00       | 10.00        |
| 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                    | 8.00       | 16.00        |
| tblConstructionPhase    | NumDays                    | 8.00       | 16.00        |
| tblConstructionPhase    | NumDays                    | 230.00     | 18.00        |
| tblGrading              | MaterialExported           | 0.00       | 13,381.00    |
| tblLandUse              | LandUseSquareFeet          | 42,150.00  | 42,145.00    |
| tblLandUse              | LandUseSquareFeet          | 123,920.00 | 0.00         |
| tblLandUse              | LotAcreage                 | 0.97       | 1.01         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 3.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 3.00       | 1.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 2.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 3.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 3.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |



|                           |                    |       |        |
|---------------------------|--------------------|-------|--------|
| tblOffRoadEquipment       | UsageHours         | 7.00  | 8.00   |
| tblOffRoadEquipment       | UsageHours         | 8.00  | 6.00   |
| tblProjectCharacteristics | CH4IntensityFactor | 0     | 0.095  |
| tblProjectCharacteristics | CO2IntensityFactor | 0     | 383.88 |
| tblProjectCharacteristics | N2OIntensityFactor | 0     | 0.012  |
| tblTripsAndVMT            | HaulingTripNumber  | 31.00 | 32.00  |
| tblTripsAndVMT            | HaulingTripNumber  | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber   | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber   | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber   | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber   | 0.00  | 4.00   |

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O    | CO2e        |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |             |             |        |        |             |
| 2018    | 4.6806 | 65.0057 | 24.5108 | 0.1174 | 18.2931       | 2.5822       | 20.8752    | 9.9914         | 2.3757        | 12.3671     | 0.0000   | 12,444.3917 | 12,444.3917 | 1.5750 | 0.0000 | 12,483.7660 |
| Maximum | 4.6806 | 65.0057 | 24.5108 | 0.1174 | 18.2931       | 2.5822       | 20.8752    | 9.9914         | 2.3757        | 12.3671     | 0.0000   | 12,444.3917 | 12,444.3917 | 1.5750 | 0.0000 | 12,483.7660 |

## Mitigated Construction

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O    | CO2e        |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |             |             |        |        |             |
| 2018    | 1.5023 | 35.9069 | 25.6865 | 0.1174 | 7.9328        | 0.1819       | 8.0001     | 4.3018         | 0.1761        | 4.3689      | 0.0000   | 12,444.3917 | 12,444.3917 | 1.5750 | 0.0000 | 12,483.7660 |
| Maximum | 1.5023 | 35.9069 | 25.6865 | 0.1174 | 7.9328        | 0.1819       | 8.0001     | 4.3018         | 0.1761        | 4.3689      | 0.0000   | 12,444.3917 | 12,444.3917 | 1.5750 | 0.0000 | 12,483.7660 |

|                   | ROG   | NOx   | CO    | SO2  | 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 | 67.90 | 44.76 | -4.80 | 0.00 | 56.64         | 92.96        | 61.68      | 56.94          | 92.59         | 64.67       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name                   | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|------------------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Asphalt Demo                 | Demolition            | 6/1/2018   | 6/28/2018 | 5             | 20       |                   |
| 2            | Asphalt Demo Haul            | Demolition            | 6/1/2018   | 6/28/2018 | 5             | 20       |                   |
| 3            | Site Preparation             | Site Preparation      | 6/29/2018  | 7/5/2018  | 5             | 5        |                   |
| 4            | Grading                      | Grading               | 7/6/2018   | 7/27/2018 | 5             | 16       |                   |
| 5            | Grading Haul                 | Grading               | 7/6/2018   | 7/27/2018 | 5             | 16       |                   |
| 6            | Trenching                    | Trenching             | 7/28/2018  | 8/6/2018  | 5             | 6        |                   |
| 7            | Landscaping & Field Lighting | Building Construction | 8/7/2018   | 8/30/2018 | 5             | 18       |                   |
| 8            | Paving                       | Paving                | 8/7/2018   | 8/30/2018 | 5             | 18       |                   |
| 9            | Architectural Coating        | Architectural Coating | 9/1/2018   | 9/26/2018 | 5             | 18       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8

Acres of Paving: 3.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,468; Non-Residential Outdoor: 823; Striped Parking Area: 2,529

OffRoad Equipment

| Phase Name                   | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------------------------|---------------------------|--------|-------------|-------------|-------------|
| Asphalt Demo                 | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Asphalt Demo                 | Excavators                | 3      | 8.00        | 158         | 0.38        |
| Asphalt Demo                 | Rubber Tired Dozers       | 2      | 8.00        | 247         | 0.40        |
| Asphalt Demo Haul            | Concrete/Industrial Saws  | 0      | 8.00        | 81          | 0.73        |
| Asphalt Demo Haul            | Excavators                | 0      | 8.00        | 158         | 0.38        |
| Asphalt Demo Haul            | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Site Preparation             | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation             | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading                      | Excavators                | 1      | 8.00        | 158         | 0.38        |
| Grading                      | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading                      | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading                      | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Grading Haul                 | Excavators                | 0      | 8.00        | 158         | 0.38        |
| Grading Haul                 | Graders                   | 0      | 8.00        | 187         | 0.41        |
| Grading Haul                 | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Grading Haul                 | Tractors/Loaders/Backhoes | 0      | 8.00        | 97          | 0.37        |
| Trenching                    | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Landscaping & Field Lighting | Cranes                    | 1      | 8.00        | 231         | 0.29        |
| Landscaping & Field Lighting | Forklifts                 | 1      | 6.00        | 89          | 0.20        |
| Landscaping & Field Lighting | Generator Sets            | 0      | 8.00        | 84          | 0.74        |
| Landscaping & Field Lighting | Rubber Tired Dozers       | 1      | 6.00        | 247         | 0.40        |
| Landscaping & Field Lighting | Tractors/Loaders/Backhoes | 0      | 7.00        | 97          | 0.37        |
| Landscaping & Field Lighting | Welders                   | 0      | 8.00        | 46          | 0.45        |

|                       |                           |   |      |     |      |
|-----------------------|---------------------------|---|------|-----|------|
| Paving                | Cement and Mortar Mixers  | 2 | 6.00 | 9   | 0.56 |
| Paving                | Pavers                    | 1 | 8.00 | 130 | 0.42 |
| Paving                | Paving Equipment          | 2 | 6.00 | 132 | 0.36 |
| Paving                | Rollers                   | 2 | 6.00 | 80  | 0.38 |
| Paving                | 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 |
|------------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Asphalt Demo                 | 6                       | 15.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Asphalt Demo Haul            | 0                       | 0.00               | 0.00               | 32.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation             | 7                       | 18.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                      | 6                       | 15.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading Haul                 | 0                       | 0.00               | 0.00               | 1,673.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Trenching                    | 2                       | 5.00               | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Landscaping & Field Lighting | 3                       | 18.00              | 7.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                       | 8                       | 20.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating        | 1                       | 4.00               | 0.00               | 4.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

### 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Asphalt Demo - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 3.7190        | 38.3225        | 22.3040        | 0.0388        |               | 1.9386        | 1.9386        |                | 1.8048        | 1.8048        |          | 3,871.7665        | 3,871.7665        | 1.0667        |     | 3,898.4344        |
| <b>Total</b>  | <b>3.7190</b> | <b>38.3225</b> | <b>22.3040</b> | <b>0.0388</b> | <b>0.0000</b> | <b>1.9386</b> | <b>1.9386</b> | <b>0.0000</b>  | <b>1.8048</b> | <b>1.8048</b> |          | <b>3,871.7665</b> | <b>3,871.7665</b> | <b>1.0667</b> |     | <b>3,898.4344</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0184        | 0.4902        | 0.1340        | 1.0600e-003        | 0.0256        | 3.4500e-003        | 0.0291        | 7.3700e-003    | 3.3000e-003        | 0.0107        |          | 112.6718        | 112.6718        | 7.4200e-003   |     | 112.8572        |
| Worker       | 0.0829        | 0.0625        | 0.8101        | 1.8900e-003        | 0.1677        | 1.4900e-003        | 0.1692        | 0.0445         | 1.3800e-003        | 0.0458        |          | 188.0535        | 188.0535        | 7.0500e-003   |     | 188.2298        |
| <b>Total</b> | <b>0.1013</b> | <b>0.5528</b> | <b>0.9442</b> | <b>2.9500e-003</b> | <b>0.1933</b> | <b>4.9400e-003</b> | <b>0.1982</b> | <b>0.0518</b>  | <b>4.6800e-003</b> | <b>0.0565</b> |          | <b>300.7252</b> | <b>300.7252</b> | <b>0.0145</b> |     | <b>301.0871</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      | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |        |         |        | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 0.4623 | 2.0032 | 23.2798 | 0.0388 |               | 0.0616       | 0.0616     |                | 0.0616        | 0.0616      | 0.0000   | 3,871.7665 | 3,871.7665 | 1.0667 |     | 3,898.4344 |
| Total         | 0.4623 | 2.0032 | 23.2798 | 0.0388 | 0.0000        | 0.0616       | 0.0616     | 0.0000         | 0.0616        | 0.0616      | 0.0000   | 3,871.7665 | 3,871.7665 | 1.0667 |     | 3,898.4344 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0184 | 0.4902 | 0.1340 | 1.0600e-003 | 0.0240        | 3.4500e-003  | 0.0274     | 6.9700e-003    | 3.3000e-003   | 0.0103      |          | 112.6718  | 112.6718  | 7.4200e-003 |     | 112.8572 |
| Worker   | 0.0829 | 0.0625 | 0.8101 | 1.8900e-003 | 0.1546        | 1.4900e-003  | 0.1560     | 0.0413         | 1.3800e-003   | 0.0426      |          | 188.0535  | 188.0535  | 7.0500e-003 |     | 188.2298 |
| Total    | 0.1013 | 0.5528 | 0.9442 | 2.9500e-003 | 0.1785        | 4.9400e-003  | 0.1835     | 0.0482         | 4.6800e-003   | 0.0529      |          | 300.7252  | 300.7252  | 0.0145      |     | 301.0871 |

### 3.3 Asphalt Demo Haul - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O | CO2e          |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|-----|---------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.3381        | 0.0000        | 0.3381        | 0.0512         | 0.0000        | 0.0512        |          |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 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>0.3381</b> | <b>0.0000</b> | <b>0.3381</b> | <b>0.0512</b>  | <b>0.0000</b> | <b>0.0512</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</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     | lb/day        |               |               |                    |               |                    |               |                    |                    |                    | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0159        | 0.5169        | 0.1070        | 1.3000e-003        | 0.0280        | 1.9700e-003        | 0.0299        | 7.6700e-003        | 1.8800e-003        | 9.5500e-003        |          | 140.0983        | 140.0983        | 9.6400e-003        |     | 140.3395        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 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          |
| <b>Total</b> | <b>0.0159</b> | <b>0.5169</b> | <b>0.1070</b> | <b>1.3000e-003</b> | <b>0.0280</b> | <b>1.9700e-003</b> | <b>0.0299</b> | <b>7.6700e-003</b> | <b>1.8800e-003</b> | <b>9.5500e-003</b> |          | <b>140.0983</b> | <b>140.0983</b> | <b>9.6400e-003</b> |     | <b>140.3395</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      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.1445        | 0.0000        | 0.1445        | 0.0219         | 0.0000        | 0.0219        |               |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 0.0000        | 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>0.1445</b> | <b>0.0000</b> | <b>0.1445</b> | <b>0.0219</b>  | <b>0.0000</b> | <b>0.0219</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</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     | lb/day        |               |               |                    |               |                    |               |                    |                    |                    | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0159        | 0.5169        | 0.1070        | 1.3000e-003        | 0.0261        | 1.9700e-003        | 0.0280        | 7.2000e-003        | 1.8800e-003        | 9.0800e-003        |          | 140.0983        | 140.0983        | 9.6400e-003        |     | 140.3395        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 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          |
| <b>Total</b> | <b>0.0159</b> | <b>0.5169</b> | <b>0.1070</b> | <b>1.3000e-003</b> | <b>0.0261</b> | <b>1.9700e-003</b> | <b>0.0280</b> | <b>7.2000e-003</b> | <b>1.8800e-003</b> | <b>9.0800e-003</b> |          | <b>140.0983</b> | <b>140.0983</b> | <b>9.6400e-003</b> |     | <b>140.3395</b> |



### 3.4 Site Preparation - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total    | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |                |               |                |                |               |                | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 18.0663        | 0.0000        | 18.0663        | 9.9307         | 0.0000        | 9.9307         |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 4.5627        | 48.1988        | 22.4763        | 0.0380        |                | 2.5769        | 2.5769         |                | 2.3708        | 2.3708         |          | 3,831.6239        | 3,831.6239        | 1.1928        |     | 3,861.4448        |
| <b>Total</b>  | <b>4.5627</b> | <b>48.1988</b> | <b>22.4763</b> | <b>0.0380</b> | <b>18.0663</b> | <b>2.5769</b> | <b>20.6432</b> | <b>9.9307</b>  | <b>2.3708</b> | <b>12.3014</b> |          | <b>3,831.6239</b> | <b>3,831.6239</b> | <b>1.1928</b> |     | <b>3,861.4448</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0184        | 0.4902        | 0.1340        | 1.0600e-003        | 0.0256        | 3.4500e-003        | 0.0291        | 7.3700e-003    | 3.3000e-003        | 0.0107        |          | 112.6718        | 112.6718        | 7.4200e-003   |     | 112.8572        |
| Worker       | 0.0995        | 0.0751        | 0.9721        | 2.2700e-003        | 0.2012        | 1.7900e-003        | 0.2030        | 0.0534         | 1.6500e-003        | 0.0550        |          | 225.6642        | 225.6642        | 8.4600e-003   |     | 225.8758        |
| <b>Total</b> | <b>0.1179</b> | <b>0.5653</b> | <b>1.1062</b> | <b>3.3300e-003</b> | <b>0.2268</b> | <b>5.2400e-003</b> | <b>0.2321</b> | <b>0.0607</b>  | <b>4.9500e-003</b> | <b>0.0657</b> |          | <b>338.3359</b> | <b>338.3359</b> | <b>0.0159</b> |     | <b>338.7330</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      | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |        |         |        | 7.7233        | 0.0000       | 7.7233     | 4.2454         | 0.0000        | 4.2454      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 0.4656 | 2.0175 | 20.8690 | 0.0380 |               | 0.0621       | 0.0621     |                | 0.0621        | 0.0621      | 0.0000   | 3,831.6239 | 3,831.6239 | 1.1928 |     | 3,861.4448 |
| Total         | 0.4656 | 2.0175 | 20.8690 | 0.0380 | 7.7233        | 0.0621       | 7.7854     | 4.2454         | 0.0621        | 4.3075      | 0.0000   | 3,831.6239 | 3,831.6239 | 1.1928 |     | 3,861.4448 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0184 | 0.4902 | 0.1340 | 1.0600e-003 | 0.0240        | 3.4500e-003  | 0.0274     | 6.9700e-003    | 3.3000e-003   | 0.0103      |          | 112.6718  | 112.6718  | 7.4200e-003 |     | 112.8572 |
| Worker   | 0.0995 | 0.0751 | 0.9721 | 2.2700e-003 | 0.1855        | 1.7900e-003  | 0.1873     | 0.0495         | 1.6500e-003   | 0.0512      |          | 225.6642  | 225.6642  | 8.4600e-003 |     | 225.8758 |
| Total    | 0.1179 | 0.5653 | 1.1062 | 3.3300e-003 | 0.2094        | 5.2400e-003  | 0.2147     | 0.0565         | 4.9500e-003   | 0.0614      |          | 338.3359  | 338.3359  | 0.0159      |     | 338.7330 |

### 3.5 Grading - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 6.5523        | 0.0000        | 6.5523        | 3.3675         | 0.0000        | 3.3675        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 2.7733        | 30.6725        | 16.5770        | 0.0297        |               | 1.5513        | 1.5513        |                | 1.4272        | 1.4272        |          | 2,988.0216        | 2,988.0216        | 0.9302        |     | 3,011.2769        |
| <b>Total</b>  | <b>2.7733</b> | <b>30.6725</b> | <b>16.5770</b> | <b>0.0297</b> | <b>6.5523</b> | <b>1.5513</b> | <b>8.1037</b> | <b>3.3675</b>  | <b>1.4272</b> | <b>4.7947</b> |          | <b>2,988.0216</b> | <b>2,988.0216</b> | <b>0.9302</b> |     | <b>3,011.2769</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0184        | 0.4902        | 0.1340        | 1.0600e-003        | 0.0256        | 3.4500e-003        | 0.0291        | 7.3700e-003    | 3.3000e-003        | 0.0107        |          | 112.6718        | 112.6718        | 7.4200e-003   |     | 112.8572        |
| Worker       | 0.0829        | 0.0625        | 0.8101        | 1.8900e-003        | 0.1677        | 1.4900e-003        | 0.1692        | 0.0445         | 1.3800e-003        | 0.0458        |          | 188.0535        | 188.0535        | 7.0500e-003   |     | 188.2298        |
| <b>Total</b> | <b>0.1013</b> | <b>0.5528</b> | <b>0.9442</b> | <b>2.9500e-003</b> | <b>0.1933</b> | <b>4.9400e-003</b> | <b>0.1982</b> | <b>0.0518</b>  | <b>4.6800e-003</b> | <b>0.0565</b> |          | <b>300.7252</b> | <b>300.7252</b> | <b>0.0145</b> |     | <b>301.0871</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      | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |        |         |        | 2.8011        | 0.0000       | 2.8011     | 1.4396         | 0.0000        | 1.4396      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 0.3632 | 1.5737 | 17.7527 | 0.0297 |               | 0.0484       | 0.0484     |                | 0.0484        | 0.0484      | 0.0000   | 2,988.0216 | 2,988.0216 | 0.9302 |     | 3,011.2769 |
| Total         | 0.3632 | 1.5737 | 17.7527 | 0.0297 | 2.8011        | 0.0484       | 2.8495     | 1.4396         | 0.0484        | 1.4880      | 0.0000   | 2,988.0216 | 2,988.0216 | 0.9302 |     | 3,011.2769 |

Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0184 | 0.4902 | 0.1340 | 1.0600e-003 | 0.0240        | 3.4500e-003  | 0.0274     | 6.9700e-003    | 3.3000e-003   | 0.0103      |          | 112.6718  | 112.6718  | 7.4200e-003 |     | 112.8572 |
| Worker   | 0.0829 | 0.0625 | 0.8101 | 1.8900e-003 | 0.1546        | 1.4900e-003  | 0.1560     | 0.0413         | 1.3800e-003   | 0.0426      |          | 188.0535  | 188.0535  | 7.0500e-003 |     | 188.2298 |
| Total    | 0.1013 | 0.5528 | 0.9442 | 2.9500e-003 | 0.1785        | 4.9400e-003  | 0.1835     | 0.0482         | 4.6800e-003   | 0.0529      |          | 300.7252  | 300.7252  | 0.0145      |     | 301.0871 |

### 3.6 Grading Haul - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O | CO2e          |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|-----|---------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.0946        | 0.0000        | 0.0946        | 0.0143         | 0.0000        | 0.0143        |          |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 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>0.0946</b> | <b>0.0000</b> | <b>0.0946</b> | <b>0.0143</b>  | <b>0.0000</b> | <b>0.0143</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</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     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Hauling      | 1.0379        | 33.7804        | 6.9897        | 0.0848        | 1.8281        | 0.1285        | 1.9566        | 0.5011         | 0.1229        | 0.6240        |          | 9,155.6448        | 9,155.6448        | 0.6303        |     | 9,171.4020        |
| Vendor       | 0.0000        | 0.0000         | 0.0000        | 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            |
| <b>Total</b> | <b>1.0379</b> | <b>33.7804</b> | <b>6.9897</b> | <b>0.0848</b> | <b>1.8281</b> | <b>0.1285</b> | <b>1.9566</b> | <b>0.5011</b>  | <b>0.1229</b> | <b>0.6240</b> |          | <b>9,155.6448</b> | <b>9,155.6448</b> | <b>0.6303</b> |     | <b>9,171.4020</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      | lb/day        |               |               |               |               |               |               |                    |               |                    | lb/day        |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.0404        | 0.0000        | 0.0404        | 6.1200e-003        | 0.0000        | 6.1200e-003        |               |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 0.0000        | 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>0.0404</b> | <b>0.0000</b> | <b>0.0404</b> | <b>6.1200e-003</b> | <b>0.0000</b> | <b>6.1200e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</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     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Hauling      | 1.0379        | 33.7804        | 6.9897        | 0.0848        | 1.7037        | 0.1285        | 1.8322        | 0.4706         | 0.1229        | 0.5935        |          | 9,155.6448        | 9,155.6448        | 0.6303        |     | 9,171.4020        |
| Vendor       | 0.0000        | 0.0000         | 0.0000        | 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            |
| <b>Total</b> | <b>1.0379</b> | <b>33.7804</b> | <b>6.9897</b> | <b>0.0848</b> | <b>1.7037</b> | <b>0.1285</b> | <b>1.8322</b> | <b>0.4706</b>  | <b>0.1229</b> | <b>0.5935</b> |          | <b>9,155.6448</b> | <b>9,155.6448</b> | <b>0.6303</b> |     | <b>9,171.4020</b> |

### 3.7 Trenching - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Off-Road     | 0.5322        | 5.2595        | 4.6734        | 6.2100e-003        |               | 0.3726        | 0.3726        |                | 0.3428        | 0.3428        |          | 625.5519        | 625.5519        | 0.1947        |     | 630.4205        |
| <b>Total</b> | <b>0.5322</b> | <b>5.2595</b> | <b>4.6734</b> | <b>6.2100e-003</b> |               | <b>0.3726</b> | <b>0.3726</b> |                | <b>0.3428</b> | <b>0.3428</b> |          | <b>625.5519</b> | <b>625.5519</b> | <b>0.1947</b> |     | <b>630.4205</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Vendor       | 0.0184        | 0.4902        | 0.1340        | 1.0600e-003        | 0.0256        | 3.4500e-003        | 0.0291        | 7.3700e-003    | 3.3000e-003        | 0.0107        |          | 112.6718        | 112.6718        | 7.4200e-003        |     | 112.8572        |
| Worker       | 0.0276        | 0.0209        | 0.2700        | 6.3000e-004        | 0.0559        | 5.0000e-004        | 0.0564        | 0.0148         | 4.6000e-004        | 0.0153        |          | 62.6845         | 62.6845         | 2.3500e-003        |     | 62.7433         |
| <b>Total</b> | <b>0.0460</b> | <b>0.5111</b> | <b>0.4041</b> | <b>1.6900e-003</b> | <b>0.0815</b> | <b>3.9500e-003</b> | <b>0.0855</b> | <b>0.0222</b>  | <b>3.7600e-003</b> | <b>0.0260</b> |          | <b>175.3563</b> | <b>175.3563</b> | <b>9.7700e-003</b> |     | <b>175.6005</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     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Off-Road     | 0.0760        | 0.3292        | 4.6841        | 6.2100e-003        |               | 0.0101        | 0.0101        |                | 0.0101        | 0.0101        | 0.0000        | 625.5519        | 625.5519        | 0.1947        |     | 630.4205        |
| <b>Total</b> | <b>0.0760</b> | <b>0.3292</b> | <b>4.6841</b> | <b>6.2100e-003</b> |               | <b>0.0101</b> | <b>0.0101</b> |                | <b>0.0101</b> | <b>0.0101</b> | <b>0.0000</b> | <b>625.5519</b> | <b>625.5519</b> | <b>0.1947</b> |     | <b>630.4205</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Vendor       | 0.0184        | 0.4902        | 0.1340        | 1.0600e-003        | 0.0240        | 3.4500e-003        | 0.0274        | 6.9700e-003    | 3.3000e-003        | 0.0103        |          | 112.6718        | 112.6718        | 7.4200e-003        |     | 112.8572        |
| Worker       | 0.0276        | 0.0209        | 0.2700        | 6.3000e-004        | 0.0515        | 5.0000e-004        | 0.0520        | 0.0138         | 4.6000e-004        | 0.0142        |          | 62.6845         | 62.6845         | 2.3500e-003        |     | 62.7433         |
| <b>Total</b> | <b>0.0460</b> | <b>0.5111</b> | <b>0.4041</b> | <b>1.6900e-003</b> | <b>0.0755</b> | <b>3.9500e-003</b> | <b>0.0794</b> | <b>0.0207</b>  | <b>3.7600e-003</b> | <b>0.0245</b> |          | <b>175.3563</b> | <b>175.3563</b> | <b>9.7700e-003</b> |     | <b>175.6005</b> |



### 3.8 Landscaping & Field Lighting - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.5789        | 17.4216        | 6.7126        | 0.0133        |               | 0.8474        | 0.8474        |                | 0.7796        | 0.7796        |          | 1,341.0686        | 1,341.0686        | 0.4175        |     | 1,351.5059        |
| <b>Total</b> | <b>1.5789</b> | <b>17.4216</b> | <b>6.7126</b> | <b>0.0133</b> |               | <b>0.8474</b> | <b>0.8474</b> |                | <b>0.7796</b> | <b>0.7796</b> |          | <b>1,341.0686</b> | <b>1,341.0686</b> | <b>0.4175</b> |     | <b>1,351.5059</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0322        | 0.8579        | 0.2346        | 1.8500e-003        | 0.0448        | 6.0500e-003        | 0.0509        | 0.0129         | 5.7800e-003        | 0.0187        |          | 197.1756        | 197.1756        | 0.0130        |     | 197.5002        |
| Worker       | 0.0995        | 0.0751        | 0.9721        | 2.2700e-003        | 0.2012        | 1.7900e-003        | 0.2030        | 0.0534         | 1.6500e-003        | 0.0550        |          | 225.6642        | 225.6642        | 8.4600e-003   |     | 225.8758        |
| <b>Total</b> | <b>0.1317</b> | <b>0.9330</b> | <b>1.2067</b> | <b>4.1200e-003</b> | <b>0.2460</b> | <b>7.8400e-003</b> | <b>0.2539</b> | <b>0.0663</b>  | <b>7.4300e-003</b> | <b>0.0737</b> |          | <b>422.8398</b> | <b>422.8398</b> | <b>0.0214</b> |     | <b>423.3759</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 | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Off-Road | 0.1634 | 0.7082 | 6.3457 | 0.0133 |               | 0.0218       | 0.0218     |                | 0.0218        | 0.0218      | 0.0000   | 1,341.0686 | 1,341.0686 | 0.4175 |     | 1,351.5059 |
| Total    | 0.1634 | 0.7082 | 6.3457 | 0.0133 |               | 0.0218       | 0.0218     |                | 0.0218        | 0.0218      | 0.0000   | 1,341.0686 | 1,341.0686 | 0.4175 |     | 1,351.5059 |

### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0322 | 0.8579 | 0.2346 | 1.8500e-003 | 0.0419        | 6.0500e-003  | 0.0480     | 0.0122         | 5.7800e-003   | 0.0180      |          | 197.1756  | 197.1756  | 0.0130      |     | 197.5002 |
| Worker   | 0.0995 | 0.0751 | 0.9721 | 2.2700e-003 | 0.1855        | 1.7900e-003  | 0.1873     | 0.0495         | 1.6500e-003   | 0.0512      |          | 225.6642  | 225.6642  | 8.4600e-003 |     | 225.8758 |
| Total    | 0.1317 | 0.9330 | 1.2067 | 4.1200e-003 | 0.2274        | 7.8400e-003  | 0.2352     | 0.0617         | 7.4300e-003   | 0.0691      |          | 422.8398  | 422.8398  | 0.0214      |     | 423.3759 |

### 3.9 Paving - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.4239        | 14.5184        | 12.4333        | 0.0189        |               | 0.8370        | 0.8370        |                | 0.7718        | 0.7718        |          | 1,872.5505        | 1,872.5505        | 0.5672        |     | 1,886.7312        |
| Paving       | 0.1470        |                |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| <b>Total</b> | <b>1.5709</b> | <b>14.5184</b> | <b>12.4333</b> | <b>0.0189</b> |               | <b>0.8370</b> | <b>0.8370</b> |                | <b>0.7718</b> | <b>0.7718</b> |          | <b>1,872.5505</b> | <b>1,872.5505</b> | <b>0.5672</b> |     | <b>1,886.7312</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Worker       | 0.1105        | 0.0834        | 1.0802        | 2.5200e-003        | 0.2236        | 1.9900e-003        | 0.2256        | 0.0593         | 1.8400e-003        | 0.0611        |          | 250.7380        | 250.7380        | 9.4000e-003        |     | 250.9731        |
| <b>Total</b> | <b>0.1105</b> | <b>0.0834</b> | <b>1.0802</b> | <b>2.5200e-003</b> | <b>0.2236</b> | <b>1.9900e-003</b> | <b>0.2256</b> | <b>0.0593</b>  | <b>1.8400e-003</b> | <b>0.0611</b> |          | <b>250.7380</b> | <b>250.7380</b> | <b>9.4000e-003</b> |     | <b>250.9731</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 | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Off-Road | 0.3076 | 1.5032 | 13.9949 | 0.0189 |               | 0.0510       | 0.0510     |                | 0.0510        | 0.0510      | 0.0000   | 1,872.5505 | 1,872.5505 | 0.5672 |     | 1,886.7312 |
| Paving   | 0.1470 |        |         |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          |            | 0.0000     |        |     | 0.0000     |
| Total    | 0.4546 | 1.5032 | 13.9949 | 0.0189 |               | 0.0510       | 0.0510     |                | 0.0510        | 0.0510      | 0.0000   | 1,872.5505 | 1,872.5505 | 0.5672 |     | 1,886.7312 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Worker   | 0.1105 | 0.0834 | 1.0802 | 2.5200e-003 | 0.2061        | 1.9900e-003  | 0.2081     | 0.0550         | 1.8400e-003   | 0.0568      |          | 250.7380  | 250.7380  | 9.4000e-003 |     | 250.9731 |
| Total    | 0.1105 | 0.0834 | 1.0802 | 2.5200e-003 | 0.2061        | 1.9900e-003  | 0.2081     | 0.0550         | 1.8400e-003   | 0.0568      |          | 250.7380  | 250.7380  | 9.4000e-003 |     | 250.9731 |

### 3.10 Architectural Coating - 2018

#### Unmitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Archit. Coating | 0.7493        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.2986        | 2.0058        | 1.8542        | 2.9700e-003        |               | 0.1506        | 0.1506        |                | 0.1506        | 0.1506        |          | 281.4485        | 281.4485        | 0.0267        |     | 282.1171        |
| <b>Total</b>    | <b>1.0480</b> | <b>2.0058</b> | <b>1.8542</b> | <b>2.9700e-003</b> |               | <b>0.1506</b> | <b>0.1506</b> |                | <b>0.1506</b> | <b>0.1506</b> |          | <b>281.4485</b> | <b>281.4485</b> | <b>0.0267</b> |     | <b>282.1171</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                |                |                    |     |                |
| Hauling      | 2.2100e-003   | 0.0718        | 0.0149        | 1.8000e-004        | 3.8900e-003   | 2.7000e-004        | 4.1600e-003   | 1.0600e-003    | 2.6000e-004        | 1.3300e-003   |          | 19.4581        | 19.4581        | 1.3400e-003        |     | 19.4916        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |
| Worker       | 0.0221        | 0.0167        | 0.2160        | 5.0000e-004        | 0.0447        | 4.0000e-004        | 0.0451        | 0.0119         | 3.7000e-004        | 0.0122        |          | 50.1476        | 50.1476        | 1.8800e-003        |     | 50.1946        |
| <b>Total</b> | <b>0.0243</b> | <b>0.0885</b> | <b>0.2309</b> | <b>6.8000e-004</b> | <b>0.0486</b> | <b>6.7000e-004</b> | <b>0.0493</b> | <b>0.0129</b>  | <b>6.3000e-004</b> | <b>0.0136</b> |          | <b>69.6057</b> | <b>69.6057</b> | <b>3.2200e-003</b> |     | <b>69.6862</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        | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |        |     |          |
| Archit. Coating | 0.7493 |        |        |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          |           | 0.0000    |        |     | 0.0000   |
| Off-Road        | 0.2986 | 2.0058 | 1.8542 | 2.9700e-003 |               | 0.1506       | 0.1506     |                | 0.1506        | 0.1506      | 0.0000   | 281.4485  | 281.4485  | 0.0267 |     | 282.1171 |
| Total           | 1.0480 | 2.0058 | 1.8542 | 2.9700e-003 |               | 0.1506       | 0.1506     |                | 0.1506        | 0.1506      | 0.0000   | 281.4485  | 281.4485  | 0.0267 |     | 282.1171 |

Mitigated Construction Off-Site

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e    |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|---------|
| Category | lb/day      |        |        |             |               |              |             |                |               |             | lb/day   |           |           |             |     |         |
| Hauling  | 2.2100e-003 | 0.0718 | 0.0149 | 1.8000e-004 | 3.6200e-003   | 2.7000e-004  | 3.8900e-003 | 1.0000e-003    | 2.6000e-004   | 1.2600e-003 |          | 19.4581   | 19.4581   | 1.3400e-003 |     | 19.4916 |
| Vendor   | 0.0000      | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |
| Worker   | 0.0221      | 0.0167 | 0.2160 | 5.0000e-004 | 0.0412        | 4.0000e-004  | 0.0416      | 0.0110         | 3.7000e-004   | 0.0114      |          | 50.1476   | 50.1476   | 1.8800e-003 |     | 50.1946 |
| Total    | 0.0243      | 0.0885 | 0.2309 | 6.8000e-004 | 0.0448        | 6.7000e-004  | 0.0455      | 0.0120         | 6.3000e-004   | 0.0126      |          | 69.6057   | 69.6057   | 3.2200e-003 |     | 69.6862 |

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Wilson Midle School Construction - Los Angeles-South Coast County, Winter

## Wilson Midle School Construction-- Mitigated

### Los Angeles-South Coast County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses                  | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|----------------------------|--------|----------|-------------|--------------------|------------|
| Other Asphalt Surfaces     | 42.15  | 1000sqft | 1.01        | 42,145.00          | 0          |
| Other Non-Asphalt Surfaces | 123.92 | 1000sqft | 2.84        | 0.00               | 0          |

### 1.2 Other Project Characteristics

|                             |              |                             |       |                             |       |
|-----------------------------|--------------|-----------------------------|-------|-----------------------------|-------|
| Urbanization                | Urban        | Wind Speed (m/s)            | 2.2   | Precipitation Freq (Days)   | 33    |
| Climate Zone                | 12           |                             |       | Operational Year            | 2019  |
| Utility Company             | User Defined |                             |       |                             |       |
| CO2 Intensity<br>(lb/MW hr) | 383.88       | CH4 Intensity<br>(lb/MW hr) | 0.095 | N2O Intensity<br>(lb/MW hr) | 0.012 |

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

Project Characteristics - \*\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label: <http://www.sce.com/california/>

Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - Haul

Off-road Equipment - Haul

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - CalEEMod assumptions

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating - See CalEEMod Assumptions

Vehicle Trips -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

| Table Name              | Column Name                          | Default Value | New Value |
|-------------------------|--------------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior    | 0.00          | 823.00    |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior    | 0.00          | 2,468.00  |
| tblArchitecturalCoating | EF_Nonresidential_Exterior           | 100.00        | 50.00     |
| tblArchitecturalCoating | EF_Nonresidential_Interior           | 100.00        | 50.00     |
| tblArchitecturalCoating | EF_Parking                           | 100.00        | 50.00     |
| tblConstDustMitigation  | CleanPavedRoadPercentReduction       | 0             | 9         |
| tblConstDustMitigation  | WaterExposedAreaPM10PercentReduction | 61            | 55        |
| tblConstDustMitigation  | WaterExposedAreaPM25PercentReduction | 61            | 55        |
| tblConstDustMitigation  | WaterUnpavedRoadVehicleSpeed         | 0             | 15        |
| tblConstEquipMitigation | NumberOfEquipmentMitigated           | 0.00          | 1.00      |
| tblConstEquipMitigation | NumberOfEquipmentMitigated           | 0.00          | 1.00      |
| tblConstEquipMitigation | NumberOfEquipmentMitigated           | 0.00          | 1.00      |
| tblConstEquipMitigation | NumberOfEquipmentMitigated           | 0.00          | 4.00      |
| 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          | 2.00      |



|                         |                            |            |              |
|-------------------------|----------------------------|------------|--------------|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00       | 7.00         |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00       | 10.00        |
| 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                    | 8.00       | 16.00        |
| tblConstructionPhase    | NumDays                    | 8.00       | 16.00        |
| tblConstructionPhase    | NumDays                    | 230.00     | 18.00        |
| tblGrading              | MaterialExported           | 0.00       | 13,381.00    |
| tblLandUse              | LandUseSquareFeet          | 42,150.00  | 42,145.00    |
| tblLandUse              | LandUseSquareFeet          | 123,920.00 | 0.00         |
| tblLandUse              | LotAcreage                 | 0.97       | 1.01         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 3.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 3.00       | 1.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 2.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 3.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 3.00       | 0.00         |
| tblOffRoadEquipment     | OffRoadEquipmentUnitAmount | 1.00       | 0.00         |

|                           |                    |       |        |
|---------------------------|--------------------|-------|--------|
| tblOffRoadEquipment       | UsageHours         | 7.00  | 8.00   |
| tblOffRoadEquipment       | UsageHours         | 8.00  | 6.00   |
| tblProjectCharacteristics | CH4IntensityFactor | 0     | 0.095  |
| tblProjectCharacteristics | CO2IntensityFactor | 0     | 383.88 |
| tblProjectCharacteristics | N2OIntensityFactor | 0     | 0.012  |
| tblTripsAndVMT            | HaulingTripNumber  | 31.00 | 32.00  |
| tblTripsAndVMT            | HaulingTripNumber  | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber   | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber   | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber   | 0.00  | 4.00   |
| tblTripsAndVMT            | VendorTripNumber   | 0.00  | 4.00   |

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O    | CO2e        |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |             |             |        |        |             |
| 2018    | 4.6920 | 65.4762 | 24.9477 | 0.1158 | 18.2931       | 2.5822       | 20.8753    | 9.9914         | 2.3758        | 12.3672     | 0.0000   | 12,277.2140 | 12,277.2140 | 1.5997 | 0.0000 | 12,317.2058 |
| Maximum | 4.6920 | 65.4762 | 24.9477 | 0.1158 | 18.2931       | 2.5822       | 20.8753    | 9.9914         | 2.3758        | 12.3672     | 0.0000   | 12,277.2140 | 12,277.2140 | 1.5997 | 0.0000 | 12,317.2058 |

### Mitigated Construction

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                 |                 |        |        |                 |
| 2018    | 1.5382 | 36.3774 | 26.1234 | 0.1158 | 7.9328        | 0.1844       | 8.0001     | 4.3018         | 0.1785        | 4.3689      | 0.0000   | 12,277.21<br>40 | 12,277.214<br>0 | 1.5997 | 0.0000 | 12,317.20<br>58 |
| Maximum | 1.5382 | 36.3774 | 26.1234 | 0.1158 | 7.9328        | 0.1844       | 8.0001     | 4.3018         | 0.1785        | 4.3689      | 0.0000   | 12,277.21<br>40 | 12,277.214<br>0 | 1.5997 | 0.0000 | 12,317.20<br>58 |

|                   | ROG   | NOx   | CO    | SO2  | 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 | 67.22 | 44.44 | -4.71 | 0.00 | 56.64         | 92.86        | 61.68      | 56.94          | 92.49         | 64.67       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name                   | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|------------------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Asphalt Demo                 | Demolition            | 6/1/2018   | 6/28/2018 | 5             | 20       |                   |
| 2            | Asphalt Demo Haul            | Demolition            | 6/1/2018   | 6/28/2018 | 5             | 20       |                   |
| 3            | Site Preparation             | Site Preparation      | 6/29/2018  | 7/5/2018  | 5             | 5        |                   |
| 4            | Grading                      | Grading               | 7/6/2018   | 7/27/2018 | 5             | 16       |                   |
| 5            | Grading Haul                 | Grading               | 7/6/2018   | 7/27/2018 | 5             | 16       |                   |
| 6            | Trenching                    | Trenching             | 7/28/2018  | 8/6/2018  | 5             | 6        |                   |
| 7            | Landscaping & Field Lighting | Building Construction | 8/7/2018   | 8/30/2018 | 5             | 18       |                   |
| 8            | Paving                       | Paving                | 8/7/2018   | 8/30/2018 | 5             | 18       |                   |
| 9            | Architectural Coating        | Architectural Coating | 9/1/2018   | 9/26/2018 | 5             | 18       |                   |

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

**Acres of Grading (Grading Phase): 8**

**Acres of Paving: 3.85**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,468; Non-Residential Outdoor: 823; Striped Parking Area: 2,529**

**OffRoad Equipment**

| Phase Name                   | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------------------------|---------------------------|--------|-------------|-------------|-------------|
| Asphalt Demo                 | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Asphalt Demo                 | Excavators                | 3      | 8.00        | 158         | 0.38        |
| Asphalt Demo                 | Rubber Tired Dozers       | 2      | 8.00        | 247         | 0.40        |
| Asphalt Demo Haul            | Concrete/Industrial Saws  | 0      | 8.00        | 81          | 0.73        |
| Asphalt Demo Haul            | Excavators                | 0      | 8.00        | 158         | 0.38        |
| Asphalt Demo Haul            | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Site Preparation             | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation             | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading                      | Excavators                | 1      | 8.00        | 158         | 0.38        |
| Grading                      | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading                      | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading                      | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Grading Haul                 | Excavators                | 0      | 8.00        | 158         | 0.38        |
| Grading Haul                 | Graders                   | 0      | 8.00        | 187         | 0.41        |
| Grading Haul                 | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Grading Haul                 | Tractors/Loaders/Backhoes | 0      | 8.00        | 97          | 0.37        |
| Trenching                    | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Landscaping & Field Lighting | Cranes                    | 1      | 8.00        | 231         | 0.29        |
| Landscaping & Field Lighting | Forklifts                 | 1      | 6.00        | 89          | 0.20        |
| Landscaping & Field Lighting | Generator Sets            | 0      | 8.00        | 84          | 0.74        |
| Landscaping & Field Lighting | Rubber Tired Dozers       | 1      | 6.00        | 247         | 0.40        |
| Landscaping & Field Lighting | Tractors/Loaders/Backhoes | 0      | 7.00        | 97          | 0.37        |
| Landscaping & Field Lighting | Welders                   | 0      | 8.00        | 46          | 0.45        |
| Paving                       | Cement and Mortar Mixers  | 2      | 6.00        | 9           | 0.56        |
| Paving                       | Pavers                    | 1      | 8.00        | 130         | 0.42        |
| Paving                       | Paving Equipment          | 2      | 6.00        | 132         | 0.36        |
| Paving                       | Rollers                   | 2      | 6.00        | 80          | 0.38        |
| Paving                       | 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 |
|------------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Asphalt Demo                 | 6                       | 15.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Asphalt Demo Haul            | 0                       | 0.00               | 0.00               | 32.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation             | 7                       | 18.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                      | 6                       | 15.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading Haul                 | 0                       | 0.00               | 0.00               | 1,673.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Trenching                    | 2                       | 5.00               | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Landscaping & Field Lighting | 3                       | 18.00              | 7.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                       | 8                       | 20.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating        | 1                       | 4.00               | 0.00               | 4.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

### 3.2 Asphalt Demo - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 3.7190        | 38.3225        | 22.3040        | 0.0388        |               | 1.9386        | 1.9386        |                | 1.8048        | 1.8048        |          | 3,871.7665        | 3,871.7665        | 1.0667        |     | 3,898.4344        |
| <b>Total</b>  | <b>3.7190</b> | <b>38.3225</b> | <b>22.3040</b> | <b>0.0388</b> | <b>0.0000</b> | <b>1.9386</b> | <b>1.9386</b> | <b>0.0000</b>  | <b>1.8048</b> | <b>1.8048</b> |          | <b>3,871.7665</b> | <b>3,871.7665</b> | <b>1.0667</b> |     | <b>3,898.4344</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0192        | 0.4913        | 0.1473        | 1.0300e-003        | 0.0256        | 3.5100e-003        | 0.0291        | 7.3700e-003    | 3.3600e-003        | 0.0107        |          | 109.6599        | 109.6599        | 7.9100e-003   |     | 109.8578        |
| Worker       | 0.0917        | 0.0693        | 0.7459        | 1.7800e-003        | 0.1677        | 1.4900e-003        | 0.1692        | 0.0445         | 1.3800e-003        | 0.0458        |          | 177.0864        | 177.0864        | 6.6600e-003   |     | 177.2530        |
| <b>Total</b> | <b>0.1109</b> | <b>0.5606</b> | <b>0.8932</b> | <b>2.8100e-003</b> | <b>0.1933</b> | <b>5.0000e-003</b> | <b>0.1983</b> | <b>0.0518</b>  | <b>4.7400e-003</b> | <b>0.0566</b> |          | <b>286.7463</b> | <b>286.7463</b> | <b>0.0146</b> |     | <b>287.1108</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      | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |        |         |        | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 0.4623 | 2.0032 | 23.2798 | 0.0388 |               | 0.0616       | 0.0616     |                | 0.0616        | 0.0616      | 0.0000   | 3,871.7665 | 3,871.7665 | 1.0667 |     | 3,898.4344 |
| Total         | 0.4623 | 2.0032 | 23.2798 | 0.0388 | 0.0000        | 0.0616       | 0.0616     | 0.0000         | 0.0616        | 0.0616      | 0.0000   | 3,871.7665 | 3,871.7665 | 1.0667 |     | 3,898.4344 |

Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0192 | 0.4913 | 0.1473 | 1.0300e-003 | 0.0240        | 3.5100e-003  | 0.0275     | 6.9700e-003    | 3.3600e-003   | 0.0103      |          | 109.6599  | 109.6599  | 7.9100e-003 |     | 109.8578 |
| Worker   | 0.0917 | 0.0693 | 0.7459 | 1.7800e-003 | 0.1546        | 1.4900e-003  | 0.1560     | 0.0413         | 1.3800e-003   | 0.0426      |          | 177.0864  | 177.0864  | 6.6600e-003 |     | 177.2530 |
| Total    | 0.1109 | 0.5606 | 0.8932 | 2.8100e-003 | 0.1785        | 5.0000e-003  | 0.1835     | 0.0482         | 4.7400e-003   | 0.0530      |          | 286.7463  | 286.7463  | 0.0146      |     | 287.1108 |



### 3.3 Asphalt Demo Haul - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O | CO2e          |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|-----|---------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.3381        | 0.0000        | 0.3381        | 0.0512         | 0.0000        | 0.0512        |          |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 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>0.3381</b> | <b>0.0000</b> | <b>0.3381</b> | <b>0.0512</b>  | <b>0.0000</b> | <b>0.0512</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</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     | lb/day        |               |               |                    |               |                    |               |                    |                    |                    | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0163        | 0.5240        | 0.1144        | 1.2800e-003        | 0.0280        | 2.0000e-003        | 0.0300        | 7.6700e-003        | 1.9200e-003        | 9.5900e-003        |          | 137.7541        | 137.7541        | 0.0100        |     | 138.0046        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 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          |
| <b>Total</b> | <b>0.0163</b> | <b>0.5240</b> | <b>0.1144</b> | <b>1.2800e-003</b> | <b>0.0280</b> | <b>2.0000e-003</b> | <b>0.0300</b> | <b>7.6700e-003</b> | <b>1.9200e-003</b> | <b>9.5900e-003</b> |          | <b>137.7541</b> | <b>137.7541</b> | <b>0.0100</b> |     | <b>138.0046</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      | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |     |        |
| Fugitive Dust |        |        |        |        | 0.1445        | 0.0000       | 0.1445     | 0.0219         | 0.0000        | 0.0219      |          |           | 0.0000    |        |     | 0.0000 |
| Off-Road      | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Total         | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1445        | 0.0000       | 0.1445     | 0.0219         | 0.0000        | 0.0219      | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |

### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |        |     |          |
| Hauling  | 0.0163 | 0.5240 | 0.1144 | 1.2800e-003 | 0.0261        | 2.0000e-003  | 0.0281     | 7.2000e-003    | 1.9200e-003   | 9.1200e-003 |          | 137.7541  | 137.7541  | 0.0100 |     | 138.0046 |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 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   |
| Total    | 0.0163 | 0.5240 | 0.1144 | 1.2800e-003 | 0.0261        | 2.0000e-003  | 0.0281     | 7.2000e-003    | 1.9200e-003   | 9.1200e-003 |          | 137.7541  | 137.7541  | 0.0100 |     | 138.0046 |

### 3.4 Site Preparation - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total    | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |                |               |                |                |               |                | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 18.0663        | 0.0000        | 18.0663        | 9.9307         | 0.0000        | 9.9307         |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 4.5627        | 48.1988        | 22.4763        | 0.0380        |                | 2.5769        | 2.5769         |                | 2.3708        | 2.3708         |          | 3,831.6239        | 3,831.6239        | 1.1928        |     | 3,861.4448        |
| <b>Total</b>  | <b>4.5627</b> | <b>48.1988</b> | <b>22.4763</b> | <b>0.0380</b> | <b>18.0663</b> | <b>2.5769</b> | <b>20.6432</b> | <b>9.9307</b>  | <b>2.3708</b> | <b>12.3014</b> |          | <b>3,831.6239</b> | <b>3,831.6239</b> | <b>1.1928</b> |     | <b>3,861.4448</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0192        | 0.4913        | 0.1473        | 1.0300e-003        | 0.0256        | 3.5100e-003        | 0.0291        | 7.3700e-003    | 3.3600e-003        | 0.0107        |          | 109.6599        | 109.6599        | 7.9100e-003   |     | 109.8578        |
| Worker       | 0.1101        | 0.0831        | 0.8951        | 2.1400e-003        | 0.2012        | 1.7900e-003        | 0.2030        | 0.0534         | 1.6500e-003        | 0.0550        |          | 212.5037        | 212.5037        | 8.0000e-003   |     | 212.7036        |
| <b>Total</b> | <b>0.1293</b> | <b>0.5745</b> | <b>1.0424</b> | <b>3.1700e-003</b> | <b>0.2268</b> | <b>5.3000e-003</b> | <b>0.2321</b> | <b>0.0607</b>  | <b>5.0100e-003</b> | <b>0.0657</b> |          | <b>322.1636</b> | <b>322.1636</b> | <b>0.0159</b> |     | <b>322.5614</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      | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |        |         |        | 7.7233        | 0.0000       | 7.7233     | 4.2454         | 0.0000        | 4.2454      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 0.4656 | 2.0175 | 20.8690 | 0.0380 |               | 0.0621       | 0.0621     |                | 0.0621        | 0.0621      | 0.0000   | 3,831.6239 | 3,831.6239 | 1.1928 |     | 3,861.4448 |
| Total         | 0.4656 | 2.0175 | 20.8690 | 0.0380 | 7.7233        | 0.0621       | 7.7854     | 4.2454         | 0.0621        | 4.3075      | 0.0000   | 3,831.6239 | 3,831.6239 | 1.1928 |     | 3,861.4448 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0192 | 0.4913 | 0.1473 | 1.0300e-003 | 0.0240        | 3.5100e-003  | 0.0275     | 6.9700e-003    | 3.3600e-003   | 0.0103      |          | 109.6599  | 109.6599  | 7.9100e-003 |     | 109.8578 |
| Worker   | 0.1101 | 0.0831 | 0.8951 | 2.1400e-003 | 0.1855        | 1.7900e-003  | 0.1873     | 0.0495         | 1.6500e-003   | 0.0512      |          | 212.5037  | 212.5037  | 8.0000e-003 |     | 212.7036 |
| Total    | 0.1293 | 0.5745 | 1.0424 | 3.1700e-003 | 0.2094        | 5.3000e-003  | 0.2147     | 0.0565         | 5.0100e-003   | 0.0615      |          | 322.1636  | 322.1636  | 0.0159      |     | 322.5614 |

### 3.5 Grading - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 6.5523        | 0.0000        | 6.5523        | 3.3675         | 0.0000        | 3.3675        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 2.7733        | 30.6725        | 16.5770        | 0.0297        |               | 1.5513        | 1.5513        |                | 1.4272        | 1.4272        |          | 2,988.0216        | 2,988.0216        | 0.9302        |     | 3,011.2769        |
| <b>Total</b>  | <b>2.7733</b> | <b>30.6725</b> | <b>16.5770</b> | <b>0.0297</b> | <b>6.5523</b> | <b>1.5513</b> | <b>8.1037</b> | <b>3.3675</b>  | <b>1.4272</b> | <b>4.7947</b> |          | <b>2,988.0216</b> | <b>2,988.0216</b> | <b>0.9302</b> |     | <b>3,011.2769</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0192        | 0.4913        | 0.1473        | 1.0300e-003        | 0.0256        | 3.5100e-003        | 0.0291        | 7.3700e-003    | 3.3600e-003        | 0.0107        |          | 109.6599        | 109.6599        | 7.9100e-003   |     | 109.8578        |
| Worker       | 0.0917        | 0.0693        | 0.7459        | 1.7800e-003        | 0.1677        | 1.4900e-003        | 0.1692        | 0.0445         | 1.3800e-003        | 0.0458        |          | 177.0864        | 177.0864        | 6.6600e-003   |     | 177.2530        |
| <b>Total</b> | <b>0.1109</b> | <b>0.5606</b> | <b>0.8932</b> | <b>2.8100e-003</b> | <b>0.1933</b> | <b>5.0000e-003</b> | <b>0.1983</b> | <b>0.0518</b>  | <b>4.7400e-003</b> | <b>0.0566</b> |          | <b>286.7463</b> | <b>286.7463</b> | <b>0.0146</b> |     | <b>287.1108</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      | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Fugitive Dust |        |        |         |        | 2.8011        | 0.0000       | 2.8011     | 1.4396         | 0.0000        | 1.4396      |          |            | 0.0000     |        |     | 0.0000     |
| Off-Road      | 0.3632 | 1.5737 | 17.7527 | 0.0297 |               | 0.0484       | 0.0484     |                | 0.0484        | 0.0484      | 0.0000   | 2,988.0216 | 2,988.0216 | 0.9302 |     | 3,011.2769 |
| Total         | 0.3632 | 1.5737 | 17.7527 | 0.0297 | 2.8011        | 0.0484       | 2.8495     | 1.4396         | 0.0484        | 1.4880      | 0.0000   | 2,988.0216 | 2,988.0216 | 0.9302 |     | 3,011.2769 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0192 | 0.4913 | 0.1473 | 1.0300e-003 | 0.0240        | 3.5100e-003  | 0.0275     | 6.9700e-003    | 3.3600e-003   | 0.0103      |          | 109.6599  | 109.6599  | 7.9100e-003 |     | 109.8578 |
| Worker   | 0.0917 | 0.0693 | 0.7459 | 1.7800e-003 | 0.1546        | 1.4900e-003  | 0.1560     | 0.0413         | 1.3800e-003   | 0.0426      |          | 177.0864  | 177.0864  | 6.6600e-003 |     | 177.2530 |
| Total    | 0.1109 | 0.5606 | 0.8932 | 2.8100e-003 | 0.1785        | 5.0000e-003  | 0.1835     | 0.0482         | 4.7400e-003   | 0.0530      |          | 286.7463  | 286.7463  | 0.0146      |     | 287.1108 |

### 3.6 Grading Haul - 2018

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O | CO2e          |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|-----|---------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.0946        | 0.0000        | 0.0946        | 0.0143         | 0.0000        | 0.0143        |          |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 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>0.0946</b> | <b>0.0000</b> | <b>0.0946</b> | <b>0.0143</b>  | <b>0.0000</b> | <b>0.0143</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</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     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                        |                   |               |     |                        |
| Hauling      | 1.0641        | 34.2431        | 7.4775        | 0.0833        | 1.8281        | 0.1310        | 1.9591        | 0.5011         | 0.1253        | 0.6264        |          | 9,002.446<br>1         | 9,002.4461        | 0.6549        |     | 9,018.818<br>2         |
| Vendor       | 0.0000        | 0.0000         | 0.0000        | 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                 |
| <b>Total</b> | <b>1.0641</b> | <b>34.2431</b> | <b>7.4775</b> | <b>0.0833</b> | <b>1.8281</b> | <b>0.1310</b> | <b>1.9591</b> | <b>0.5011</b>  | <b>0.1253</b> | <b>0.6264</b> |          | <b>9,002.446<br/>1</b> | <b>9,002.4461</b> | <b>0.6549</b> |     | <b>9,018.818<br/>2</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      | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |     |        |
| Fugitive Dust |        |        |        |        | 0.0404        | 0.0000       | 0.0404     | 6.1200e-003    | 0.0000        | 6.1200e-003 |          |           | 0.0000    |        |     | 0.0000 |
| Off-Road      | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Total         | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0404        | 0.0000       | 0.0404     | 6.1200e-003    | 0.0000        | 6.1200e-003 | 0.0000   | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |

**Mitigated Construction Off-Site**

|          | ROG    | NOx     | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O | CO2e       |
|----------|--------|---------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day |         |        |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Hauling  | 1.0641 | 34.2431 | 7.4775 | 0.0833 | 1.7037        | 0.1310       | 1.8347     | 0.4706         | 0.1253        | 0.5959      |          | 9,002.4461 | 9,002.4461 | 0.6549 |     | 9,018.8182 |
| Vendor   | 0.0000 | 0.0000  | 0.0000 | 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     |
| Total    | 1.0641 | 34.2431 | 7.4775 | 0.0833 | 1.7037        | 0.1310       | 1.8347     | 0.4706         | 0.1253        | 0.5959      |          | 9,002.4461 | 9,002.4461 | 0.6549 |     | 9,018.8182 |



### 3.7 Trenching - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Off-Road     | 0.5322        | 5.2595        | 4.6734        | 6.2100e-003        |               | 0.3726        | 0.3726        |                | 0.3428        | 0.3428        |          | 625.5519        | 625.5519        | 0.1947        |     | 630.4205        |
| <b>Total</b> | <b>0.5322</b> | <b>5.2595</b> | <b>4.6734</b> | <b>6.2100e-003</b> |               | <b>0.3726</b> | <b>0.3726</b> |                | <b>0.3428</b> | <b>0.3428</b> |          | <b>625.5519</b> | <b>625.5519</b> | <b>0.1947</b> |     | <b>630.4205</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0192        | 0.4913        | 0.1473        | 1.0300e-003        | 0.0256        | 3.5100e-003        | 0.0291        | 7.3700e-003    | 3.3600e-003        | 0.0107        |          | 109.6599        | 109.6599        | 7.9100e-003   |     | 109.8578        |
| Worker       | 0.0306        | 0.0231        | 0.2486        | 5.9000e-004        | 0.0559        | 5.0000e-004        | 0.0564        | 0.0148         | 4.6000e-004        | 0.0153        |          | 59.0288         | 59.0288         | 2.2200e-003   |     | 59.0843         |
| <b>Total</b> | <b>0.0498</b> | <b>0.5144</b> | <b>0.3960</b> | <b>1.6200e-003</b> | <b>0.0815</b> | <b>4.0100e-003</b> | <b>0.0855</b> | <b>0.0222</b>  | <b>3.8200e-003</b> | <b>0.0260</b> |          | <b>168.6887</b> | <b>168.6887</b> | <b>0.0101</b> |     | <b>168.9421</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     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Off-Road     | 0.0760        | 0.3292        | 4.6841        | 6.2100e-003        |               | 0.0101        | 0.0101        |                | 0.0101        | 0.0101        | 0.0000        | 625.5519        | 625.5519        | 0.1947        |     | 630.4205        |
| <b>Total</b> | <b>0.0760</b> | <b>0.3292</b> | <b>4.6841</b> | <b>6.2100e-003</b> |               | <b>0.0101</b> | <b>0.0101</b> |                | <b>0.0101</b> | <b>0.0101</b> | <b>0.0000</b> | <b>625.5519</b> | <b>625.5519</b> | <b>0.1947</b> |     | <b>630.4205</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0192        | 0.4913        | 0.1473        | 1.0300e-003        | 0.0240        | 3.5100e-003        | 0.0275        | 6.9700e-003    | 3.3600e-003        | 0.0103        |          | 109.6599        | 109.6599        | 7.9100e-003   |     | 109.8578        |
| Worker       | 0.0306        | 0.0231        | 0.2486        | 5.9000e-004        | 0.0515        | 5.0000e-004        | 0.0520        | 0.0138         | 4.6000e-004        | 0.0142        |          | 59.0288         | 59.0288         | 2.2200e-003   |     | 59.0843         |
| <b>Total</b> | <b>0.0498</b> | <b>0.5144</b> | <b>0.3960</b> | <b>1.6200e-003</b> | <b>0.0755</b> | <b>4.0100e-003</b> | <b>0.0795</b> | <b>0.0207</b>  | <b>3.8200e-003</b> | <b>0.0245</b> |          | <b>168.6887</b> | <b>168.6887</b> | <b>0.0101</b> |     | <b>168.9421</b> |

### 3.8 Landscaping & Field Lighting - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.5789        | 17.4216        | 6.7126        | 0.0133        |               | 0.8474        | 0.8474        |                | 0.7796        | 0.7796        |          | 1,341.0686        | 1,341.0686        | 0.4175        |     | 1,351.5059        |
| <b>Total</b> | <b>1.5789</b> | <b>17.4216</b> | <b>6.7126</b> | <b>0.0133</b> |               | <b>0.8474</b> | <b>0.8474</b> |                | <b>0.7796</b> | <b>0.7796</b> |          | <b>1,341.0686</b> | <b>1,341.0686</b> | <b>0.4175</b> |     | <b>1,351.5059</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0336        | 0.8599        | 0.2578        | 1.8000e-003        | 0.0448        | 6.1400e-003        | 0.0510        | 0.0129         | 5.8800e-003        | 0.0188        |          | 191.9049        | 191.9049        | 0.0139        |     | 192.2511        |
| Worker       | 0.1101        | 0.0831        | 0.8951        | 2.1400e-003        | 0.2012        | 1.7900e-003        | 0.2030        | 0.0534         | 1.6500e-003        | 0.0550        |          | 212.5037        | 212.5037        | 8.0000e-003   |     | 212.7036        |
| <b>Total</b> | <b>0.1436</b> | <b>0.9430</b> | <b>1.1529</b> | <b>3.9400e-003</b> | <b>0.2460</b> | <b>7.9300e-003</b> | <b>0.2539</b> | <b>0.0663</b>  | <b>7.5300e-003</b> | <b>0.0738</b> |          | <b>404.4086</b> | <b>404.4086</b> | <b>0.0219</b> |     | <b>404.9547</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     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.1634        | 0.7082        | 6.3457        | 0.0133        |               | 0.0218        | 0.0218        |                | 0.0218        | 0.0218        | 0.0000        | 1,341.0686        | 1,341.0686        | 0.4175        |     | 1,351.5059        |
| <b>Total</b> | <b>0.1634</b> | <b>0.7082</b> | <b>6.3457</b> | <b>0.0133</b> |               | <b>0.0218</b> | <b>0.0218</b> |                | <b>0.0218</b> | <b>0.0218</b> | <b>0.0000</b> | <b>1,341.0686</b> | <b>1,341.0686</b> | <b>0.4175</b> |     | <b>1,351.5059</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        |     | 0.0000          |
| Vendor       | 0.0336        | 0.8599        | 0.2578        | 1.8000e-003        | 0.0419        | 6.1400e-003        | 0.0481        | 0.0122         | 5.8800e-003        | 0.0181        |          | 191.9049        | 191.9049        | 0.0139        |     | 192.2511        |
| Worker       | 0.1101        | 0.0831        | 0.8951        | 2.1400e-003        | 0.1855        | 1.7900e-003        | 0.1873        | 0.0495         | 1.6500e-003        | 0.0512        |          | 212.5037        | 212.5037        | 8.0000e-003   |     | 212.7036        |
| <b>Total</b> | <b>0.1436</b> | <b>0.9430</b> | <b>1.1529</b> | <b>3.9400e-003</b> | <b>0.2274</b> | <b>7.9300e-003</b> | <b>0.2353</b> | <b>0.0617</b>  | <b>7.5300e-003</b> | <b>0.0692</b> |          | <b>404.4086</b> | <b>404.4086</b> | <b>0.0219</b> |     | <b>404.9547</b> |

### 3.9 Paving - 2018

#### Unmitigated Construction On-Site

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.4239        | 14.5184        | 12.4333        | 0.0189        |               | 0.8370        | 0.8370        |                | 0.7718        | 0.7718        |          | 1,872.5505        | 1,872.5505        | 0.5672        |     | 1,886.7312        |
| Paving       | 0.1470        |                |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| <b>Total</b> | <b>1.5709</b> | <b>14.5184</b> | <b>12.4333</b> | <b>0.0189</b> |               | <b>0.8370</b> | <b>0.8370</b> |                | <b>0.7718</b> | <b>0.7718</b> |          | <b>1,872.5505</b> | <b>1,872.5505</b> | <b>0.5672</b> |     | <b>1,886.7312</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |     |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Worker       | 0.1223        | 0.0923        | 0.9945        | 2.3700e-003        | 0.2236        | 1.9900e-003        | 0.2256        | 0.0593         | 1.8400e-003        | 0.0611        |          | 236.1152        | 236.1152        | 8.8900e-003        |     | 236.3373        |
| <b>Total</b> | <b>0.1223</b> | <b>0.0923</b> | <b>0.9945</b> | <b>2.3700e-003</b> | <b>0.2236</b> | <b>1.9900e-003</b> | <b>0.2256</b> | <b>0.0593</b>  | <b>1.8400e-003</b> | <b>0.0611</b> |          | <b>236.1152</b> | <b>236.1152</b> | <b>8.8900e-003</b> |     | <b>236.3373</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 | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Off-Road | 0.3076 | 1.5032 | 13.9949 | 0.0189 |               | 0.0510       | 0.0510     |                | 0.0510        | 0.0510      | 0.0000   | 1,872.5505 | 1,872.5505 | 0.5672 |     | 1,886.7312 |
| Paving   | 0.1470 |        |         |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          |            | 0.0000     |        |     | 0.0000     |
| Total    | 0.4546 | 1.5032 | 13.9949 | 0.0189 |               | 0.0510       | 0.0510     |                | 0.0510        | 0.0510      | 0.0000   | 1,872.5505 | 1,872.5505 | 0.5672 |     | 1,886.7312 |

### Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |
| Worker   | 0.1223 | 0.0923 | 0.9945 | 2.3700e-003 | 0.2061        | 1.9900e-003  | 0.2081     | 0.0550         | 1.8400e-003   | 0.0568      |          | 236.1152  | 236.1152  | 8.8900e-003 |     | 236.3373 |
| Total    | 0.1223 | 0.0923 | 0.9945 | 2.3700e-003 | 0.2061        | 1.9900e-003  | 0.2081     | 0.0550         | 1.8400e-003   | 0.0568      |          | 236.1152  | 236.1152  | 8.8900e-003 |     | 236.3373 |

### 3.10 Architectural Coating - 2018

#### Unmitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Archit. Coating | 0.7493        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.2986        | 2.0058        | 1.8542        | 2.9700e-003        |               | 0.1506        | 0.1506        |                | 0.1506        | 0.1506        |          | 281.4485        | 281.4485        | 0.0267        |     | 282.1171        |
| <b>Total</b>    | <b>1.0480</b> | <b>2.0058</b> | <b>1.8542</b> | <b>2.9700e-003</b> |               | <b>0.1506</b> | <b>0.1506</b> |                | <b>0.1506</b> | <b>0.1506</b> |          | <b>281.4485</b> | <b>281.4485</b> | <b>0.0267</b> |     | <b>282.1171</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                |                |                    |     |                |
| Hauling      | 2.2600e-003   | 0.0728        | 0.0159        | 1.8000e-004        | 3.8900e-003   | 2.8000e-004        | 4.1600e-003   | 1.0600e-003    | 2.7000e-004        | 1.3300e-003   |          | 19.1325        | 19.1325        | 1.3900e-003        |     | 19.1673        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |
| Worker       | 0.0245        | 0.0185        | 0.1989        | 4.7000e-004        | 0.0447        | 4.0000e-004        | 0.0451        | 0.0119         | 3.7000e-004        | 0.0122        |          | 47.2230        | 47.2230        | 1.7800e-003        |     | 47.2675        |
| <b>Total</b> | <b>0.0267</b> | <b>0.0913</b> | <b>0.2148</b> | <b>6.5000e-004</b> | <b>0.0486</b> | <b>6.8000e-004</b> | <b>0.0493</b> | <b>0.0129</b>  | <b>6.4000e-004</b> | <b>0.0136</b> |          | <b>66.3556</b> | <b>66.3556</b> | <b>3.1700e-003</b> |     | <b>66.4348</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        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Archit. Coating | 0.7493        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.2986        | 2.0058        | 1.8542        | 2.9700e-003        |               | 0.1506        | 0.1506        |                | 0.1506        | 0.1506        | 0.0000        | 281.4485        | 281.4485        | 0.0267        |     | 282.1171        |
| <b>Total</b>    | <b>1.0480</b> | <b>2.0058</b> | <b>1.8542</b> | <b>2.9700e-003</b> |               | <b>0.1506</b> | <b>0.1506</b> |                | <b>0.1506</b> | <b>0.1506</b> | <b>0.0000</b> | <b>281.4485</b> | <b>281.4485</b> | <b>0.0267</b> |     | <b>282.1171</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     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                |                |                    |     |                |
| Hauling      | 2.2600e-003   | 0.0728        | 0.0159        | 1.8000e-004        | 3.6200e-003   | 2.8000e-004        | 3.9000e-003   | 1.0000e-003    | 2.7000e-004        | 1.2700e-003   |          | 19.1325        | 19.1325        | 1.3900e-003        |     | 19.1673        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |
| Worker       | 0.0245        | 0.0185        | 0.1989        | 4.7000e-004        | 0.0412        | 4.0000e-004        | 0.0416        | 0.0110         | 3.7000e-004        | 0.0114        |          | 47.2230        | 47.2230        | 1.7800e-003        |     | 47.2675        |
| <b>Total</b> | <b>0.0267</b> | <b>0.0913</b> | <b>0.2148</b> | <b>6.5000e-004</b> | <b>0.0448</b> | <b>6.8000e-004</b> | <b>0.0455</b> | <b>0.0120</b>  | <b>6.4000e-004</b> | <b>0.0126</b> |          | <b>66.3556</b> | <b>66.3556</b> | <b>3.1700e-003</b> |     | <b>66.4348</b> |

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## Wilson Midle School Operation - Los Angeles-South Coast County, Annual

**Wilson Midle School Operation**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                  | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|----------------------------|--------|----------|-------------|--------------------|------------|
| Junior High School         | 1.65   | 1000sqft | 0.04        | 1,650.00           | 0          |
| Other Asphalt Surfaces     | 42.15  | 1000sqft | 0.97        | 42,145.00          | 0          |
| Other Non-Asphalt Surfaces | 123.92 | 1000sqft | 2.84        | 0.00               | 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>             | 12           |                                 |       | <b>Operational Year</b>          | 2018  |
| <b>Utility Company</b>          | User Defined |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 383.88       | <b>CH4 Intensity (lb/MW hr)</b> | 0.095 | <b>N2O Intensity (lb/MW hr)</b>  | 0.012 |

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

Project Characteristics - \*\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label: <http://www.energy.ca.gov/data/labels/>

Land Use - See CalEEMod Assumptions

Off-road Equipment -  
Off-road Equipment -  
Off-road Equipment -  
Off-road Equipment -  
Off-road Equipment -

Off-road Equipment -

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating - See CalEEMod Assumptions

Vehicle Trips - See CalEEMod Assumptions

Area Coating - SCAQMD Rule 1113

Energy Use -

Water And Wastewater - See CalEEMod Assumptions

Solid Waste - No additional solid waste

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Energy Mitigation -

Water Mitigation -

Fleet Mix - See CalEEMod Assumptions

Construction Phase -

| Table Name              | Column Name                     | Default Value | New Value   |
|-------------------------|---------------------------------|---------------|-------------|
| tblArchitecturalCoating | ConstArea_Parking               | 2,529.00      | 9,964.00    |
| tblAreaCoating          | Area_EF_Nonresidential_Exterior | 100           | 50          |
| tblAreaCoating          | Area_EF_Nonresidential_Interior | 100           | 50          |
| tblAreaCoating          | Area_EF_Parking                 | 100           | 50          |
| tblConstDustMitigation  | WaterUnpavedRoadVehicleSpeed    | 0             | 15          |
| tblFleetMix             | HHD                             | 0.03          | 3.9670e-003 |
| tblFleetMix             | LDA                             | 0.55          | 0.67        |
| tblFleetMix             | LDT1                            | 0.05          | 0.06        |
| tblFleetMix             | LDT2                            | 0.20          | 0.24        |
| tblFleetMix             | LHD1                            | 0.02          | 2.5420e-003 |
| tblFleetMix             | LHD2                            | 5.9530e-003   | 8.5500e-004 |
| tblFleetMix             | MCY                             | 4.8040e-003   | 6.4480e-003 |
| tblFleetMix             | MDV                             | 0.13          | 0.01        |
| tblFleetMix             | MH                              | 9.4400e-004   | 0.00        |

|                           |                                       |             |             |
|---------------------------|---------------------------------------|-------------|-------------|
| tblFleetMix               | MHD                                   | 0.02        | 2.6370e-003 |
| tblFleetMix               | OBUS                                  | 2.3410e-003 | 0.00        |
| tblFleetMix               | SBUS                                  | 6.6700e-004 | 0.00        |
| tblFleetMix               | UBUS                                  | 2.5830e-003 | 0.00        |
| tblLandUse                | LandUseSquareFeet                     | 42,150.00   | 42,145.00   |
| tblLandUse                | LandUseSquareFeet                     | 123,920.00  | 0.00        |
| tblProjectCharacteristics | CH4IntensityFactor                    | 0           | 0.095       |
| tblProjectCharacteristics | CO2IntensityFactor                    | 0           | 383.88      |
| tblProjectCharacteristics | N2OIntensityFactor                    | 0           | 0.012       |
| tblSolidWaste             | SolidWasteGenerationRate              | 2.15        | 0.00        |
| tblTripsAndVMT            | HaulingTripNumber                     | 0.00        | 1,673.00    |
| tblTripsAndVMT            | HaulingTripNumber                     | 0.00        | 2.00        |
| tblTripsAndVMT            | VendorTripNumber                      | 7.00        | 27.00       |
| tblTripsAndVMT            | WorkerTripNumber                      | 18.00       | 70.00       |
| tblTripsAndVMT            | WorkerTripNumber                      | 4.00        | 14.00       |
| tblVehicleTrips           | ST_TR                                 | 0.00        | 142.86      |
| tblVehicleTrips           | SU_TR                                 | 0.00        | 142.86      |
| tblVehicleTrips           | WD_TR                                 | 13.78       | 110.64      |
| tblWater                  | AerobicPercent                        | 87.46       | 100.00      |
| tblWater                  | AerobicPercent                        | 87.46       | 100.00      |
| tblWater                  | AerobicPercent                        | 87.46       | 100.00      |
| tblWater                  | AnaerobicandFacultativeLagoonsPercent | 2.21        | 0.00        |
| tblWater                  | AnaerobicandFacultativeLagoonsPercent | 2.21        | 0.00        |
| tblWater                  | AnaerobicandFacultativeLagoonsPercent | 2.21        | 0.00        |
| tblWater                  | SepticTankPercent                     | 10.33       | 0.00        |
| tblWater                  | SepticTankPercent                     | 10.33       | 0.00        |
| tblWater                  | SepticTankPercent                     | 10.33       | 0.00        |

## 2.0 Emissions Summary

| Quarter | Start Date | End Date   | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|------------|--|--|
| 1       | 1-1-2017   | 3-31-2017  | 1.6258                                       | 1.6258                                     |
| 2       | 4-1-2017   | 6-30-2017  | 1.1084                                       | 1.1084                                     |
| 3       | 7-1-2017   | 9-30-2017  | 1.1206                                       | 1.1206                                     |
| 4       | 10-1-2017  | 12-31-2017 | 1.1239                                       | 1.1239                                     |
| 5       | 1-1-2018   | 3-31-2018  | 0.2344                                       | 0.2344                                     |
|         |            | Highest    | 1.6258                                       | 1.6258                                     |

## 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     | 9.5700e-003 | 2.0000e-005 | 2.1700e-003 | 0.0000      |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 4.1600e-003 | 4.1600e-003 | 1.0000e-005 | 0.0000      | 4.4500e-003 |
| Energy   | 9.0000e-005 | 8.4000e-004 | 7.1000e-004 | 1.0000e-005 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 | 0.0000   | 2.6166      | 2.6166      | 4.4000e-004 | 7.0000e-005 | 2.6484      |
| Mobile   | 0.0778      | 0.1417      | 1.1356      | 2.9200e-003 | 0.2660        | 2.4000e-003  | 0.2684      | 0.0707         | 2.2300e-003   | 0.0729      | 0.0000   | 263.9619    | 263.9619    | 0.0109      | 0.0000      | 264.2338    |
| 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      | 0.0120   | 0.2464      | 0.2584      | 1.0000e-004 | 3.0000e-005 | 0.2711      |
| Total    | 0.0874      | 0.1425      | 1.1385      | 2.9300e-003 | 0.2660        | 2.4700e-003  | 0.2685      | 0.0707         | 2.3000e-003   | 0.0730      | 0.0120   | 266.8290    | 266.8411    | 0.0114      | 1.0000e-004 | 267.1577    |

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     | 9.5700e-003 | 2.0000e-005 | 2.1700e-003 | 0.0000      |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000      | 4.1600e-003 | 4.1600e-003 | 1.0000e-005 | 0.0000      | 4.4500e-003 |
| Energy   | 9.0000e-005 | 8.4000e-004 | 7.1000e-004 | 1.0000e-005 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 | 0.0000      | 2.6166      | 2.6166      | 4.4000e-004 | 7.0000e-005 | 2.6484      |
| Mobile   | 0.0778      | 0.1417      | 1.1356      | 2.9200e-003 | 0.2660        | 2.4000e-003  | 0.2684      | 0.0707         | 2.2300e-003   | 0.0729      | 0.0000      | 263.9619    | 263.9619    | 0.0109      | 0.0000      | 264.2338    |
| 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      | 9.6300e-003 | 0.2207      | 0.2303      | 9.0000e-005 | 3.0000e-005 | 0.2408      |
| Total    | 0.0874      | 0.1425      | 1.1385      | 2.9300e-003 | 0.2660        | 2.4700e-003  | 0.2685      | 0.0707         | 2.3000e-003   | 0.0730      | 9.6300e-003 | 266.8033    | 266.8129    | 0.0114      | 1.0000e-004 | 267.1274    |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00         | 0.00       | 0.00           | 0.00          | 0.00        | 20.02    | 0.01     | 0.01      | 0.09 | 0.00 | 0.01 |

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   | 0.0778  | 0.1417 | 1.1356 | 2.9200e-003 | 0.2660        | 2.4000e-003  | 0.2684     | 0.0707         | 2.2300e-003   | 0.0729      | 0.0000   | 263.9619  | 263.9619  | 0.0109 | 0.0000 | 264.2338 |
| Unmitigated | 0.0778  | 0.1417 | 1.1356 | 2.9200e-003 | 0.2660        | 2.4000e-003  | 0.2684     | 0.0707         | 2.2300e-003   | 0.0729      | 0.0000   | 263.9619  | 263.9619  | 0.0109 | 0.0000 | 264.2338 |

4.2 Trip Summary Information

| Land Use                   | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
|                            | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Junior High School         | 182.56                  | 235.72   | 235.72 | 713,388     | 713,388    |
| Other Asphalt Surfaces     | 0.00                    | 0.00     | 0.00   |             |            |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 182.56                  | 235.72   | 235.72 | 713,388     | 713,388    |

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 High School         | 16.60      | 8.40       | 6.90        | 72.80      | 22.20      | 5.00        | 63             | 25       | 12      |
| Other Asphalt Surfaces     | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Other Non-Asphalt Surfaces | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |

4.4 Fleet Mix

| Land Use                   | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Junior High School         | 0.672372 | 0.056599 | 0.244582 | 0.010000 | 0.002542 | 0.000855 | 0.002637 | 0.003967 | 0.000000 | 0.000000 | 0.006448 | 0.000000 | 0.000000 |
| Other Asphalt Surfaces     | 0.547972 | 0.046127 | 0.199330 | 0.125604 | 0.017697 | 0.005953 | 0.018360 | 0.027618 | 0.002341 | 0.002583 | 0.004804 | 0.000667 | 0.000944 |
| Other Non-Asphalt Surfaces | 0.547972 | 0.046127 | 0.199330 | 0.125604 | 0.017697 | 0.005953 | 0.018360 | 0.027618 | 0.002341 | 0.002583 | 0.004804 | 0.000667 | 0.000944 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

|                         | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e   |
|-------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|--------|
| Category                | tons/yr     |             |             |             |               |              |             |                |               |             | MT/yr    |           |           |             |             |        |
| Electricity Mitigated   |             |             |             |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 1.7009    | 1.7009    | 4.2000e-004 | 5.0000e-005 | 1.7272 |
| Electricity Unmitigated |             |             |             |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 1.7009    | 1.7009    | 4.2000e-004 | 5.0000e-005 | 1.7272 |
| NaturalGas Mitigated    | 9.0000e-005 | 8.4000e-004 | 7.1000e-004 | 1.0000e-005 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 | 0.0000   | 0.9157    | 0.9157    | 2.0000e-005 | 2.0000e-005 | 0.9212 |
| NaturalGas Unmitigated  | 9.0000e-005 | 8.4000e-004 | 7.1000e-004 | 1.0000e-005 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 | 0.0000   | 0.9157    | 0.9157    | 2.0000e-005 | 2.0000e-005 | 0.9212 |

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 High School         | 17160          | 9.0000e-005 | 8.4000e-004 | 7.1000e-004 | 1.0000e-005 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 | 0.0000   | 0.9157    | 0.9157    | 2.0000e-005 | 2.0000e-005 | 0.9212 |
| Other Asphalt Surfaces     | 0              | 0.0000      | 0.0000      | 0.0000      | 0.0000      |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Other Non-Asphalt Surfaces | 0              | 0.0000      | 0.0000      | 0.0000      | 0.0000      |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Total                      |                | 9.0000e-005 | 8.4000e-004 | 7.1000e-004 | 1.0000e-005 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 | 0.0000   | 0.9157    | 0.9157    | 2.0000e-005 | 2.0000e-005 | 0.9212 |

Mitigated

|                            | NaturalGas Use | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e   |
|----------------------------|----------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|--------|
| Land Use                   | kBTU/yr        | tons/yr     |             |             |             |               |              |             |                |               |             | MT/yr    |           |           |             |             |        |
| Junior High School         | 17160          | 9.0000e-005 | 8.4000e-004 | 7.1000e-004 | 1.0000e-005 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 | 0.0000   | 0.9157    | 0.9157    | 2.0000e-005 | 2.0000e-005 | 0.9212 |
| Other Asphalt Surfaces     | 0              | 0.0000      | 0.0000      | 0.0000      | 0.0000      |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Other Non-Asphalt Surfaces | 0              | 0.0000      | 0.0000      | 0.0000      | 0.0000      |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Total                      |                | 9.0000e-005 | 8.4000e-004 | 7.1000e-004 | 1.0000e-005 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 | 0.0000   | 0.9157    | 0.9157    | 2.0000e-005 | 2.0000e-005 | 0.9212 |



5.3 Energy by Land Use - Electricity

Unmitigated

|                            | Electricity Use | Total CO2 | CH4         | N2O         | CO2e   |
|----------------------------|-----------------|-----------|-------------|-------------|--------|
| Land Use                   | kWh/yr          | MT/yr     |             |             |        |
| Junior High School         | 9768            | 1.7009    | 4.2000e-004 | 5.0000e-005 | 1.7272 |
| Other Asphalt Surfaces     | 0               | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Other Non-Asphalt Surfaces | 0               | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Total                      |                 | 1.7009    | 4.2000e-004 | 5.0000e-005 | 1.7272 |

Mitigated

|                            | Electricity Use | Total CO2 | CH4         | N2O         | CO2e   |
|----------------------------|-----------------|-----------|-------------|-------------|--------|
| Land Use                   | kWh/yr          | MT/yr     |             |             |        |
| Junior High School         | 9768            | 1.7009    | 4.2000e-004 | 5.0000e-005 | 1.7272 |
| Other Asphalt Surfaces     | 0               | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Other Non-Asphalt Surfaces | 0               | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Total                      |                 | 1.7009    | 4.2000e-004 | 5.0000e-005 | 1.7272 |

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   | 9.5700e-003 | 2.0000e-005 | 2.1700e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 4.1600e-003 | 4.1600e-003 | 1.0000e-005 | 0.0000 | 4.4500e-003 |
| Unmitigated | 9.5700e-003 | 2.0000e-005 | 2.1700e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 4.1600e-003 | 4.1600e-003 | 1.0000e-005 | 0.0000 | 4.4500e-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 | 6.8000e-004 |             |             |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000      | 0.0000 | 0.0000      |
| Consumer Products     | 8.6900e-003 |             |             |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000      | 0.0000 | 0.0000      |
| Landscaping           | 2.1000e-004 | 2.0000e-005 | 2.1700e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 4.1600e-003 | 4.1600e-003 | 1.0000e-005 | 0.0000 | 4.4500e-003 |
| Total                 | 9.5800e-003 | 2.0000e-005 | 2.1700e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 4.1600e-003 | 4.1600e-003 | 1.0000e-005 | 0.0000 | 4.4500e-003 |

Mitigated

|                       | ROG         | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4         | N2O    | CO2e        |
|-----------------------|-------------|-------------|-------------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-------------|-------------|-------------|--------|-------------|
| SubCategory           | tons/yr     |             |             |        |               |              |             |                |               |             | MT/yr    |             |             |             |        |             |
| Architectural Coating | 6.8000e-004 |             |             |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000      | 0.0000 | 0.0000      |
| Consumer Products     | 8.6900e-003 |             |             |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000      | 0.0000 | 0.0000      |
| Landscaping           | 2.1000e-004 | 2.0000e-005 | 2.1700e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 4.1600e-003 | 4.1600e-003 | 1.0000e-005 | 0.0000 | 4.4500e-003 |
| Total                 | 9.5800e-003 | 2.0000e-005 | 2.1700e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 4.1600e-003 | 4.1600e-003 | 1.0000e-005 | 0.0000 | 4.4500e-003 |

7.0 Water Detail

7.1 Mitigation Measures Water

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

|             | Total CO2 | CH4         | N2O         | CO2e   |
|-------------|-----------|-------------|-------------|--------|
| Category    | MT/yr     |             |             |        |
| Mitigated   | 0.2303    | 9.0000e-005 | 3.0000e-005 | 0.2408 |
| Unmitigated | 0.2584    | 1.0000e-004 | 3.0000e-005 | 0.2711 |

7.2 Water by Land Use

Unmitigated

|                            | Indoor/Outdoor Use   | Total CO2 | CH4         | N2O         | CO2e   |
|----------------------------|----------------------|-----------|-------------|-------------|--------|
| Land Use                   | Mgal                 | MT/yr     |             |             |        |
| Junior High School         | 0.0340247 / 0.087492 | 0.2584    | 1.0000e-004 | 3.0000e-005 | 0.2711 |
| Other Asphalt Surfaces     | 0 / 0                | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Other Non-Asphalt Surfaces | 0 / 0                | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Total                      |                      | 0.2584    | 1.0000e-004 | 3.0000e-005 | 0.2711 |

Mitigated

|                            | Indoor/Outdoor Use   | Total CO2 | CH4         | N2O         | CO2e   |
|----------------------------|----------------------|-----------|-------------|-------------|--------|
| Land Use                   | Mgal                 | MT/yr     |             |             |        |
| Junior High School         | 0.0272197 / 0.082155 | 0.2303    | 9.0000e-005 | 3.0000e-005 | 0.2408 |
| Other Asphalt Surfaces     | 0 / 0                | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Other Non-Asphalt Surfaces | 0 / 0                | 0.0000    | 0.0000      | 0.0000      | 0.0000 |
| Total                      |                      | 0.2303    | 9.0000e-005 | 3.0000e-005 | 0.2408 |

8.0 Waste Detail

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     |        |        |        |
| Junior High School         | 0              | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Other Asphalt Surfaces     | 0              | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Other Non-Asphalt Surfaces | 0              | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Total                      |                | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

Mitigated

|                            | Waste Disposed | Total CO2 | CH4    | N2O    | CO2e   |
|----------------------------|----------------|-----------|--------|--------|--------|
| Land Use                   | tons           | MT/yr     |        |        |        |
| Junior High School         | 0              | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Other Asphalt Surfaces     | 0              | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Other Non-Asphalt Surfaces | 0              | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Total                      |                | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

Wilson Midle School Operation - Los Angeles-South Coast County, Summer

**Wilson Midle School Operation**  
**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses                  | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|----------------------------|--------|----------|-------------|--------------------|------------|
| Junior High School         | 1.65   | 1000sqft | 0.04        | 1,650.00           | 0          |
| Other Asphalt Surfaces     | 42.15  | 1000sqft | 0.97        | 42,145.00          | 0          |
| Other Non-Asphalt Surfaces | 123.92 | 1000sqft | 2.84        | 0.00               | 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>             | 12           |                                 |       | <b>Operational Year</b>          | 2018  |
| <b>Utility Company</b>          | User Defined |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 383.88       | <b>CH4 Intensity (lb/MW hr)</b> | 0.095 | <b>N2O Intensity (lb/MW hr)</b>  | 0.012 |

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

Project Characteristics - \*\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label: <http://www.energy.ca.gov/data/labels/>  
 Land Use - See CalEEMod Assumptions

Off-road Equipment -  
 Off-road Equipment -  
 Off-road Equipment -  
 Off-road Equipment -  
 Off-road Equipment -

Off-road Equipment -

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating - See CalEEMod Assumptions

Vehicle Trips - See CalEEMod Assumptions

Area Coating - SCAQMD Rule 1113

Energy Use -

Water And Wastewater - See CalEEMod Assumptions

Solid Waste - No additional solid waste

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Energy Mitigation -

Water Mitigation -

Fleet Mix - See CalEEMod Assumptions

Construction Phase -

| Table Name              | Column Name                     | Default Value | New Value   |
|-------------------------|---------------------------------|---------------|-------------|
| tblArchitecturalCoating | ConstArea_Parking               | 2,529.00      | 9,964.00    |
| tblAreaCoating          | Area_EF_Nonresidential_Exterior | 100           | 50          |
| tblAreaCoating          | Area_EF_Nonresidential_Interior | 100           | 50          |
| tblAreaCoating          | Area_EF_Parking                 | 100           | 50          |
| tblConstDustMitigation  | WaterUnpavedRoadVehicleSpeed    | 0             | 15          |
| tblFleetMix             | HHD                             | 0.03          | 3.9670e-003 |
| tblFleetMix             | LDA                             | 0.55          | 0.67        |
| tblFleetMix             | LDT1                            | 0.05          | 0.06        |
| tblFleetMix             | LDT2                            | 0.20          | 0.24        |
| tblFleetMix             | LHD1                            | 0.02          | 2.5420e-003 |
| tblFleetMix             | LHD2                            | 5.9530e-003   | 8.5500e-004 |
| tblFleetMix             | MCY                             | 4.8040e-003   | 6.4480e-003 |
| tblFleetMix             | MDV                             | 0.13          | 0.01        |
| tblFleetMix             | MH                              | 9.4400e-004   | 0.00        |



|                           |                                       |             |             |
|---------------------------|---------------------------------------|-------------|-------------|
| tblFleetMix               | MHD                                   | 0.02        | 2.6370e-003 |
| tblFleetMix               | OBUS                                  | 2.3410e-003 | 0.00        |
| tblFleetMix               | SBUS                                  | 6.6700e-004 | 0.00        |
| tblFleetMix               | UBUS                                  | 2.5830e-003 | 0.00        |
| tblLandUse                | LandUseSquareFeet                     | 42,150.00   | 42,145.00   |
| tblLandUse                | LandUseSquareFeet                     | 123,920.00  | 0.00        |
| tblProjectCharacteristics | CH4IntensityFactor                    | 0           | 0.095       |
| tblProjectCharacteristics | CO2IntensityFactor                    | 0           | 383.88      |
| tblProjectCharacteristics | N2OIntensityFactor                    | 0           | 0.012       |
| tblSolidWaste             | SolidWasteGenerationRate              | 2.15        | 0.00        |
| tblTripsAndVMT            | HaulingTripNumber                     | 0.00        | 1,673.00    |
| tblTripsAndVMT            | HaulingTripNumber                     | 0.00        | 2.00        |
| tblTripsAndVMT            | VendorTripNumber                      | 7.00        | 27.00       |
| tblTripsAndVMT            | WorkerTripNumber                      | 18.00       | 70.00       |
| tblTripsAndVMT            | WorkerTripNumber                      | 4.00        | 14.00       |
| tblVehicleTrips           | ST_TR                                 | 0.00        | 142.86      |
| tblVehicleTrips           | SU_TR                                 | 0.00        | 142.86      |
| tblVehicleTrips           | WD_TR                                 | 13.78       | 110.64      |
| tblWater                  | AerobicPercent                        | 87.46       | 100.00      |
| tblWater                  | AerobicPercent                        | 87.46       | 100.00      |
| tblWater                  | AerobicPercent                        | 87.46       | 100.00      |
| tblWater                  | AnaerobicandFacultativeLagoonsPercent | 2.21        | 0.00        |
| tblWater                  | AnaerobicandFacultativeLagoonsPercent | 2.21        | 0.00        |
| tblWater                  | AnaerobicandFacultativeLagoonsPercent | 2.21        | 0.00        |
| tblWater                  | SepticTankPercent                     | 10.33       | 0.00        |
| tblWater                  | SepticTankPercent                     | 10.33       | 0.00        |
| tblWater                  | SepticTankPercent                     | 10.33       | 0.00        |

## 2.0 Emissions Summary

### Unmitigated Operational

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4         | N2O         | CO2e       |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|------------|------------|-------------|-------------|------------|
| Category | lb/day      |             |             |             |               |              |             |                |               |             | lb/day   |            |            |             |             |            |
| Area     | 0.0530      | 1.6000e-004 | 0.0174      | 0.0000      |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367     | 0.0367     | 1.0000e-004 |             | 0.0392     |
| Energy   | 5.1000e-004 | 4.6100e-003 | 3.8700e-003 | 3.0000e-005 |               | 3.5000e-004  | 3.5000e-004 |                | 3.5000e-004   | 3.5000e-004 |          | 5.5310     | 5.5310     | 1.1000e-004 | 1.0000e-004 | 5.5639     |
| Mobile   | 0.5396      | 0.8452      | 7.7641      | 0.0200      | 1.7771        | 0.0158       | 1.7928      | 0.4713         | 0.0146        | 0.4859      |          | 1,990.7068 | 1,990.7068 | 0.0803      |             | 1,992.7136 |
| Total    | 0.5930      | 0.8499      | 7.7853      | 0.0200      | 1.7771        | 0.0162       | 1.7932      | 0.4713         | 0.0150        | 0.4864      |          | 1,996.2745 | 1,996.2745 | 0.0805      | 1.0000e-004 | 1,998.3167 |

**Mitigated Operational**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4         | N2O         | CO2e       |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|------------|------------|-------------|-------------|------------|
| Category | lb/day      |             |             |             |               |              |             |                |               |             | lb/day   |            |            |             |             |            |
| Area     | 0.0530      | 1.6000e-004 | 0.0174      | 0.0000      |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367     | 0.0367     | 1.0000e-004 |             | 0.0392     |
| Energy   | 5.1000e-004 | 4.6100e-003 | 3.8700e-003 | 3.0000e-005 |               | 3.5000e-004  | 3.5000e-004 |                | 3.5000e-004   | 3.5000e-004 |          | 5.5310     | 5.5310     | 1.1000e-004 | 1.0000e-004 | 5.5639     |
| Mobile   | 0.5396      | 0.8452      | 7.7641      | 0.0200      | 1.7771        | 0.0158       | 1.7928      | 0.4713         | 0.0146        | 0.4859      |          | 1,990.7068 | 1,990.7068 | 0.0803      |             | 1,992.7136 |
| Total    | 0.5930      | 0.8499      | 7.7853      | 0.0200      | 1.7771        | 0.0162       | 1.7932      | 0.4713         | 0.0150        | 0.4864      |          | 1,996.2745 | 1,996.2745 | 0.0805      | 1.0000e-004 | 1,998.3167 |

[illegible]

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

|             | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O | CO2e       |
|-------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category    | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Mitigated   | 0.5396 | 0.8452 | 7.7641 | 0.0200 | 1.7771        | 0.0158       | 1.7928     | 0.4713         | 0.0146        | 0.4859      |          | 1,990.7068 | 1,990.7068 | 0.0803 |     | 1,992.7136 |
| Unmitigated | 0.5396 | 0.8452 | 7.7641 | 0.0200 | 1.7771        | 0.0158       | 1.7928     | 0.4713         | 0.0146        | 0.4859      |          | 1,990.7068 | 1,990.7068 | 0.0803 |     | 1,992.7136 |

4.2 Trip Summary Information

| Land Use                   | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
|                            | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Junior High School         | 182.56                  | 235.72   | 235.72 | 713,388     | 713,388    |
| Other Asphalt Surfaces     | 0.00                    | 0.00     | 0.00   |             |            |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 182.56                  | 235.72   | 235.72 | 713,388     | 713,388    |

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- | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Junior High School         | 16.60      | 8.40       | 6.90        | 72.80     | 22.20      | 5.00        | 63             | 25       | 12      |
| Other Asphalt Surfaces     | 16.60      | 8.40       | 6.90        | 0.00      | 0.00       | 0.00        | 0              | 0        | 0       |
| Other Non-Asphalt Surfaces | 16.60      | 8.40       | 6.90        | 0.00      | 0.00       | 0.00        | 0              | 0        | 0       |

4.4 Fleet Mix

| Land Use                   | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Junior High School         | 0.672372 | 0.056599 | 0.244582 | 0.010000 | 0.002542 | 0.000855 | 0.002637 | 0.003967 | 0.000000 | 0.000000 | 0.006448 | 0.000000 | 0.000000 |
| Other Asphalt Surfaces     | 0.547972 | 0.046127 | 0.199330 | 0.125604 | 0.017697 | 0.005953 | 0.018360 | 0.027618 | 0.002341 | 0.002583 | 0.004804 | 0.000667 | 0.000944 |
| Other Non-Asphalt Surfaces | 0.547972 | 0.046127 | 0.199330 | 0.125604 | 0.017697 | 0.005953 | 0.018360 | 0.027618 | 0.002341 | 0.002583 | 0.004804 | 0.000667 | 0.000944 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

|                        | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e   |
|------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|--------|
| Category               | lb/day      |             |             |             |               |              |             |                |               |             | lb/day   |           |           |             |             |        |
| NaturalGas Mitigated   | 5.1000e-004 | 4.6100e-003 | 3.8700e-003 | 3.0000e-005 |               | 3.5000e-004  | 3.5000e-004 |                | 3.5000e-004   | 3.5000e-004 |          | 5.5310    | 5.5310    | 1.1000e-004 | 1.0000e-004 | 5.5639 |
| NaturalGas Unmitigated | 5.1000e-004 | 4.6100e-003 | 3.8700e-003 | 3.0000e-005 |               | 3.5000e-004  | 3.5000e-004 |                | 3.5000e-004   | 3.5000e-004 |          | 5.5310    | 5.5310    | 1.1000e-004 | 1.0000e-004 | 5.5639 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

|                            | NaturalGas Use | ROG                | NOx                | CO                 | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|----------------------------|----------------|--------------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|--------------------|---------------|
| Land Use                   | kBTU/yr        | lb/day             |                    |                    |                    |               |                    |                    |                |                    |                    | lb/day   |               |               |                    |                    |               |
| Junior High School         | 47.0137        | 5.1000e-004        | 4.6100e-003        | 3.8700e-003        | 3.0000e-005        |               | 3.5000e-004        | 3.5000e-004        |                | 3.5000e-004        | 3.5000e-004        |          | 5.5310        | 5.5310        | 1.1000e-004        | 1.0000e-004        | 5.5639        |
| Other Asphalt Surfaces     | 0              | 0.0000             | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Other Non-Asphalt Surfaces | 0              | 0.0000             | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| <b>Total</b>               |                | <b>5.1000e-004</b> | <b>4.6100e-003</b> | <b>3.8700e-003</b> | <b>3.0000e-005</b> |               | <b>3.5000e-004</b> | <b>3.5000e-004</b> |                | <b>3.5000e-004</b> | <b>3.5000e-004</b> |          | <b>5.5310</b> | <b>5.5310</b> | <b>1.1000e-004</b> | <b>1.0000e-004</b> | <b>5.5639</b> |

### Mitigated

|                            | NaturalGas Use | ROG                | NOx                | CO                 | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|----------------------------|----------------|--------------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|--------------------|---------------|
| Land Use                   | kBTU/yr        | lb/day             |                    |                    |                    |               |                    |                    |                |                    |                    | lb/day   |               |               |                    |                    |               |
| Junior High School         | 0.0470137      | 5.1000e-004        | 4.6100e-003        | 3.8700e-003        | 3.0000e-005        |               | 3.5000e-004        | 3.5000e-004        |                | 3.5000e-004        | 3.5000e-004        |          | 5.5310        | 5.5310        | 1.1000e-004        | 1.0000e-004        | 5.5639        |
| Other Asphalt Surfaces     | 0              | 0.0000             | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Other Non-Asphalt Surfaces | 0              | 0.0000             | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| <b>Total</b>               |                | <b>5.1000e-004</b> | <b>4.6100e-003</b> | <b>3.8700e-003</b> | <b>3.0000e-005</b> |               | <b>3.5000e-004</b> | <b>3.5000e-004</b> |                | <b>3.5000e-004</b> | <b>3.5000e-004</b> |          | <b>5.5310</b> | <b>5.5310</b> | <b>1.1000e-004</b> | <b>1.0000e-004</b> | <b>5.5639</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    | lb/day |             |        |        |               |              |             |                |               |             | lb/day   |           |           |             |     |        |
| Mitigated   | 0.0530 | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |
| Unmitigated | 0.0530 | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |

6.2 Area by SubCategory

Unmitigated

|                       | ROG         | NOx         | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e   |
|-----------------------|-------------|-------------|--------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|--------|
| SubCategory           | lb/day      |             |        |        |               |              |             |                |               |             | lb/day   |           |           |             |     |        |
| Architectural Coating | 3.7000e-003 |             |        |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      |          |           | 0.0000    |             |     | 0.0000 |
| Consumer Products     | 0.0476      |             |        |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      |          |           | 0.0000    |             |     | 0.0000 |
| Landscaping           | 1.6600e-003 | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |
| Total                 | 0.0530      | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |

Mitigated

|                       | ROG         | NOx         | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e   |
|-----------------------|-------------|-------------|--------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|--------|
| SubCategory           | lb/day      |             |        |        |               |              |             |                |               |             | lb/day   |           |           |             |     |        |
| Architectural Coating | 3.7000e-003 |             |        |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      |          |           | 0.0000    |             |     | 0.0000 |
| Consumer Products     | 0.0476      |             |        |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      |          |           | 0.0000    |             |     | 0.0000 |
| Landscaping           | 1.6600e-003 | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |
| Total                 | 0.0530      | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |

7.0 Water Detail

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

---

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

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Wilson Midle School Operation - Los Angeles-South Coast County, Winter

**Wilson Midle School Operation**  
**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses                  | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|----------------------------|--------|----------|-------------|--------------------|------------|
| Junior High School         | 1.65   | 1000sqft | 0.04        | 1,650.00           | 0          |
| Other Asphalt Surfaces     | 42.15  | 1000sqft | 0.97        | 42,145.00          | 0          |
| Other Non-Asphalt Surfaces | 123.92 | 1000sqft | 2.84        | 0.00               | 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>             | 12           |                                 |       | <b>Operational Year</b>          | 2018  |
| <b>Utility Company</b>          | User Defined |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 383.88       | <b>CH4 Intensity (lb/MW hr)</b> | 0.095 | <b>N2O Intensity (lb/MW hr)</b>  | 0.012 |

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

Project Characteristics - \*\*City of Glendale Power Mix from California Department of Energy. Utility Annual Power Content Labels for 2016. 2016 City of Glendale Power Content Label: <http://www.energy.ca.gov/data/labels/>  
 Land Use - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating - See CalEEMod Assumptions

Vehicle Trips - See CalEEMod Assumptions

Area Coating - SCAQMD Rule 1113

Energy Use -

Water And Wastewater - See CalEEMod Assumptions

Solid Waste - No additional solid waste

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Energy Mitigation -

Water Mitigation -

Fleet Mix - See CalEEMod Assumptions

Construction Phase -

| Table Name              | Column Name                     | Default Value | New Value   |
|-------------------------|---------------------------------|---------------|-------------|
| tblArchitecturalCoating | ConstArea_Parking               | 2,529.00      | 9,964.00    |
| tblAreaCoating          | Area_EF_Nonresidential_Exterior | 100           | 50          |
| tblAreaCoating          | Area_EF_Nonresidential_Interior | 100           | 50          |
| tblAreaCoating          | Area_EF_Parking                 | 100           | 50          |
| tblConstDustMitigation  | WaterUnpavedRoadVehicleSpeed    | 0             | 15          |
| tblFleetMix             | HHD                             | 0.03          | 3.9670e-003 |
| tblFleetMix             | LDA                             | 0.55          | 0.67        |
| tblFleetMix             | LDT1                            | 0.05          | 0.06        |
| tblFleetMix             | LDT2                            | 0.20          | 0.24        |
| tblFleetMix             | LHD1                            | 0.02          | 2.5420e-003 |
| tblFleetMix             | LHD2                            | 5.9530e-003   | 8.5500e-004 |
| tblFleetMix             | MCY                             | 4.8040e-003   | 6.4480e-003 |
| tblFleetMix             | MDV                             | 0.13          | 0.01        |
| tblFleetMix             | MH                              | 9.4400e-004   | 0.00        |

|                           |                                       |             |             |
|---------------------------|---------------------------------------|-------------|-------------|
| tblFleetMix               | MHD                                   | 0.02        | 2.6370e-003 |
| tblFleetMix               | OBUS                                  | 2.3410e-003 | 0.00        |
| tblFleetMix               | SBUS                                  | 6.6700e-004 | 0.00        |
| tblFleetMix               | UBUS                                  | 2.5830e-003 | 0.00        |
| tblLandUse                | LandUseSquareFeet                     | 42,150.00   | 42,145.00   |
| tblLandUse                | LandUseSquareFeet                     | 123,920.00  | 0.00        |
| tblProjectCharacteristics | CH4IntensityFactor                    | 0           | 0.095       |
| tblProjectCharacteristics | CO2IntensityFactor                    | 0           | 383.88      |
| tblProjectCharacteristics | N2OIntensityFactor                    | 0           | 0.012       |
| tblSolidWaste             | SolidWasteGenerationRate              | 2.15        | 0.00        |
| tblTripsAndVMT            | HaulingTripNumber                     | 0.00        | 1,673.00    |
| tblTripsAndVMT            | HaulingTripNumber                     | 0.00        | 2.00        |
| tblTripsAndVMT            | VendorTripNumber                      | 7.00        | 27.00       |
| tblTripsAndVMT            | WorkerTripNumber                      | 18.00       | 70.00       |
| tblTripsAndVMT            | WorkerTripNumber                      | 4.00        | 14.00       |
| tblVehicleTrips           | ST_TR                                 | 0.00        | 142.86      |
| tblVehicleTrips           | SU_TR                                 | 0.00        | 142.86      |
| tblVehicleTrips           | WD_TR                                 | 13.78       | 110.64      |
| tblWater                  | AerobicPercent                        | 87.46       | 100.00      |
| tblWater                  | AerobicPercent                        | 87.46       | 100.00      |
| tblWater                  | AerobicPercent                        | 87.46       | 100.00      |
| tblWater                  | AnaerobicandFacultativeLagoonsPercent | 2.21        | 0.00        |
| tblWater                  | AnaerobicandFacultativeLagoonsPercent | 2.21        | 0.00        |
| tblWater                  | AnaerobicandFacultativeLagoonsPercent | 2.21        | 0.00        |
| tblWater                  | SepticTankPercent                     | 10.33       | 0.00        |
| tblWater                  | SepticTankPercent                     | 10.33       | 0.00        |
| tblWater                  | SepticTankPercent                     | 10.33       | 0.00        |

## 2.0 Emissions Summary

### Unmitigated Operational

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4         | N2O         | CO2e       |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|------------|------------|-------------|-------------|------------|
| Category | lb/day      |             |             |             |               |              |             |                |               |             | lb/day   |            |            |             |             |            |
| Area     | 0.0530      | 1.6000e-004 | 0.0174      | 0.0000      |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367     | 0.0367     | 1.0000e-004 |             | 0.0392     |
| Energy   | 5.1000e-004 | 4.6100e-003 | 3.8700e-003 | 3.0000e-005 |               | 3.5000e-004  | 3.5000e-004 |                | 3.5000e-004   | 3.5000e-004 |          | 5.5310     | 5.5310     | 1.1000e-004 | 1.0000e-004 | 5.5639     |
| Mobile   | 0.5228      | 0.9079      | 7.3005      | 0.0188      | 1.7771        | 0.0158       | 1.7928      | 0.4713         | 0.0146        | 0.4860      |          | 1,877.0975 | 1,877.0975 | 0.0780      |             | 1,879.0469 |
| Total    | 0.5763      | 0.9127      | 7.3217      | 0.0189      | 1.7771        | 0.0162       | 1.7932      | 0.4713         | 0.0150        | 0.4864      |          | 1,882.6653 | 1,882.6653 | 0.0782      | 1.0000e-004 | 1,884.6500 |

**Mitigated Operational**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4         | N2O         | CO2e       |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|------------|------------|-------------|-------------|------------|
| Category | lb/day      |             |             |             |               |              |             |                |               |             | lb/day   |            |            |             |             |            |
| Area     | 0.0530      | 1.6000e-004 | 0.0174      | 0.0000      |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367     | 0.0367     | 1.0000e-004 |             | 0.0392     |
| Energy   | 5.1000e-004 | 4.6100e-003 | 3.8700e-003 | 3.0000e-005 |               | 3.5000e-004  | 3.5000e-004 |                | 3.5000e-004   | 3.5000e-004 |          | 5.5310     | 5.5310     | 1.1000e-004 | 1.0000e-004 | 5.5639     |
| Mobile   | 0.5228      | 0.9079      | 7.3005      | 0.0188      | 1.7771        | 0.0158       | 1.7928      | 0.4713         | 0.0146        | 0.4860      |          | 1,877.0975 | 1,877.0975 | 0.0780      |             | 1,879.0469 |
| Total    | 0.5763      | 0.9127      | 7.3217      | 0.0189      | 1.7771        | 0.0162       | 1.7932      | 0.4713         | 0.0150        | 0.4864      |          | 1,882.6653 | 1,882.6653 | 0.0782      | 1.0000e-004 | 1,884.6500 |

[illegible]

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

|             | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O | CO2e       |
|-------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category    | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Mitigated   | 0.5228 | 0.9079 | 7.3005 | 0.0188 | 1.7771        | 0.0158       | 1.7928     | 0.4713         | 0.0146        | 0.4860      |          | 1,877.0975 | 1,877.0975 | 0.0780 |     | 1,879.0469 |
| Unmitigated | 0.5228 | 0.9079 | 7.3005 | 0.0188 | 1.7771        | 0.0158       | 1.7928     | 0.4713         | 0.0146        | 0.4860      |          | 1,877.0975 | 1,877.0975 | 0.0780 |     | 1,879.0469 |

4.2 Trip Summary Information

| Land Use                   | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
|                            | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Junior High School         | 182.56                  | 235.72   | 235.72 | 713,388     | 713,388    |
| Other Asphalt Surfaces     | 0.00                    | 0.00     | 0.00   |             |            |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 182.56                  | 235.72   | 235.72 | 713,388     | 713,388    |

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- | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Junior High School         | 16.60      | 8.40       | 6.90        | 72.80     | 22.20      | 5.00        | 63             | 25       | 12      |
| Other Asphalt Surfaces     | 16.60      | 8.40       | 6.90        | 0.00      | 0.00       | 0.00        | 0              | 0        | 0       |
| Other Non-Asphalt Surfaces | 16.60      | 8.40       | 6.90        | 0.00      | 0.00       | 0.00        | 0              | 0        | 0       |

4.4 Fleet Mix

| Land Use                   | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Junior High School         | 0.672372 | 0.056599 | 0.244582 | 0.010000 | 0.002542 | 0.000855 | 0.002637 | 0.003967 | 0.000000 | 0.000000 | 0.006448 | 0.000000 | 0.000000 |
| Other Asphalt Surfaces     | 0.547972 | 0.046127 | 0.199330 | 0.125604 | 0.017697 | 0.005953 | 0.018360 | 0.027618 | 0.002341 | 0.002583 | 0.004804 | 0.000667 | 0.000944 |
| Other Non-Asphalt Surfaces | 0.547972 | 0.046127 | 0.199330 | 0.125604 | 0.017697 | 0.005953 | 0.018360 | 0.027618 | 0.002341 | 0.002583 | 0.004804 | 0.000667 | 0.000944 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

|                        | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e   |
|------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|--------|
| Category               | lb/day      |             |             |             |               |              |             |                |               |             | lb/day   |           |           |             |             |        |
| NaturalGas Mitigated   | 5.1000e-004 | 4.6100e-003 | 3.8700e-003 | 3.0000e-005 |               | 3.5000e-004  | 3.5000e-004 |                | 3.5000e-004   | 3.5000e-004 |          | 5.5310    | 5.5310    | 1.1000e-004 | 1.0000e-004 | 5.5639 |
| NaturalGas Unmitigated | 5.1000e-004 | 4.6100e-003 | 3.8700e-003 | 3.0000e-005 |               | 3.5000e-004  | 3.5000e-004 |                | 3.5000e-004   | 3.5000e-004 |          | 5.5310    | 5.5310    | 1.1000e-004 | 1.0000e-004 | 5.5639 |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

|                            | NaturalGas Use | ROG                | NOx                | CO                 | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|----------------------------|----------------|--------------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|--------------------|---------------|
| Land Use                   | kBTU/yr        | lb/day             |                    |                    |                    |               |                    |                    |                |                    |                    | lb/day   |               |               |                    |                    |               |
| Junior High School         | 47.0137        | 5.1000e-004        | 4.6100e-003        | 3.8700e-003        | 3.0000e-005        |               | 3.5000e-004        | 3.5000e-004        |                | 3.5000e-004        | 3.5000e-004        |          | 5.5310        | 5.5310        | 1.1000e-004        | 1.0000e-004        | 5.5639        |
| Other Asphalt Surfaces     | 0              | 0.0000             | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Other Non-Asphalt Surfaces | 0              | 0.0000             | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| <b>Total</b>               |                | <b>5.1000e-004</b> | <b>4.6100e-003</b> | <b>3.8700e-003</b> | <b>3.0000e-005</b> |               | <b>3.5000e-004</b> | <b>3.5000e-004</b> |                | <b>3.5000e-004</b> | <b>3.5000e-004</b> |          | <b>5.5310</b> | <b>5.5310</b> | <b>1.1000e-004</b> | <b>1.0000e-004</b> | <b>5.5639</b> |

### Mitigated

|                            | NaturalGas Use | ROG                | NOx                | CO                 | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|----------------------------|----------------|--------------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|--------------------|---------------|
| Land Use                   | kBTU/yr        | lb/day             |                    |                    |                    |               |                    |                    |                |                    |                    | lb/day   |               |               |                    |                    |               |
| Junior High School         | 0.0470137      | 5.1000e-004        | 4.6100e-003        | 3.8700e-003        | 3.0000e-005        |               | 3.5000e-004        | 3.5000e-004        |                | 3.5000e-004        | 3.5000e-004        |          | 5.5310        | 5.5310        | 1.1000e-004        | 1.0000e-004        | 5.5639        |
| Other Asphalt Surfaces     | 0              | 0.0000             | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Other Non-Asphalt Surfaces | 0              | 0.0000             | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| <b>Total</b>               |                | <b>5.1000e-004</b> | <b>4.6100e-003</b> | <b>3.8700e-003</b> | <b>3.0000e-005</b> |               | <b>3.5000e-004</b> | <b>3.5000e-004</b> |                | <b>3.5000e-004</b> | <b>3.5000e-004</b> |          | <b>5.5310</b> | <b>5.5310</b> | <b>1.1000e-004</b> | <b>1.0000e-004</b> | <b>5.5639</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    | lb/day |             |        |        |               |              |             |                |               |             | lb/day   |           |           |             |     |        |
| Mitigated   | 0.0530 | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |
| Unmitigated | 0.0530 | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |

6.2 Area by SubCategory

Unmitigated

|                       | ROG         | NOx         | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e   |
|-----------------------|-------------|-------------|--------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|--------|
| SubCategory           | lb/day      |             |        |        |               |              |             |                |               |             | lb/day   |           |           |             |     |        |
| Architectural Coating | 3.7000e-003 |             |        |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      |          |           | 0.0000    |             |     | 0.0000 |
| Consumer Products     | 0.0476      |             |        |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      |          |           | 0.0000    |             |     | 0.0000 |
| Landscaping           | 1.6600e-003 | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |
| Total                 | 0.0530      | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |



Mitigated

|                       | ROG         | NOx         | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e   |
|-----------------------|-------------|-------------|--------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|--------|
| SubCategory           | lb/day      |             |        |        |               |              |             |                |               |             | lb/day   |           |           |             |     |        |
| Architectural Coating | 3.7000e-003 |             |        |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      |          |           | 0.0000    |             |     | 0.0000 |
| Consumer Products     | 0.0476      |             |        |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      |          |           | 0.0000    |             |     | 0.0000 |
| Landscaping           | 1.6600e-003 | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |
| Total                 | 0.0530      | 1.6000e-004 | 0.0174 | 0.0000 |               | 6.0000e-005  | 6.0000e-005 |                | 6.0000e-005   | 6.0000e-005 |          | 0.0367    | 0.0367    | 1.0000e-004 |     | 0.0392 |

7.0 Water Detail

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

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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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