

Vista Roman Creek - San Diego County, Summer

**Vista Roman Creek  
San Diego County, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

| Land Uses                  | Size  | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|-------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 16.00 | Acre   | 16.00       | 696,960.00         | 0          |

**1.2 Other Project Characteristics**

|                                 |                          |                                 |       |                                  |       |
|---------------------------------|--------------------------|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                    | <b>Wind Speed (m/s)</b>         | 2.6   | <b>Precipitation Freq (Days)</b> | 40    |
| <b>Climate Zone</b>             | 13                       |                                 |       | <b>Operational Year</b>          | 2021  |
| <b>Utility Company</b>          | San Diego Gas & Electric |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 720.49                   | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

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

Project Characteristics -

Land Use - non-asphalt parking is used to represent the mitigation site.

Construction Phase - Schedule adjusted to reflect the six month construction schedule.

Off-road Equipment - no cranes or welders would be required on-site

Grading - up to 16 acres will require grading

Construction Off-road Equipment Mitigation -

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| Table Name           | Column Name                | Default Value | New Value |
|----------------------|----------------------------|---------------|-----------|
| tblConstructionPhase | NumDays                    | 300.00        | 40.00     |
| tblConstructionPhase | NumDays                    | 30.00         | 40.00     |
| tblConstructionPhase | NumDays                    | 10.00         | 40.00     |
| tblConstructionPhase | PhaseEndDate               | 5/21/2021     | 7/17/2020 |
| tblConstructionPhase | PhaseEndDate               | 3/27/2020     | 5/22/2020 |
| tblConstructionPhase | PhaseEndDate               | 2/14/2020     | 3/27/2020 |
| tblConstructionPhase | PhaseStartDate             | 3/28/2020     | 5/25/2020 |
| tblConstructionPhase | PhaseStartDate             | 2/15/2020     | 3/30/2020 |
| tblConstructionPhase | PhaseStartDate             | 2/1/2020      | 2/3/2020  |
| tblGrading           | AcresOfGrading             | 100.00        | 16.00     |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00          | 0.00      |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00          | 0.00      |

**2.0 Emissions Summary**

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**2.2 Overall Operational**

**Unmitigated Operational**

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2          | Total CO2          | CH4                | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |                    |                    |                |                    |                    | lb/day   |                    |                    |                    |               |                    |
| Area         | 0.3798        | 2.0000e-005        | 1.6400e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        |          | 3.5000e-003        | 3.5000e-003        | 1.0000e-005        |               | 3.7300e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000         | 0.0000             | 0.0000             |          | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             |
| <b>Total</b> | <b>0.3798</b> | <b>2.0000e-005</b> | <b>1.6400e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b>  | <b>1.0000e-005</b> | <b>1.0000e-005</b> |          | <b>3.5000e-003</b> | <b>3.5000e-003</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.7300e-003</b> |

**Mitigated Operational**

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2          | Total CO2          | CH4                | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |                    |                    |                |                    |                    | lb/day   |                    |                    |                    |               |                    |
| Area         | 0.3798        | 2.0000e-005        | 1.6400e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        |          | 3.5000e-003        | 3.5000e-003        | 1.0000e-005        |               | 3.7300e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000         | 0.0000             | 0.0000             |          | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             |
| <b>Total</b> | <b>0.3798</b> | <b>2.0000e-005</b> | <b>1.6400e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b>  | <b>1.0000e-005</b> | <b>1.0000e-005</b> |          | <b>3.5000e-003</b> | <b>3.5000e-003</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.7300e-003</b> |

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

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Site Preparation      | Site Preparation      | 2/3/2020   | 3/27/2020 | 5             | 40       |                   |
| 2            | Grading               | Grading               | 3/30/2020  | 5/22/2020 | 5             | 40       |                   |
| 3            | Building Construction | Building Construction | 5/25/2020  | 7/17/2020 | 5             | 40       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 16

Acres of Paving: 16

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

#### OffRoad Equipment

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| Phase Name            | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Building Construction | Cranes                    | 0      | 7.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Building Construction | Welders                   | 0      | 8.00        | 46          | 0.45        |

**Trips and VMT**

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Site Preparation      | 7                       | 18.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 8                       | 20.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 7                       | 293.00             | 114.00             | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

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**3.2 Site Preparation - 2020**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total    | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |                |               |                |                |               |                | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 18.0663        | 0.0000        | 18.0663        | 9.9307         | 0.0000        | 9.9307         |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 4.0765        | 42.4173        | 21.5136        | 0.0380        |                | 2.1974        | 2.1974         |                | 2.0216        | 2.0216         |          | 3,685.1016        | 3,685.1016        | 1.1918        |     | 3,714.8975        |
| <b>Total</b>  | <b>4.0765</b> | <b>42.4173</b> | <b>21.5136</b> | <b>0.0380</b> | <b>18.0663</b> | <b>2.1974</b> | <b>20.2637</b> | <b>9.9307</b>  | <b>2.0216</b> | <b>11.9523</b> |          | <b>3,685.1016</b> | <b>3,685.1016</b> | <b>1.1918</b> |     | <b>3,714.8975</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       | 0.0661        | 0.0445        | 0.5102        | 1.5200e-003        | 0.1479        | 1.0400e-003        | 0.1489        | 0.0392         | 9.6000e-004        | 0.0402        |          | 151.6945        | 151.6945        | 4.5300e-003        |     | 151.8077        |
| <b>Total</b> | <b>0.0661</b> | <b>0.0445</b> | <b>0.5102</b> | <b>1.5200e-003</b> | <b>0.1479</b> | <b>1.0400e-003</b> | <b>0.1489</b> | <b>0.0392</b>  | <b>9.6000e-004</b> | <b>0.0402</b> |          | <b>151.6945</b> | <b>151.6945</b> | <b>4.5300e-003</b> |     | <b>151.8077</b> |

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**3.2 Site Preparation - 2020**

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total    | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |                |               |                |                |               |                | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 18.0663        | 0.0000        | 18.0663        | 9.9307         | 0.0000        | 9.9307         |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 4.0765        | 42.4173        | 21.5136        | 0.0380        |                | 2.1974        | 2.1974         |                | 2.0216        | 2.0216         | 0.0000        | 3,685.1016        | 3,685.1016        | 1.1918        |     | 3,714.8975        |
| <b>Total</b>  | <b>4.0765</b> | <b>42.4173</b> | <b>21.5136</b> | <b>0.0380</b> | <b>18.0663</b> | <b>2.1974</b> | <b>20.2637</b> | <b>9.9307</b>  | <b>2.0216</b> | <b>11.9523</b> | <b>0.0000</b> | <b>3,685.1016</b> | <b>3,685.1016</b> | <b>1.1918</b> |     | <b>3,714.8975</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       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Worker       | 0.0661        | 0.0445        | 0.5102        | 1.5200e-003        | 0.1479        | 1.0400e-003        | 0.1489        | 0.0392         | 9.6000e-004        | 0.0402        |          | 151.6945        | 151.6945        | 4.5300e-003        |     | 151.8077        |
| <b>Total</b> | <b>0.0661</b> | <b>0.0445</b> | <b>0.5102</b> | <b>1.5200e-003</b> | <b>0.1479</b> | <b>1.0400e-003</b> | <b>0.1489</b> | <b>0.0392</b>  | <b>9.6000e-004</b> | <b>0.0402</b> |          | <b>151.6945</b> | <b>151.6945</b> | <b>4.5300e-003</b> |     | <b>151.8077</b> |



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**3.3 Grading - 2020**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 6.4463        | 0.0000        | 6.4463        | 3.3560         | 0.0000        | 3.3560        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 4.4501        | 50.1975        | 31.9583        | 0.0620        |               | 2.1739        | 2.1739        |                | 2.0000        | 2.0000        |          | 6,005.8653        | 6,005.8653        | 1.9424        |     | 6,054.4257        |
| <b>Total</b>  | <b>4.4501</b> | <b>50.1975</b> | <b>31.9583</b> | <b>0.0620</b> | <b>6.4463</b> | <b>2.1739</b> | <b>8.6202</b> | <b>3.3560</b>  | <b>2.0000</b> | <b>5.3560</b> |          | <b>6,005.8653</b> | <b>6,005.8653</b> | <b>1.9424</b> |     | <b>6,054.4257</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       | 0.0734        | 0.0495        | 0.5669        | 1.6900e-003        | 0.1643        | 1.1500e-003        | 0.1655        | 0.0436         | 1.0600e-003        | 0.0446        |          | 168.5494        | 168.5494        | 5.0300e-003        |     | 168.6752        |
| <b>Total</b> | <b>0.0734</b> | <b>0.0495</b> | <b>0.5669</b> | <b>1.6900e-003</b> | <b>0.1643</b> | <b>1.1500e-003</b> | <b>0.1655</b> | <b>0.0436</b>  | <b>1.0600e-003</b> | <b>0.0446</b> |          | <b>168.5494</b> | <b>168.5494</b> | <b>5.0300e-003</b> |     | <b>168.6752</b> |

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**3.3 Grading - 2020**

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 6.4463        | 0.0000        | 6.4463        | 3.3560         | 0.0000        | 3.3560        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 4.4501        | 50.1975        | 31.9583        | 0.0620        |               | 2.1739        | 2.1739        |                | 2.0000        | 2.0000        | 0.0000        | 6,005.8653        | 6,005.8653        | 1.9424        |     | 6,054.4257        |
| <b>Total</b>  | <b>4.4501</b> | <b>50.1975</b> | <b>31.9583</b> | <b>0.0620</b> | <b>6.4463</b> | <b>2.1739</b> | <b>8.6202</b> | <b>3.3560</b>  | <b>2.0000</b> | <b>5.3560</b> | <b>0.0000</b> | <b>6,005.8653</b> | <b>6,005.8653</b> | <b>1.9424</b> |     | <b>6,054.4257</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       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Worker       | 0.0734        | 0.0495        | 0.5669        | 1.6900e-003        | 0.1643        | 1.1500e-003        | 0.1655        | 0.0436         | 1.0600e-003        | 0.0446        |          | 168.5494        | 168.5494        | 5.0300e-003        |     | 168.6752        |
| <b>Total</b> | <b>0.0734</b> | <b>0.0495</b> | <b>0.5669</b> | <b>1.6900e-003</b> | <b>0.1643</b> | <b>1.1500e-003</b> | <b>0.1655</b> | <b>0.0436</b>  | <b>1.0600e-003</b> | <b>0.0446</b> |          | <b>168.5494</b> | <b>168.5494</b> | <b>5.0300e-003</b> |     | <b>168.6752</b> |

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**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Off-Road     | 1.3810        | 12.8971        | 13.2305        | 0.0193        |               | 0.8357        | 0.8357        |                | 0.7845        | 0.7845        |          | 1,856.644<br>4         | 1,856.644<br>4         | 0.4341        |     | 1,867.495<br>8         |
| <b>Total</b> | <b>1.3810</b> | <b>12.8971</b> | <b>13.2305</b> | <b>0.0193</b> |               | <b>0.8357</b> | <b>0.8357</b> |                | <b>0.7845</b> | <b>0.7845</b> |          | <b>1,856.644<br/>4</b> | <b>1,856.644<br/>4</b> | <b>0.4341</b> |     | <b>1,867.495<br/>8</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       | 0.4260        | 12.8544        | 3.2748         | 0.0312        | 0.7717        | 0.0629        | 0.8346        | 0.2222         | 0.0602        | 0.2823        |          | 3,352.056<br>9         | 3,352.056<br>9         | 0.2473        |     | 3,358.239<br>0         |
| Worker       | 1.0752        | 0.7244         | 8.3053         | 0.0248        | 2.4069        | 0.0169        | 2.4238        | 0.6384         | 0.0156        | 0.6540        |          | 2,469.248<br>9         | 2,469.248<br>9         | 0.0737        |     | 2,471.092<br>1         |
| <b>Total</b> | <b>1.5012</b> | <b>13.5789</b> | <b>11.5802</b> | <b>0.0560</b> | <b>3.1787</b> | <b>0.0798</b> | <b>3.2585</b> | <b>0.8606</b>  | <b>0.0757</b> | <b>0.9363</b> |          | <b>5,821.305<br/>8</b> | <b>5,821.305<br/>8</b> | <b>0.3210</b> |     | <b>5,829.331<br/>1</b> |

Vista Roman Creek - San Diego County, Summer

**3.4 Building Construction - 2020**

**Mitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Off-Road     | 1.3810        | 12.8971        | 13.2305        | 0.0193        |               | 0.8357        | 0.8357        |                | 0.7845        | 0.7845        | 0.0000        | 1,856.644<br>4         | 1,856.644<br>4         | 0.4341        |     | 1,867.495<br>8         |
| <b>Total</b> | <b>1.3810</b> | <b>12.8971</b> | <b>13.2305</b> | <b>0.0193</b> |               | <b>0.8357</b> | <b>0.8357</b> |                | <b>0.7845</b> | <b>0.7845</b> | <b>0.0000</b> | <b>1,856.644<br/>4</b> | <b>1,856.644<br/>4</b> | <b>0.4341</b> |     | <b>1,867.495<br/>8</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       | 0.4260        | 12.8544        | 3.2748         | 0.0312        | 0.7717        | 0.0629        | 0.8346        | 0.2222         | 0.0602        | 0.2823        |          | 3,352.056<br>9         | 3,352.056<br>9         | 0.2473        |     | 3,358.239<br>0         |
| Worker       | 1.0752        | 0.7244         | 8.3053         | 0.0248        | 2.4069        | 0.0169        | 2.4238        | 0.6384         | 0.0156        | 0.6540        |          | 2,469.248<br>9         | 2,469.248<br>9         | 0.0737        |     | 2,471.092<br>1         |
| <b>Total</b> | <b>1.5012</b> | <b>13.5789</b> | <b>11.5802</b> | <b>0.0560</b> | <b>3.1787</b> | <b>0.0798</b> | <b>3.2585</b> | <b>0.8606</b>  | <b>0.0757</b> | <b>0.9363</b> |          | <b>5,821.305<br/>8</b> | <b>5,821.305<br/>8</b> | <b>0.3210</b> |     | <b>5,829.331<br/>1</b> |

**4.0 Operational Detail - Mobile**

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Vista Roman Creek - San Diego County, Summer

**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   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |

**4.2 Trip Summary Information**

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

**4.3 Trip Type Information**

| Land Use                   | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|----------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                            | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Other Non-Asphalt Surfaces | 9.50       | 7.30       | 7.30        | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.593936 | 0.041843 | 0.182569 | 0.108325 | 0.016436 | 0.005513 | 0.015940 | 0.023523 | 0.001912 | 0.001972 | 0.006090 | 0.000748 | 0.001193 |

Vista Roman Creek - San Diego County, Summer

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

Vista Roman Creek - San Diego County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**Mitigated**

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Vista Roman Creek - San Diego County, Summer

|             | ROG    | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 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   | 0.3798 | 2.0000e-005 | 1.6400e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 |          | 3.5000e-003 | 3.5000e-003 | 1.0000e-005 |     | 3.7300e-003 |
| Unmitigated | 0.3798 | 2.0000e-005 | 1.6400e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 |          | 3.5000e-003 | 3.5000e-003 | 1.0000e-005 |     | 3.7300e-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           | lb/day        |                    |                    |               |               |                    |                    |                |                    |                    | lb/day   |                    |                    |                    |     |                    |
| Architectural Coating | 0.1328        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |                    | 0.0000             |                    |     | 0.0000             |
| Consumer Products     | 0.2469        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |                    | 0.0000             |                    |     | 0.0000             |
| Landscaping           | 1.5000e-004   | 2.0000e-005        | 1.6400e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        |          | 3.5000e-003        | 3.5000e-003        | 1.0000e-005        |     | 3.7300e-003        |
| <b>Total</b>          | <b>0.3798</b> | <b>2.0000e-005</b> | <b>1.6400e-003</b> | <b>0.0000</b> |               | <b>1.0000e-005</b> | <b>1.0000e-005</b> |                | <b>1.0000e-005</b> | <b>1.0000e-005</b> |          | <b>3.5000e-003</b> | <b>3.5000e-003</b> | <b>1.0000e-005</b> |     | <b>3.7300e-003</b> |



Vista Roman Creek - San Diego County, Summer

**6.2 Area by SubCategory**

**Mitigated**

|                       | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2          | Total CO2          | CH4                | N2O | CO2e               |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|-----|--------------------|
| SubCategory           | lb/day        |                    |                    |               |               |                    |                    |                |                    |                    | lb/day   |                    |                    |                    |     |                    |
| Architectural Coating | 0.1328        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |                    | 0.0000             |                    |     | 0.0000             |
| Consumer Products     | 0.2469        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |                    | 0.0000             |                    |     | 0.0000             |
| Landscaping           | 1.5000e-004   | 2.0000e-005        | 1.6400e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        |          | 3.5000e-003        | 3.5000e-003        | 1.0000e-005        |     | 3.7300e-003        |
| <b>Total</b>          | <b>0.3798</b> | <b>2.0000e-005</b> | <b>1.6400e-003</b> | <b>0.0000</b> |               | <b>1.0000e-005</b> | <b>1.0000e-005</b> |                | <b>1.0000e-005</b> | <b>1.0000e-005</b> |          | <b>3.5000e-003</b> | <b>3.5000e-003</b> | <b>1.0000e-005</b> |     | <b>3.7300e-003</b> |

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**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**

Vista Roman Creek - San Diego County, Summer

| 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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Vista Roman Creek - San Diego County, Winter

**Vista Roman Creek  
San Diego County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                  | Size  | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|-------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 16.00 | Acre   | 16.00       | 696,960.00         | 0          |

**1.2 Other Project Characteristics**

|                                 |                          |                                 |       |                                  |       |
|---------------------------------|--------------------------|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                    | <b>Wind Speed (m/s)</b>         | 2.6   | <b>Precipitation Freq (Days)</b> | 40    |
| <b>Climate Zone</b>             | 13                       |                                 |       | <b>Operational Year</b>          | 2021  |
| <b>Utility Company</b>          | San Diego Gas & Electric |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 720.49                   | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

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

Project Characteristics -

Land Use - non-asphalt parking is used to represent the mitigation site.

Construction Phase - Schedule adjusted to reflect the six month construction schedule.

Off-road Equipment - no cranes or welders would be required on-site

Grading - up to 16 acres will require grading

Construction Off-road Equipment Mitigation -

Vista Roman Creek - San Diego County, Winter

| Table Name           | Column Name                | Default Value | New Value |
|----------------------|----------------------------|---------------|-----------|
| tblConstructionPhase | NumDays                    | 300.00        | 40.00     |
| tblConstructionPhase | NumDays                    | 30.00         | 40.00     |
| tblConstructionPhase | NumDays                    | 10.00         | 40.00     |
| tblConstructionPhase | PhaseEndDate               | 5/21/2021     | 7/17/2020 |
| tblConstructionPhase | PhaseEndDate               | 3/27/2020     | 5/22/2020 |
| tblConstructionPhase | PhaseEndDate               | 2/14/2020     | 3/27/2020 |
| tblConstructionPhase | PhaseStartDate             | 3/28/2020     | 5/25/2020 |
| tblConstructionPhase | PhaseStartDate             | 2/15/2020     | 3/30/2020 |
| tblConstructionPhase | PhaseStartDate             | 2/1/2020      | 2/3/2020  |
| tblGrading           | AcresOfGrading             | 100.00        | 16.00     |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00          | 0.00      |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00          | 0.00      |

**2.0 Emissions Summary**

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Vista Roman Creek - San Diego County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2          | Total CO2          | CH4                | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |                    |                    |                |                    |                    | lb/day   |                    |                    |                    |               |                    |
| Area         | 0.3798        | 2.0000e-005        | 1.6400e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        |          | 3.5000e-003        | 3.5000e-003        | 1.0000e-005        |               | 3.7300e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000         | 0.0000             | 0.0000             |          | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             |
| <b>Total</b> | <b>0.3798</b> | <b>2.0000e-005</b> | <b>1.6400e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b>  | <b>1.0000e-005</b> | <b>1.0000e-005</b> |          | <b>3.5000e-003</b> | <b>3.5000e-003</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.7300e-003</b> |

**Mitigated Operational**

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2          | Total CO2          | CH4                | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |                    |                    |                |                    |                    | lb/day   |                    |                    |                    |               |                    |
| Area         | 0.3798        | 2.0000e-005        | 1.6400e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        |          | 3.5000e-003        | 3.5000e-003        | 1.0000e-005        |               | 3.7300e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000         | 0.0000             | 0.0000             |          | 0.0000             | 0.0000             | 0.0000             |               | 0.0000             |
| <b>Total</b> | <b>0.3798</b> | <b>2.0000e-005</b> | <b>1.6400e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b>  | <b>1.0000e-005</b> | <b>1.0000e-005</b> |          | <b>3.5000e-003</b> | <b>3.5000e-003</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.7300e-003</b> |

Vista Roman Creek - San Diego County, Winter

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

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Site Preparation      | Site Preparation      | 2/3/2020   | 3/27/2020 | 5             | 40       |                   |
| 2            | Grading               | Grading               | 3/30/2020  | 5/22/2020 | 5             | 40       |                   |
| 3            | Building Construction | Building Construction | 5/25/2020  | 7/17/2020 | 5             | 40       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 16

Acres of Paving: 16

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

#### OffRoad Equipment

Vista Roman Creek - San Diego County, Winter

| Phase Name            | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Building Construction | Cranes                    | 0      | 7.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Building Construction | Welders                   | 0      | 8.00        | 46          | 0.45        |

**Trips and VMT**

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Site Preparation      | 7                       | 18.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 8                       | 20.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 7                       | 293.00             | 114.00             | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**



Vista Roman Creek - San Diego County, Winter

**3.2 Site Preparation - 2020**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total    | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |                |               |                |                |               |                | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 18.0663        | 0.0000        | 18.0663        | 9.9307         | 0.0000        | 9.9307         |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 4.0765        | 42.4173        | 21.5136        | 0.0380        |                | 2.1974        | 2.1974         |                | 2.0216        | 2.0216         |          | 3,685.1016        | 3,685.1016        | 1.1918        |     | 3,714.8975        |
| <b>Total</b>  | <b>4.0765</b> | <b>42.4173</b> | <b>21.5136</b> | <b>0.0380</b> | <b>18.0663</b> | <b>2.1974</b> | <b>20.2637</b> | <b>9.9307</b>  | <b>2.0216</b> | <b>11.9523</b> |          | <b>3,685.1016</b> | <b>3,685.1016</b> | <b>1.1918</b> |     | <b>3,714.8975</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       | 0.0748        | 0.0500        | 0.4810        | 1.4300e-003        | 0.1479        | 1.0400e-003        | 0.1489        | 0.0392         | 9.6000e-004        | 0.0402        |          | 142.4038        | 142.4038        | 4.2900e-003        |     | 142.5109        |
| <b>Total</b> | <b>0.0748</b> | <b>0.0500</b> | <b>0.4810</b> | <b>1.4300e-003</b> | <b>0.1479</b> | <b>1.0400e-003</b> | <b>0.1489</b> | <b>0.0392</b>  | <b>9.6000e-004</b> | <b>0.0402</b> |          | <b>142.4038</b> | <b>142.4038</b> | <b>4.2900e-003</b> |     | <b>142.5109</b> |

Vista Roman Creek - San Diego County, Winter

**3.2 Site Preparation - 2020**

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total    | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |                |               |                |                |               |                | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 18.0663        | 0.0000        | 18.0663        | 9.9307         | 0.0000        | 9.9307         |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 4.0765        | 42.4173        | 21.5136        | 0.0380        |                | 2.1974        | 2.1974         |                | 2.0216        | 2.0216         | 0.0000        | 3,685.1016        | 3,685.1016        | 1.1918        |     | 3,714.8975        |
| <b>Total</b>  | <b>4.0765</b> | <b>42.4173</b> | <b>21.5136</b> | <b>0.0380</b> | <b>18.0663</b> | <b>2.1974</b> | <b>20.2637</b> | <b>9.9307</b>  | <b>2.0216</b> | <b>11.9523</b> | <b>0.0000</b> | <b>3,685.1016</b> | <b>3,685.1016</b> | <b>1.1918</b> |     | <b>3,714.8975</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       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Worker       | 0.0748        | 0.0500        | 0.4810        | 1.4300e-003        | 0.1479        | 1.0400e-003        | 0.1489        | 0.0392         | 9.6000e-004        | 0.0402        |          | 142.4038        | 142.4038        | 4.2900e-003        |     | 142.5109        |
| <b>Total</b> | <b>0.0748</b> | <b>0.0500</b> | <b>0.4810</b> | <b>1.4300e-003</b> | <b>0.1479</b> | <b>1.0400e-003</b> | <b>0.1489</b> | <b>0.0392</b>  | <b>9.6000e-004</b> | <b>0.0402</b> |          | <b>142.4038</b> | <b>142.4038</b> | <b>4.2900e-003</b> |     | <b>142.5109</b> |

Vista Roman Creek - San Diego County, Winter

**3.3 Grading - 2020**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Fugitive Dust |               |                |                |               | 6.4463        | 0.0000        | 6.4463        | 3.3560         | 0.0000        | 3.3560        |          |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 4.4501        | 50.1975        | 31.9583        | 0.0620        |               | 2.1739        | 2.1739        |                | 2.0000        | 2.0000        |          | 6,005.865<br>3         | 6,005.865<br>3         | 1.9424        |     | 6,054.425<br>7         |
| <b>Total</b>  | <b>4.4501</b> | <b>50.1975</b> | <b>31.9583</b> | <b>0.0620</b> | <b>6.4463</b> | <b>2.1739</b> | <b>8.6202</b> | <b>3.3560</b>  | <b>2.0000</b> | <b>5.3560</b> |          | <b>6,005.865<br/>3</b> | <b>6,005.865<br/>3</b> | <b>1.9424</b> |     | <b>6,054.425<br/>7</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       | 0.0831        | 0.0555        | 0.5345        | 1.5900e-003        | 0.1643        | 1.1500e-003        | 0.1655        | 0.0436         | 1.0600e-003        | 0.0446        |          | 158.2264        | 158.2264        | 4.7600e-003        |     | 158.3455        |
| <b>Total</b> | <b>0.0831</b> | <b>0.0555</b> | <b>0.5345</b> | <b>1.5900e-003</b> | <b>0.1643</b> | <b>1.1500e-003</b> | <b>0.1655</b> | <b>0.0436</b>  | <b>1.0600e-003</b> | <b>0.0446</b> |          | <b>158.2264</b> | <b>158.2264</b> | <b>4.7600e-003</b> |     | <b>158.3455</b> |

Vista Roman Creek - San Diego County, Winter

**3.3 Grading - 2020**

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Fugitive Dust |               |                |                |               | 6.4463        | 0.0000        | 6.4463        | 3.3560         | 0.0000        | 3.3560        |               |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 4.4501        | 50.1975        | 31.9583        | 0.0620        |               | 2.1739        | 2.1739        |                | 2.0000        | 2.0000        | 0.0000        | 6,005.865<br>3         | 6,005.865<br>3         | 1.9424        |     | 6,054.425<br>7         |
| <b>Total</b>  | <b>4.4501</b> | <b>50.1975</b> | <b>31.9583</b> | <b>0.0620</b> | <b>6.4463</b> | <b>2.1739</b> | <b>8.6202</b> | <b>3.3560</b>  | <b>2.0000</b> | <b>5.3560</b> | <b>0.0000</b> | <b>6,005.865<br/>3</b> | <b>6,005.865<br/>3</b> | <b>1.9424</b> |     | <b>6,054.425<br/>7</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       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |
| Worker       | 0.0831        | 0.0555        | 0.5345        | 1.5900e-003        | 0.1643        | 1.1500e-003        | 0.1655        | 0.0436         | 1.0600e-003        | 0.0446        |          | 158.2264        | 158.2264        | 4.7600e-003        |     | 158.3455        |
| <b>Total</b> | <b>0.0831</b> | <b>0.0555</b> | <b>0.5345</b> | <b>1.5900e-003</b> | <b>0.1643</b> | <b>1.1500e-003</b> | <b>0.1655</b> | <b>0.0436</b>  | <b>1.0600e-003</b> | <b>0.0446</b> |          | <b>158.2264</b> | <b>158.2264</b> | <b>4.7600e-003</b> |     | <b>158.3455</b> |

Vista Roman Creek - San Diego County, Winter

**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Off-Road     | 1.3810        | 12.8971        | 13.2305        | 0.0193        |               | 0.8357        | 0.8357        |                | 0.7845        | 0.7845        |          | 1,856.644<br>4         | 1,856.644<br>4         | 0.4341        |     | 1,867.495<br>8         |
| <b>Total</b> | <b>1.3810</b> | <b>12.8971</b> | <b>13.2305</b> | <b>0.0193</b> |               | <b>0.8357</b> | <b>0.8357</b> |                | <b>0.7845</b> | <b>0.7845</b> |          | <b>1,856.644<br/>4</b> | <b>1,856.644<br/>4</b> | <b>0.4341</b> |     | <b>1,867.495<br/>8</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       | 0.4462        | 12.8441        | 3.6344         | 0.0304        | 0.7717        | 0.0641        | 0.8358        | 0.2222         | 0.0613        | 0.2835        |          | 3,265.669<br>3         | 3,265.669<br>3         | 0.2628        |     | 3,272.238<br>7         |
| Worker       | 1.2177        | 0.8134         | 7.8303         | 0.0233        | 2.4069        | 0.0169        | 2.4238        | 0.6384         | 0.0156        | 0.6540        |          | 2,318.016<br>6         | 2,318.016<br>6         | 0.0698        |     | 2,319.761<br>4         |
| <b>Total</b> | <b>1.6639</b> | <b>13.6574</b> | <b>11.4647</b> | <b>0.0537</b> | <b>3.1787</b> | <b>0.0810</b> | <b>3.2596</b> | <b>0.8606</b>  | <b>0.0769</b> | <b>0.9375</b> |          | <b>5,583.685<br/>9</b> | <b>5,583.685<br/>9</b> | <b>0.3326</b> |     | <b>5,592.000<br/>1</b> |

Vista Roman Creek - San Diego County, Winter

**3.4 Building Construction - 2020**

**Mitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Off-Road     | 1.3810        | 12.8971        | 13.2305        | 0.0193        |               | 0.8357        | 0.8357        |                | 0.7845        | 0.7845        | 0.0000        | 1,856.644<br>4         | 1,856.644<br>4         | 0.4341        |     | 1,867.495<br>8         |
| <b>Total</b> | <b>1.3810</b> | <b>12.8971</b> | <b>13.2305</b> | <b>0.0193</b> |               | <b>0.8357</b> | <b>0.8357</b> |                | <b>0.7845</b> | <b>0.7845</b> | <b>0.0000</b> | <b>1,856.644<br/>4</b> | <b>1,856.644<br/>4</b> | <b>0.4341</b> |     | <b>1,867.495<br/>8</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       | 0.4462        | 12.8441        | 3.6344         | 0.0304        | 0.7717        | 0.0641        | 0.8358        | 0.2222         | 0.0613        | 0.2835        |          | 3,265.669<br>3         | 3,265.669<br>3         | 0.2628        |     | 3,272.238<br>7         |
| Worker       | 1.2177        | 0.8134         | 7.8303         | 0.0233        | 2.4069        | 0.0169        | 2.4238        | 0.6384         | 0.0156        | 0.6540        |          | 2,318.016<br>6         | 2,318.016<br>6         | 0.0698        |     | 2,319.761<br>4         |
| <b>Total</b> | <b>1.6639</b> | <b>13.6574</b> | <b>11.4647</b> | <b>0.0537</b> | <b>3.1787</b> | <b>0.0810</b> | <b>3.2596</b> | <b>0.8606</b>  | <b>0.0769</b> | <b>0.9375</b> |          | <b>5,583.685<br/>9</b> | <b>5,583.685<br/>9</b> | <b>0.3326</b> |     | <b>5,592.000<br/>1</b> |

**4.0 Operational Detail - Mobile**

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Vista Roman Creek - San Diego County, Winter

**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   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |

**4.2 Trip Summary Information**

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

**4.3 Trip Type Information**

| Land Use                   | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|----------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                            | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Other Non-Asphalt Surfaces | 9.50       | 7.30       | 7.30        | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.593936 | 0.041843 | 0.182569 | 0.108325 | 0.016436 | 0.005513 | 0.015940 | 0.023523 | 0.001912 | 0.001972 | 0.006090 | 0.000748 | 0.001193 |

Vista Roman Creek - San Diego County, Winter

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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



Vista Roman Creek - San Diego County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**Mitigated**

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Vista Roman Creek - San Diego County, Winter

|             | ROG    | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 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   | 0.3798 | 2.0000e-005 | 1.6400e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 |          | 3.5000e-003 | 3.5000e-003 | 1.0000e-005 |     | 3.7300e-003 |
| Unmitigated | 0.3798 | 2.0000e-005 | 1.6400e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 |          | 3.5000e-003 | 3.5000e-003 | 1.0000e-005 |     | 3.7300e-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           | lb/day        |                    |                    |               |               |                    |                    |                |                    |                    | lb/day   |                    |                    |                    |     |                    |
| Architectural Coating | 0.1328        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |                    | 0.0000             |                    |     | 0.0000             |
| Consumer Products     | 0.2469        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |                    | 0.0000             |                    |     | 0.0000             |
| Landscaping           | 1.5000e-004   | 2.0000e-005        | 1.6400e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        |          | 3.5000e-003        | 3.5000e-003        | 1.0000e-005        |     | 3.7300e-003        |
| <b>Total</b>          | <b>0.3798</b> | <b>2.0000e-005</b> | <b>1.6400e-003</b> | <b>0.0000</b> |               | <b>1.0000e-005</b> | <b>1.0000e-005</b> |                | <b>1.0000e-005</b> | <b>1.0000e-005</b> |          | <b>3.5000e-003</b> | <b>3.5000e-003</b> | <b>1.0000e-005</b> |     | <b>3.7300e-003</b> |

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**6.2 Area by SubCategory**

**Mitigated**

|                       | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2          | Total CO2          | CH4                | N2O | CO2e               |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|-----|--------------------|
| SubCategory           | lb/day        |                    |                    |               |               |                    |                    |                |                    |                    | lb/day   |                    |                    |                    |     |                    |
| Architectural Coating | 0.1328        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |                    | 0.0000             |                    |     | 0.0000             |
| Consumer Products     | 0.2469        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |                    | 0.0000             |                    |     | 0.0000             |
| Landscaping           | 1.5000e-004   | 2.0000e-005        | 1.6400e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        |          | 3.5000e-003        | 3.5000e-003        | 1.0000e-005        |     | 3.7300e-003        |
| <b>Total</b>          | <b>0.3798</b> | <b>2.0000e-005</b> | <b>1.6400e-003</b> | <b>0.0000</b> |               | <b>1.0000e-005</b> | <b>1.0000e-005</b> |                | <b>1.0000e-005</b> | <b>1.0000e-005</b> |          | <b>3.5000e-003</b> | <b>3.5000e-003</b> | <b>1.0000e-005</b> |     | <b>3.7300e-003</b> |

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**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**

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| 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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**1.0 Project Characteristics**

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**1.1 Land Usage**

| Land Uses                  | Size  | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|-------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 16.00 | Acre   | 16.00       | 696,960.00         | 0          |

**1.2 Other Project Characteristics**

|                                 |                          |                                 |       |                                  |       |
|---------------------------------|--------------------------|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                    | <b>Wind Speed (m/s)</b>         | 2.6   | <b>Precipitation Freq (Days)</b> | 40    |
| <b>Climate Zone</b>             | 13                       |                                 |       | <b>Operational Year</b>          | 2021  |
| <b>Utility Company</b>          | San Diego Gas & Electric |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 720.49                   | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

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

Project Characteristics -

Land Use - non-asphalt parking is used to represent the mitigation site.

Construction Phase - Schedule adjusted to reflect the six month construction schedule.

Off-road Equipment - no cranes or welders would be required on-site

Grading - up to 16 acres will require grading

Construction Off-road Equipment Mitigation -

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| Table Name           | Column Name                | Default Value | New Value |
|----------------------|----------------------------|---------------|-----------|
| tblConstructionPhase | NumDays                    | 300.00        | 40.00     |
| tblConstructionPhase | NumDays                    | 30.00         | 40.00     |
| tblConstructionPhase | NumDays                    | 10.00         | 40.00     |
| tblConstructionPhase | PhaseEndDate               | 5/21/2021     | 7/17/2020 |
| tblConstructionPhase | PhaseEndDate               | 3/27/2020     | 5/22/2020 |
| tblConstructionPhase | PhaseEndDate               | 2/14/2020     | 3/27/2020 |
| tblConstructionPhase | PhaseStartDate             | 3/28/2020     | 5/25/2020 |
| tblConstructionPhase | PhaseStartDate             | 2/15/2020     | 3/30/2020 |
| tblConstructionPhase | PhaseStartDate             | 2/1/2020      | 2/3/2020  |
| tblGrading           | AcresOfGrading             | 100.00        | 16.00     |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00          | 0.00      |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00          | 0.00      |

**2.0 Emissions Summary**

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| Quarter | Start Date | End Date  | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|-----------|--|--|
| 1       | 1-6-2020   | 4-5-2020  | 1.0360                                       | 1.0360                                     |
| 2       | 4-6-2020   | 7-5-2020  | 1.3597                                       | 1.3597                                     |
| 3       | 7-6-2020   | 9-30-2020 | 0.1258                                       | 0.1258                                     |
|         |            | Highest   | 1.3597                                       | 1.3597                                     |

2.2 Overall Operational

Unmitigated Operational

|              | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | tons/yr       |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Area         | 0.0693        | 0.0000        | 1.5000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 2.9000e-004        | 2.9000e-004        | 0.0000        | 0.0000        | 3.0000e-004        |
| Energy       | 0.0000        | 0.0000        | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Waste        |               |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Water        |               |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.0693</b> | <b>0.0000</b> | <b>1.5000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>2.9000e-004</b> | <b>2.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>3.0000e-004</b> |



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**2.2 Overall Operational**

**Mitigated Operational**

|              | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | tons/yr       |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Area         | 0.0693        | 0.0000        | 1.5000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 2.9000e-004        | 2.9000e-004        | 0.0000        | 0.0000        | 3.0000e-004        |
| Energy       | 0.0000        | 0.0000        | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Waste        |               |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Water        |               |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.0693</b> | <b>0.0000</b> | <b>1.5000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>2.9000e-004</b> | <b>2.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>3.0000e-004</b> |

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

**3.0 Construction Detail**

**Construction Phase**

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Site Preparation      | Site Preparation      | 2/3/2020   | 3/27/2020 | 5             | 40       |                   |
| 2            | Grading               | Grading               | 3/30/2020  | 5/22/2020 | 5             | 40       |                   |
| 3            | Building Construction | Building Construction | 5/25/2020  | 7/17/2020 | 5             | 40       |                   |

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

**Acres of Grading (Grading Phase): 16**

**Acres of Paving: 16**

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

**OffRoad Equipment**

| Phase Name            | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Building Construction | Cranes                    | 0      | 7.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Building Construction | Welders                   | 0      | 8.00        | 46          | 0.45        |

**Trips and VMT**

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| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Site Preparation      | 7                       | 18.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 8                       | 20.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 7                       | 293.00             | 114.00             | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.3613        | 0.0000        | 0.3613        | 0.1986         | 0.0000        | 0.1986        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0815        | 0.8484        | 0.4303        | 7.6000e-004        |               | 0.0440        | 0.0440        |                | 0.0404        | 0.0404        | 0.0000        | 66.8614        | 66.8614        | 0.0216        | 0.0000        | 67.4020        |
| <b>Total</b>  | <b>0.0815</b> | <b>0.8484</b> | <b>0.4303</b> | <b>7.6000e-004</b> | <b>0.3613</b> | <b>0.0440</b> | <b>0.4053</b> | <b>0.1986</b>  | <b>0.0404</b> | <b>0.2390</b> | <b>0.0000</b> | <b>66.8614</b> | <b>66.8614</b> | <b>0.0216</b> | <b>0.0000</b> | <b>67.4020</b> |

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**3.2 Site Preparation - 2020**

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.3300e-003        | 9.8000e-004        | 9.6300e-003        | 3.0000e-005        | 2.8900e-003        | 2.0000e-005        | 2.9100e-003        | 7.7000e-004        | 2.0000e-005        | 7.9000e-004        | 0.0000        | 2.6096        | 2.6096        | 8.0000e-005        | 0.0000        | 2.6115        |
| <b>Total</b> | <b>1.3300e-003</b> | <b>9.8000e-004</b> | <b>9.6300e-003</b> | <b>3.0000e-005</b> | <b>2.8900e-003</b> | <b>2.0000e-005</b> | <b>2.9100e-003</b> | <b>7.7000e-004</b> | <b>2.0000e-005</b> | <b>7.9000e-004</b> | <b>0.0000</b> | <b>2.6096</b> | <b>2.6096</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>2.6115</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 |               |               |               |                    | 0.3613        | 0.0000        | 0.3613        | 0.1986         | 0.0000        | 0.1986        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0815        | 0.8484        | 0.4303        | 7.6000e-004        |               | 0.0440        | 0.0440        |                | 0.0404        | 0.0404        | 0.0000        | 66.8613        | 66.8613        | 0.0216        | 0.0000        | 67.4019        |
| <b>Total</b>  | <b>0.0815</b> | <b>0.8484</b> | <b>0.4303</b> | <b>7.6000e-004</b> | <b>0.3613</b> | <b>0.0440</b> | <b>0.4053</b> | <b>0.1986</b>  | <b>0.0404</b> | <b>0.2390</b> | <b>0.0000</b> | <b>66.8613</b> | <b>66.8613</b> | <b>0.0216</b> | <b>0.0000</b> | <b>67.4019</b> |

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**3.2 Site Preparation - 2020**

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.3300e-003        | 9.8000e-004        | 9.6300e-003        | 3.0000e-005        | 2.8900e-003        | 2.0000e-005        | 2.9100e-003        | 7.7000e-004        | 2.0000e-005        | 7.9000e-004        | 0.0000        | 2.6096        | 2.6096        | 8.0000e-005        | 0.0000        | 2.6115        |
| <b>Total</b> | <b>1.3300e-003</b> | <b>9.8000e-004</b> | <b>9.6300e-003</b> | <b>3.0000e-005</b> | <b>2.8900e-003</b> | <b>2.0000e-005</b> | <b>2.9100e-003</b> | <b>7.7000e-004</b> | <b>2.0000e-005</b> | <b>7.9000e-004</b> | <b>0.0000</b> | <b>2.6096</b> | <b>2.6096</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>2.6115</b> |

**3.3 Grading - 2020**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.1289        | 0.0000        | 0.1289        | 0.0671         | 0.0000        | 0.0671        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0890        | 1.0040        | 0.6392        | 1.2400e-003        |               | 0.0435        | 0.0435        |                | 0.0400        | 0.0400        | 0.0000        | 108.9686        | 108.9686        | 0.0352        | 0.0000        | 109.8497        |
| <b>Total</b>  | <b>0.0890</b> | <b>1.0040</b> | <b>0.6392</b> | <b>1.2400e-003</b> | <b>0.1289</b> | <b>0.0435</b> | <b>0.1724</b> | <b>0.0671</b>  | <b>0.0400</b> | <b>0.1071</b> | <b>0.0000</b> | <b>108.9686</b> | <b>108.9686</b> | <b>0.0352</b> | <b>0.0000</b> | <b>109.8497</b> |

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**3.3 Grading - 2020**

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.4700e-003        | 1.0900e-003        | 0.0107        | 3.0000e-005        | 3.2100e-003        | 2.0000e-005        | 3.2300e-003        | 8.5000e-004        | 2.0000e-005        | 8.7000e-004        | 0.0000        | 2.8995        | 2.8995        | 9.0000e-005        | 0.0000        | 2.9017        |
| <b>Total</b> | <b>1.4700e-003</b> | <b>1.0900e-003</b> | <b>0.0107</b> | <b>3.0000e-005</b> | <b>3.2100e-003</b> | <b>2.0000e-005</b> | <b>3.2300e-003</b> | <b>8.5000e-004</b> | <b>2.0000e-005</b> | <b>8.7000e-004</b> | <b>0.0000</b> | <b>2.8995</b> | <b>2.8995</b> | <b>9.0000e-005</b> | <b>0.0000</b> | <b>2.9017</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 |               |               |               |                    | 0.1289        | 0.0000        | 0.1289        | 0.0671         | 0.0000        | 0.0671        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0890        | 1.0040        | 0.6392        | 1.2400e-003        |               | 0.0435        | 0.0435        |                | 0.0400        | 0.0400        | 0.0000        | 108.9685        | 108.9685        | 0.0352        | 0.0000        | 109.8495        |
| <b>Total</b>  | <b>0.0890</b> | <b>1.0040</b> | <b>0.6392</b> | <b>1.2400e-003</b> | <b>0.1289</b> | <b>0.0435</b> | <b>0.1724</b> | <b>0.0671</b>  | <b>0.0400</b> | <b>0.1071</b> | <b>0.0000</b> | <b>108.9685</b> | <b>108.9685</b> | <b>0.0352</b> | <b>0.0000</b> | <b>109.8495</b> |

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**3.3 Grading - 2020**

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 1.4700e-003        | 1.0900e-003        | 0.0107        | 3.0000e-005        | 3.2100e-003        | 2.0000e-005        | 3.2300e-003        | 8.5000e-004        | 2.0000e-005        | 8.7000e-004        | 0.0000        | 2.8995        | 2.8995        | 9.0000e-005        | 0.0000        | 2.9017        |
| <b>Total</b> | <b>1.4700e-003</b> | <b>1.0900e-003</b> | <b>0.0107</b> | <b>3.0000e-005</b> | <b>3.2100e-003</b> | <b>2.0000e-005</b> | <b>3.2300e-003</b> | <b>8.5000e-004</b> | <b>2.0000e-005</b> | <b>8.7000e-004</b> | <b>0.0000</b> | <b>2.8995</b> | <b>2.8995</b> | <b>9.0000e-005</b> | <b>0.0000</b> | <b>2.9017</b> |

**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |                    |               |                |
| Off-Road     | 0.0276        | 0.2579        | 0.2646        | 3.9000e-004        |               | 0.0167        | 0.0167        |                | 0.0157        | 0.0157        | 0.0000        | 33.6864        | 33.6864        | 7.8800e-003        | 0.0000        | 33.8833        |
| <b>Total</b> | <b>0.0276</b> | <b>0.2579</b> | <b>0.2646</b> | <b>3.9000e-004</b> |               | <b>0.0167</b> | <b>0.0167</b> |                | <b>0.0157</b> | <b>0.0157</b> | <b>0.0000</b> | <b>33.6864</b> | <b>33.6864</b> | <b>7.8800e-003</b> | <b>0.0000</b> | <b>33.8833</b> |

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**3.4 Building Construction - 2020**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 8.6900e-003   | 0.2599        | 0.0691        | 6.2000e-004        | 0.0151        | 1.2700e-003        | 0.0164        | 4.3700e-003    | 1.2100e-003        | 5.5800e-003   | 0.0000        | 60.1604         | 60.1604         | 4.6100e-003        | 0.0000        | 60.2757         |
| Worker       | 0.0216        | 0.0160        | 0.1568        | 4.7000e-004        | 0.0470        | 3.4000e-004        | 0.0473        | 0.0125         | 3.1000e-004        | 0.0128        | 0.0000        | 42.4777         | 42.4777         | 1.2800e-003        | 0.0000        | 42.5096         |
| <b>Total</b> | <b>0.0303</b> | <b>0.2759</b> | <b>0.2259</b> | <b>1.0900e-003</b> | <b>0.0621</b> | <b>1.6100e-003</b> | <b>0.0637</b> | <b>0.0169</b>  | <b>1.5200e-003</b> | <b>0.0184</b> | <b>0.0000</b> | <b>102.6381</b> | <b>102.6381</b> | <b>5.8900e-003</b> | <b>0.0000</b> | <b>102.7853</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |                    |               |                |
| Off-Road     | 0.0276        | 0.2579        | 0.2646        | 3.9000e-004        |               | 0.0167        | 0.0167        |                | 0.0157        | 0.0157        | 0.0000        | 33.6864        | 33.6864        | 7.8800e-003        | 0.0000        | 33.8832        |
| <b>Total</b> | <b>0.0276</b> | <b>0.2579</b> | <b>0.2646</b> | <b>3.9000e-004</b> |               | <b>0.0167</b> | <b>0.0167</b> |                | <b>0.0157</b> | <b>0.0157</b> | <b>0.0000</b> | <b>33.6864</b> | <b>33.6864</b> | <b>7.8800e-003</b> | <b>0.0000</b> | <b>33.8832</b> |



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**3.4 Building Construction - 2020**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 8.6900e-003   | 0.2599        | 0.0691        | 6.2000e-004        | 0.0151        | 1.2700e-003        | 0.0164        | 4.3700e-003    | 1.2100e-003        | 5.5800e-003   | 0.0000        | 60.1604         | 60.1604         | 4.6100e-003        | 0.0000        | 60.2757         |
| Worker       | 0.0216        | 0.0160        | 0.1568        | 4.7000e-004        | 0.0470        | 3.4000e-004        | 0.0473        | 0.0125         | 3.1000e-004        | 0.0128        | 0.0000        | 42.4777         | 42.4777         | 1.2800e-003        | 0.0000        | 42.5096         |
| <b>Total</b> | <b>0.0303</b> | <b>0.2759</b> | <b>0.2259</b> | <b>1.0900e-003</b> | <b>0.0621</b> | <b>1.6100e-003</b> | <b>0.0637</b> | <b>0.0169</b>  | <b>1.5200e-003</b> | <b>0.0184</b> | <b>0.0000</b> | <b>102.6381</b> | <b>102.6381</b> | <b>5.8900e-003</b> | <b>0.0000</b> | <b>102.7853</b> |

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

| Land Use                   | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|----------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                            | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Other Non-Asphalt Surfaces | 9.50       | 7.30       | 7.30        | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.593936 | 0.041843 | 0.182569 | 0.108325 | 0.016436 | 0.005513 | 0.015940 | 0.023523 | 0.001912 | 0.001972 | 0.006090 | 0.000748 | 0.001193 |

5.0 Energy Detail

Historical Energy Use: N



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**5.2 Energy by Land Use - Natural Gas**

**Mitigated**

|                            | Natural Gas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr         | tons/yr       |               |               |               |               |               |               |                |               |               | MT/yr         |               |               |               |               |               |
| 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        |
| <b>Total</b>               |                 | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

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

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**5.3 Energy by Land Use - Electricity**

**Mitigated**

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

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

|             | ROG     | NOx    | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 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   | 0.0693  | 0.0000 | 1.5000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 2.9000e-004 | 2.9000e-004 | 0.0000 | 0.0000 | 3.0000e-004 |
| Unmitigated | 0.0693  | 0.0000 | 1.5000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 2.9000e-004 | 2.9000e-004 | 0.0000 | 0.0000 | 3.0000e-004 |

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**6.2 Area by SubCategory**

**Unmitigated**

|                       | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory           | tons/yr       |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Architectural Coating | 0.0242        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 0.0451        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 1.0000e-005   | 0.0000        | 1.5000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 2.9000e-004        | 2.9000e-004        | 0.0000        | 0.0000        | 3.0000e-004        |
| <b>Total</b>          | <b>0.0693</b> | <b>0.0000</b> | <b>1.5000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>2.9000e-004</b> | <b>2.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>3.0000e-004</b> |

**Mitigated**

|                       | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory           | tons/yr       |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Architectural Coating | 0.0242        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 0.0451        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 1.0000e-005   | 0.0000        | 1.5000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 2.9000e-004        | 2.9000e-004        | 0.0000        | 0.0000        | 3.0000e-004        |
| <b>Total</b>          | <b>0.0693</b> | <b>0.0000</b> | <b>1.5000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>2.9000e-004</b> | <b>2.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>3.0000e-004</b> |

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

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

**7.2 Water by Land Use**

**Unmitigated**

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

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**7.2 Water by Land Use**

**Mitigated**

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

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

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



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**8.2 Waste by Land Use**

**Unmitigated**

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

**Mitigated**

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

**9.0 Operational Offroad**

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

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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

**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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