

**Parenthetical CALEEMOD Assumptions  
For: Bloomington Affordable Housing Project  
Date: June 2013**

## **CONSTRUCTION**

### **Grading (10/1/2014 – 10/31/2014)**

- 5,000 cubic yards of import.
- 500 cubic yards of export.
- 5 acres disturbed.

#### **Equipment (CALEEMOD Default):**

Type	Quantity	Hours of Daily Operation
Excavators	2	8
Graders	1	8
Rubber Tired Dozers	1	8
Scrapers	2	8
Tractors/Loaders/Backhoes	2	8

### **Paving (1/1/2015 – 1/21/2015)**

#### **Equipment (CALEEMOD Default):**

Type	Quantity	Hours of Daily Operation
Pavers	2	8
Paving Equipment	2	8
Rollers	2	8

### **Building Construction (2/1/2015 – 10/31/2015)**

#### **Equipment (CALEEMOD Default):**

Type	Quantity	Hours of Daily Operation
Cranes	1	7
Forklifts	3	8
Generator Sets	1	8
Tractors/Loaders/Backhoes	3	7
Welders	1	8

### **Architectural Coating (9/1/2015 – 10/31/2015)**

#### **Equipment (CALEEMOD Default):**

Type	Quantity	Hours of Daily Operation
Air Compressor	1	8

**Bloomington Housing Project  
San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric
Library	6	1000sqft
User Defined Recreational	4	User Defined Unit
Apartments Low Rise	131	Dwelling Unit
Apartments Low Rise	65	Dwelling Unit

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>		<b>Utility Company</b>	Southern California Edison
<b>Climate Zone</b>	10		2.2		
		<b>Precipitation Freq (Days)</b>			

**1.3 User Entered Comments**

Project Characteristics - 32

Land Use - User Defined = community building, social services building, and leasing office

Construction Phase - anticipated construction schedule

Off-road Equipment - CARB load factors

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- Off-road Equipment - CARB load factors
- Off-road Equipment - CARB load factors
- Trips and VMT - soil would be hauled across site
- Grading - maximum disturbed area = 5 acres per day
- Vehicle Trips - user defined = community services that would not generate trips
- Construction Off-road Equipment Mitigation -
- Mobile Land Use Mitigation - project would add a transit stop
- Area Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -

## 2.0 Emissions Summary

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### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.09	0.72	0.43	0.00	0.08	0.03	0.11	0.04	0.03	0.07	0.00	79.24	79.24	0.01	0.00	79.40
2015	1.34	2.73	2.85	0.01	0.22	0.17	0.39	0.01	0.17	0.18	0.00	484.08	484.08	0.04	0.00	484.88
<b>Total</b>	<b>1.43</b>	<b>3.45</b>	<b>3.28</b>	<b>0.01</b>	<b>0.30</b>	<b>0.20</b>	<b>0.50</b>	<b>0.05</b>	<b>0.20</b>	<b>0.25</b>	<b>0.00</b>	<b>563.32</b>	<b>563.32</b>	<b>0.05</b>	<b>0.00</b>	<b>564.28</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.09	0.72	0.43	0.00	0.03	0.03	0.07	0.02	0.03	0.05	0.00	79.24	79.24	0.01	0.00	79.40
2015	1.34	2.73	2.85	0.01	0.17	0.17	0.34	0.01	0.17	0.18	0.00	484.08	484.08	0.04	0.00	484.88
<b>Total</b>	<b>1.43</b>	<b>3.45</b>	<b>3.28</b>	<b>0.01</b>	<b>0.20</b>	<b>0.20</b>	<b>0.41</b>	<b>0.03</b>	<b>0.20</b>	<b>0.23</b>	<b>0.00</b>	<b>563.32</b>	<b>563.32</b>	<b>0.05</b>	<b>0.00</b>	<b>564.28</b>

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.24	0.07	5.60	0.00		0.00	0.40		0.00	0.40	41.64	244.92	286.55	0.13	0.01	291.13
Energy	0.02	0.16	0.07	0.00		0.00	0.01		0.00	0.01	0.00	461.07	461.07	0.02	0.01	463.93
Mobile	1.78	5.19	18.11	0.02	2.43	0.19	2.62	0.09	0.19	0.28	0.00	2,289.41	2,289.41	0.13	0.00	2,292.11
Waste						0.00	0.00		0.00	0.00	19.42	0.00	19.42	1.15	0.00	43.53
Water						0.00	0.00		0.00	0.00	0.00	76.19	76.19	0.40	0.01	88.01
<b>Total</b>	<b>4.04</b>	<b>5.42</b>	<b>23.78</b>	<b>0.02</b>	<b>2.43</b>	<b>0.19</b>	<b>3.03</b>	<b>0.09</b>	<b>0.19</b>	<b>0.69</b>	<b>61.06</b>	<b>3,071.59</b>	<b>3,132.64</b>	<b>1.83</b>	<b>0.03</b>	<b>3,178.71</b>

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.97	0.04	3.14	0.00		0.00	0.03		0.00	0.03	0.00	259.04	259.04	0.01	0.00	260.70

Energy	0.02	0.16	0.07	0.00		0.00	0.01		0.00	0.01	0.00	458.28	458.28	0.02	0.01	461.12
Mobile	1.64	4.71	16.55	0.02	2.17	0.17	2.33	0.08	0.17	0.25	0.00	2,047.06	2,047.06	0.12	0.00	2,049.50
Waste						0.00	0.00		0.00	0.00	9.71	0.00	9.71	0.57	0.00	21.77
Water						0.00	0.00		0.00	0.00	0.00	64.70	64.70	0.32	0.01	74.18
<b>Total</b>	<b>2.63</b>	<b>4.91</b>	<b>19.76</b>	<b>0.02</b>	<b>2.17</b>	<b>0.17</b>	<b>2.37</b>	<b>0.08</b>	<b>0.17</b>	<b>0.29</b>	<b>9.71</b>	<b>2,829.08</b>	<b>2,838.79</b>	<b>1.04</b>	<b>0.02</b>	<b>2,867.27</b>

### 3.0 Construction Detail

#### 3.1 Mitigation Measures Construction

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

#### 3.2 Grading - 2014

##### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Fugitive Dust					0.07	0.00	0.07	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.09	0.70	0.39	0.00		0.03	0.03		0.03	0.03	0.00	75.85	75.85	0.01	0.00	75.99
<b>Total</b>	<b>0.09</b>	<b>0.70</b>	<b>0.39</b>	<b>0.00</b>	<b>0.07</b>	<b>0.03</b>	<b>0.10</b>	<b>0.04</b>	<b>0.03</b>	<b>0.07</b>	<b>0.00</b>	<b>75.85</b>	<b>75.85</b>	<b>0.01</b>	<b>0.00</b>	<b>75.99</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	1.10	0.00	0.00	1.11
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.29	2.29	0.00	0.00	2.30
<b>Total</b>	<b>0.00</b>	<b>0.02</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.39</b>	<b>3.39</b>	<b>0.00</b>	<b>0.00</b>	<b>3.41</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					0.03	0.00	0.03	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.09	0.70	0.39	0.00		0.03	0.03		0.03	0.03	0.00	75.85	75.85	0.01	0.00	75.99
<b>Total</b>	<b>0.09</b>	<b>0.70</b>	<b>0.39</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.02</b>	<b>0.03</b>	<b>0.05</b>	<b>0.00</b>	<b>75.85</b>	<b>75.85</b>	<b>0.01</b>	<b>0.00</b>	<b>75.99</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	1.10	0.00	0.00	1.11
Vendor	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

Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.29	2.29	0.00	0.00	2.30
<b>Total</b>	<b>0.00</b>	<b>0.02</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.39</b>	<b>3.39</b>	<b>0.00</b>	<b>0.00</b>	<b>3.41</b>

### 3.3 Paving - 2015

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.02	0.15	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.46	13.46	0.00	0.00	13.50
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.02</b>	<b>0.15</b>	<b>0.10</b>	<b>0.00</b>		<b>0.01</b>	<b>0.01</b>		<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>13.46</b>	<b>13.46</b>	<b>0.00</b>	<b>0.00</b>	<b>13.50</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	1.10	0.00	0.00	1.10
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.10</b>	<b>1.10</b>	<b>0.00</b>	<b>0.00</b>	<b>1.10</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
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Category	tons/yr										MT/yr					
	Off-Road	0.02	0.15	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.46	13.46	0.00	0.00
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.02</b>	<b>0.15</b>	<b>0.10</b>	<b>0.00</b>		<b>0.01</b>	<b>0.01</b>		<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>13.46</b>	<b>13.46</b>	<b>0.00</b>	<b>0.00</b>	<b>13.50</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
	Hauling	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	1.10	0.00	0.00	1.10
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.10</b>	<b>1.10</b>	<b>0.00</b>	<b>0.00</b>	<b>1.10</b>

**3.4 Building Construction - 2015**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.33	2.13	1.69	0.00		0.13	0.13		0.13	0.13	0.00	263.77	263.77	0.03	0.00
<b>Total</b>	<b>0.33</b>	<b>2.13</b>	<b>1.69</b>	<b>0.00</b>		<b>0.13</b>	<b>0.13</b>		<b>0.13</b>	<b>0.13</b>	<b>0.00</b>	<b>263.77</b>	<b>263.77</b>	<b>0.03</b>	<b>0.00</b>	<b>264.33</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	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
Vendor	0.03	0.31	0.17	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.00	55.78	55.78	0.00	0.00	55.81
Worker	0.07	0.08	0.80	0.00	0.20	0.01	0.20	0.01	0.01	0.01	0.00	137.86	137.86	0.01	0.00	138.01
<b>Total</b>	<b>0.10</b>	<b>0.39</b>	<b>0.97</b>	<b>0.00</b>	<b>0.22</b>	<b>0.02</b>	<b>0.23</b>	<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.00</b>	<b>193.64</b>	<b>193.64</b>	<b>0.01</b>	<b>0.00</b>	<b>193.82</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	0.33	2.13	1.69	0.00		0.13	0.13		0.13	0.13	0.00	263.77	263.77	0.03	0.00	264.33
<b>Total</b>	<b>0.33</b>	<b>2.13</b>	<b>1.69</b>	<b>0.00</b>		<b>0.13</b>	<b>0.13</b>		<b>0.13</b>	<b>0.13</b>	<b>0.00</b>	<b>263.77</b>	<b>263.77</b>	<b>0.03</b>	<b>0.00</b>	<b>264.33</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	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
Vendor	0.03	0.31	0.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	55.78	55.78	0.00	0.00	55.81
Worker	0.07	0.08	0.80	0.00	0.15	0.01	0.15	0.01	0.01	0.01	0.00	137.86	137.86	0.01	0.00	138.01
<b>Total</b>	<b>0.10</b>	<b>0.39</b>	<b>0.97</b>	<b>0.00</b>	<b>0.16</b>	<b>0.02</b>	<b>0.17</b>	<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.00</b>	<b>193.64</b>	<b>193.64</b>	<b>0.01</b>	<b>0.00</b>	<b>193.82</b>

**3.5 Architectural Coating - 2015**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.88					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.06	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.74	5.74	0.00	0.00	5.75
<b>Total</b>	<b>0.89</b>	<b>0.06</b>	<b>0.04</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>5.74</b>	<b>5.74</b>	<b>0.00</b>	<b>0.00</b>	<b>5.75</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	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
Vendor	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
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.36	6.36	0.00	0.00	6.37
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.04</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6.36</b>	<b>6.36</b>	<b>0.00</b>	<b>0.00</b>	<b>6.37</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.88					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.06	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.74	5.74	0.00	0.00	5.75

Total	0.89	0.06	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.74	5.74	0.00	0.00	5.75
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.00	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
Vendor	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
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.36	6.36	0.00	0.00	6.37
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.04</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6.36</b>	<b>6.36</b>	<b>0.00</b>	<b>0.00</b>	<b>6.37</b>

**4.0 Mobile Detail**

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**4.1 Mitigation Measures Mobile**

- Increase Density
- Increase Transit Accessibility
- Integrate Below Market Rate Housing
- Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.64	4.71	16.55	0.02	2.17	0.17	2.33	0.08	0.17	0.25	0.00	2,047.06	2,047.06	0.12	0.00	2,049.50
Unmitigated	1.78	5.19	18.11	0.02	2.43	0.19	2.62	0.09	0.19	0.28	0.00	2,289.41	2,289.41	0.13	0.00	2,292.11
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	732.29	937.96	795.17	2,566,722	2,286,949
Apartments Low Rise	363.35	465.40	394.55	1,273,564	1,134,746
Library	337.44	279.30	152.94	650,944	579,991
User Defined Recreational	0.00	0.00	0.00		
Total	1,433.08	1,682.66	1,342.66	4,491,230	4,001,686

#### 4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Library	8.90	13.30	7.40	52.00	43.00	5.00
User Defined Recreational	8.90	13.30	7.40	0.00	0.00	0.00

### 5.0 Energy Detail

#### 5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	271.52	271.52	0.01	0.00	273.22
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	274.31	274.31	0.01	0.00	276.03
NaturalGas Mitigated	0.02	0.16	0.07	0.00		0.00	0.01		0.00	0.01	0.00	186.76	186.76	0.00	0.00	187.90
NaturalGas Unmitigated	0.02	0.16	0.07	0.00		0.00	0.01		0.00	0.01	0.00	186.76	186.76	0.00	0.00	187.90
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

**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	tons/yr										MT/yr					
Apartments Low Rise	1.09441e+006	0.01	0.05	0.02	0.00		0.00	0.00		0.00	0.00	0.00	58.40	58.40	0.00	0.00	58.76
Apartments Low Rise	2.20566e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	117.70	117.70	0.00	0.00	118.42
Library	199740	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	10.66	10.66	0.00	0.00	10.72
User Defined Recreational	0	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
<b>Total</b>		<b>0.02</b>	<b>0.16</b>	<b>0.07</b>	<b>0.00</b>		<b>0.00</b>	<b>0.01</b>		<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>186.76</b>	<b>186.76</b>	<b>0.00</b>	<b>0.00</b>	<b>187.90</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	tons/yr										MT/yr					
Apartments Low Rise	1.09441e+006	0.01	0.05	0.02	0.00		0.00	0.00		0.00	0.00	0.00	58.40	58.40	0.00	0.00	58.76
Apartments Low Rise	2.20566e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	117.70	117.70	0.00	0.00	118.42
Library	199740	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	10.66	10.66	0.00	0.00	10.72
User Defined Recreational	0	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
<b>Total</b>		<b>0.02</b>	<b>0.16</b>	<b>0.07</b>	<b>0.00</b>		<b>0.00</b>	<b>0.01</b>		<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>186.76</b>	<b>186.76</b>	<b>0.00</b>	<b>0.00</b>	<b>187.90</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	290724					84.56	0.00	0.00	85.09
Apartments Low Rise	585921					170.43	0.01	0.00	171.50
Library	66420					19.32	0.00	0.00	19.44
User Defined Recreational	0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>274.31</b>	<b>0.01</b>	<b>0.00</b>	<b>276.03</b>

#### Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	287876					83.73	0.00	0.00	84.26

Apartments Low Rise	580181					168.76	0.01	0.00	169.82
Library	65412					19.03	0.00	0.00	19.15
User Defined Recreational	0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>271.52</b>	<b>0.01</b>	<b>0.00</b>	<b>273.23</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use only Natural Gas Hearths
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.97	0.04	3.14	0.00		0.00	0.03		0.00	0.03	0.00	259.04	259.04	0.01	0.00	260.70
Unmitigated	2.24	0.07	5.60	0.00		0.00	0.40		0.00	0.40	41.64	244.92	286.55	0.13	0.01	291.13
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

### 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	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.74					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	1.30	0.03	2.46	0.00		0.00	0.39		0.00	0.39	41.64	240.04	281.68	0.13	0.01		286.14
Landscaping	0.11	0.04	3.14	0.00		0.00	0.02		0.00	0.02	0.00	4.88	4.88	0.01	0.00		5.00
<b>Total</b>	<b>2.24</b>	<b>0.07</b>	<b>5.60</b>	<b>0.00</b>		<b>0.00</b>	<b>0.41</b>		<b>0.00</b>	<b>0.41</b>	<b>41.64</b>	<b>244.92</b>	<b>286.56</b>	<b>0.14</b>	<b>0.01</b>		<b>291.14</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	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.74					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.03	0.00	0.00	0.00		0.00	0.02		0.00	0.02	0.00	254.16	254.16	0.00	0.00		255.71
Landscaping	0.11	0.04	3.14	0.00		0.00	0.02		0.00	0.02	0.00	4.88	4.88	0.01	0.00		5.00
<b>Total</b>	<b>0.97</b>	<b>0.04</b>	<b>3.14</b>	<b>0.00</b>		<b>0.00</b>	<b>0.04</b>		<b>0.00</b>	<b>0.04</b>	<b>0.00</b>	<b>259.04</b>	<b>259.04</b>	<b>0.01</b>	<b>0.00</b>		<b>260.71</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

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

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					64.70	0.32	0.01	74.18
Unmitigated					76.19	0.40	0.01	88.01
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	12.7702 / 8.05077					74.53	0.39	0.01	86.17
Library	0.187733 / 0.293634					1.66	0.01	0.00	1.84
User Defined Recreational	0 / 0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>76.19</b>	<b>0.40</b>	<b>0.01</b>	<b>88.01</b>

### Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	10.2162 / 7.55967					63.24	0.31	0.01	72.58
Library	0.150187 / 0.275723					1.46	0.00	0.00	1.60
User Defined Recreational	0 / 0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>64.70</b>	<b>0.31</b>	<b>0.01</b>	<b>74.18</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

#### Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					9.71	0.57	0.00	21.77
Unmitigated					19.42	1.15	0.00	43.53
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	90.16					18.30	1.08	0.00	41.02
Library	5.53					1.12	0.07	0.00	2.52
User Defined Recreational	0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>19.42</b>	<b>1.15</b>	<b>0.00</b>	<b>43.54</b>

**Mitigated**

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	45.08					9.15	0.54	0.00	20.51
Library	2.765					0.56	0.03	0.00	1.26
User Defined Recreational	0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>9.71</b>	<b>0.57</b>	<b>0.00</b>	<b>21.77</b>

**9.0 Vegetation**

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**Bloomington Housing Project  
San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric
Library	6	1000sqft
User Defined Recreational	4	User Defined Unit
Apartments Low Rise	131	Dwelling Unit
Apartments Low Rise	65	Dwelling Unit

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>		<b>Utility Company</b>	Southern California Edison
<b>Climate Zone</b>	10		2.2		
		<b>Precipitation Freq (Days)</b>			

**1.3 User Entered Comments**

Project Characteristics - 32

Land Use - User Defined = community building, social services building, and leasing office

Construction Phase - anticipated construction schedule

Off-road Equipment - CARB load factors

Off-road Equipment - CARB load factors

Off-road Equipment - CARB load factors

- Off-road Equipment - CARB load factors
- Off-road Equipment - CARB load factors
- Trips and VMT - soil would be hauled across site
- Grading - maximum disturbed area = 5 acres per day
- Vehicle Trips - user defined = community services that would not generate trips
- Construction Off-road Equipment Mitigation -
- Mobile Land Use Mitigation - project would add a transit stop
- Area Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -

## 2.0 Emissions Summary

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### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	7.86	62.87	37.08	0.07	6.60	2.82	9.43	3.33	2.82	6.15	0.00	7,623.33	0.00	0.70	0.00	7,637.95
2015	44.15	28.52	31.63	0.06	2.89	1.78	4.67	0.12	1.78	1.90	0.00	5,934.69	0.00	0.45	0.00	5,944.15
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	7.86	62.87	37.08	0.07	2.93	2.82	5.75	1.43	2.82	4.25	0.00	7,623.33	0.00	0.70	0.00	7,637.95
2015	44.15	28.52	31.63	0.06	2.17	1.78	3.95	0.12	1.78	1.90	0.00	5,934.69	0.00	0.45	0.00	5,944.15
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 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	46.89	2.12	146.97	0.31		0.00	20.82		0.00	20.81	2,766.24	7,085.47		10.98	0.17	10,134.87
Energy	0.10	0.89	0.40	0.01		0.00	0.07		0.00	0.07		1,128.06		0.02	0.02	1,134.93
Mobile	12.43	33.78	125.04	0.17	17.88	1.22	19.10	0.62	1.22	1.84		17,834.60		0.91		17,853.69
Total	59.42	36.79	272.41	0.49	17.88	1.22	39.99	0.62	1.22	22.72	2,766.24	26,048.13		11.91	0.19	29,123.49

### 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	5.85	0.21	17.25	0.00		0.00	0.56		0.00	0.56	0.00	7,500.53		0.18	0.14	7,546.72
Energy	0.10	0.89	0.40	0.01		0.00	0.07		0.00	0.07		1,128.06		0.02	0.02	1,134.93
Mobile	11.54	30.64	113.52	0.15	15.93	1.09	17.03	0.55	1.09	1.65		15,943.84		0.82		15,961.05

Total	17.49	31.74	131.17	0.16	15.93	1.09	17.66	0.55	1.09	2.28	0.00	24,572.43		1.02	0.16	24,642.70
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### 3.0 Construction Detail

#### 3.1 Mitigation Measures Construction

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

#### 3.2 Grading - 2014

##### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					6.28	0.00	6.28	3.31	0.00	3.31						0.00
Off-Road	7.52	60.75	34.08	0.07		2.80	2.80		2.80	2.80		7,272.08		0.67		7,286.20
<b>Total</b>	<b>7.52</b>	<b>60.75</b>	<b>34.08</b>	<b>0.07</b>	<b>6.28</b>	<b>2.80</b>	<b>9.08</b>	<b>3.31</b>	<b>2.80</b>	<b>6.11</b>		<b>7,272.08</b>		<b>0.67</b>		<b>7,286.20</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	0.23	2.00	1.65	0.00	0.02	0.02	0.03	0.00	0.02	0.02	111.69		0.01		
Vendor	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
Worker	0.12	0.12	1.36	0.00	0.31	0.01	0.32	0.01	0.01	0.02	239.56		0.01			239.82
<b>Total</b>	<b>0.35</b>	<b>2.12</b>	<b>3.01</b>	<b>0.00</b>	<b>0.33</b>	<b>0.03</b>	<b>0.35</b>	<b>0.01</b>	<b>0.03</b>	<b>0.04</b>	<b>351.25</b>		<b>0.02</b>			<b>351.75</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.68	0.00	2.68	1.42	0.00	1.42						0.00
Off-Road	7.52	60.75	34.08	0.07		2.80	2.80		2.80	2.80	0.00	7,272.08		0.67		7,286.20
<b>Total</b>	<b>7.52</b>	<b>60.75</b>	<b>34.08</b>	<b>0.07</b>	<b>2.68</b>	<b>2.80</b>	<b>5.48</b>	<b>1.42</b>	<b>2.80</b>	<b>4.22</b>	<b>0.00</b>	<b>7,272.08</b>		<b>0.67</b>		<b>7,286.20</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	0.23	2.00	1.65	0.00	0.01	0.02	0.03	0.00	0.02	0.02	111.69		0.01			111.93
Vendor	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
Worker	0.12	0.12	1.36	0.00	0.23	0.01	0.24	0.01	0.01	0.02	239.56		0.01			239.82
<b>Total</b>	<b>0.35</b>	<b>2.12</b>	<b>3.01</b>	<b>0.00</b>	<b>0.24</b>	<b>0.03</b>	<b>0.27</b>	<b>0.01</b>	<b>0.03</b>	<b>0.04</b>	<b>351.25</b>		<b>0.02</b>			<b>351.75</b>

**3.3 Paving - 2015**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.31	20.42	13.93	0.02		1.72	1.72		1.72	1.72		1,979.14		0.30		1,985.40
Paving	0.00					0.00	0.00		0.00	0.00						0.00
<b>Total</b>	<b>3.31</b>	<b>20.42</b>	<b>13.93</b>	<b>0.02</b>		<b>1.72</b>	<b>1.72</b>		<b>1.72</b>	<b>1.72</b>		<b>1,979.14</b>		<b>0.30</b>		<b>1,985.40</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.08	0.08	0.93	0.00	0.23	0.01	0.24	0.01	0.01	0.02		175.65		0.01		175.83
<b>Total</b>	<b>0.08</b>	<b>0.08</b>	<b>0.93</b>	<b>0.00</b>	<b>0.23</b>	<b>0.01</b>	<b>0.24</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>		<b>175.65</b>		<b>0.01</b>		<b>175.83</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.31	20.42	13.93	0.02		1.72	1.72		1.72	1.72	0.00	1,979.14		0.30		1,985.40
Paving	0.00					0.00	0.00		0.00	0.00						0.00
<b>Total</b>	<b>3.31</b>	<b>20.42</b>	<b>13.93</b>	<b>0.02</b>		<b>1.72</b>	<b>1.72</b>		<b>1.72</b>	<b>1.72</b>	<b>0.00</b>	<b>1,979.14</b>		<b>0.30</b>		<b>1,985.40</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.08	0.08	0.93	0.00	0.17	0.01	0.18	0.01	0.01	0.02		175.65		0.01		175.83
<b>Total</b>	<b>0.08</b>	<b>0.08</b>	<b>0.93</b>	<b>0.00</b>	<b>0.17</b>	<b>0.01</b>	<b>0.18</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>		<b>175.65</b>		<b>0.01</b>		<b>175.83</b>

**3.4 Building Construction - 2015**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.35	21.89	17.33	0.03		1.38	1.38		1.38	1.38		2,982.97		0.30		2,989.30
<b>Total</b>	<b>3.35</b>	<b>21.89</b>	<b>17.33</b>	<b>0.03</b>		<b>1.38</b>	<b>1.38</b>		<b>1.38</b>	<b>1.38</b>		<b>2,982.97</b>		<b>0.30</b>		<b>2,989.30</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.25	3.15	1.62	0.01	0.21	0.10	0.32	0.02	0.10	0.12		632.98		0.01		633.24

Worker	0.80	0.76	8.99	0.02	2.23	0.07	2.29	0.08	0.07	0.15		1,697.95		0.08		1,699.71
<b>Total</b>	<b>1.05</b>	<b>3.91</b>	<b>10.61</b>	<b>0.03</b>	<b>2.44</b>	<b>0.17</b>	<b>2.61</b>	<b>0.10</b>	<b>0.17</b>	<b>0.27</b>		<b>2,330.93</b>		<b>0.09</b>		<b>2,332.95</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.35	21.89	17.33	0.03		1.38	1.38		1.38	1.38	0.00	2,982.97		0.30		2,989.30
<b>Total</b>	<b>3.35</b>	<b>21.89</b>	<b>17.33</b>	<b>0.03</b>		<b>1.38</b>	<b>1.38</b>		<b>1.38</b>	<b>1.38</b>	<b>0.00</b>	<b>2,982.97</b>		<b>0.30</b>		<b>2,989.30</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.25	3.15	1.62	0.01	0.16	0.10	0.26	0.02	0.10	0.12		632.98		0.01		633.24
Worker	0.80	0.76	8.99	0.02	1.67	0.07	1.73	0.08	0.07	0.15		1,697.95		0.08		1,699.71
<b>Total</b>	<b>1.05</b>	<b>3.91</b>	<b>10.61</b>	<b>0.03</b>	<b>1.83</b>	<b>0.17</b>	<b>1.99</b>	<b>0.10</b>	<b>0.17</b>	<b>0.27</b>		<b>2,330.93</b>		<b>0.09</b>		<b>2,332.95</b>

**3.5 Architectural Coating - 2015**

**Unmitigated Construction On-Site**

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

Archit. Coating	39.18					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22		281.19		0.04		281.96
<b>Total</b>	<b>39.59</b>	<b>2.57</b>	<b>1.90</b>	<b>0.00</b>		<b>0.22</b>	<b>0.22</b>		<b>0.22</b>	<b>0.22</b>		<b>281.19</b>		<b>0.04</b>		<b>281.96</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.16	0.15	1.80	0.00	0.45	0.01	0.46	0.02	0.01	0.03		339.59		0.02		339.94
<b>Total</b>	<b>0.16</b>	<b>0.15</b>	<b>1.80</b>	<b>0.00</b>	<b>0.45</b>	<b>0.01</b>	<b>0.46</b>	<b>0.02</b>	<b>0.01</b>	<b>0.03</b>		<b>339.59</b>		<b>0.02</b>		<b>339.94</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	39.18					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19		0.04		281.96
<b>Total</b>	<b>39.59</b>	<b>2.57</b>	<b>1.90</b>	<b>0.00</b>		<b>0.22</b>	<b>0.22</b>		<b>0.22</b>	<b>0.22</b>	<b>0.00</b>	<b>281.19</b>		<b>0.04</b>		<b>281.96</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.16	0.15	1.80	0.00	0.33	0.01	0.35	0.02	0.01	0.03		339.59		0.02		339.94
<b>Total</b>	<b>0.16</b>	<b>0.15</b>	<b>1.80</b>	<b>0.00</b>	<b>0.33</b>	<b>0.01</b>	<b>0.35</b>	<b>0.02</b>	<b>0.01</b>	<b>0.03</b>		<b>339.59</b>		<b>0.02</b>		<b>339.94</b>

## 4.0 Mobile Detail

### 4.1 Mitigation Measures Mobile

- Increase Density
- Increase Transit Accessibility
- Integrate Below Market Rate Housing
- Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.54	30.64	113.52	0.15	15.93	1.09	17.03	0.55	1.09	1.65		15,943.84		0.82		15,961.05
Unmitigated	12.43	33.78	125.04	0.17	17.88	1.22	19.10	0.62	1.22	1.84		17,834.60		0.91		17,853.69

Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	732.29	937.96	795.17	2,566,722	2,286,949
Apartments Low Rise	363.35	465.40	394.55	1,273,564	1,134,746
Library	337.44	279.30	152.94	650,944	579,991
User Defined Recreational	0.00	0.00	0.00		
Total	1,433.08	1,682.66	1,342.66	4,491,230	4,001,686

#### 4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Library	8.90	13.30	7.40	52.00	43.00	5.00
User Defined Recreational	8.90	13.30	7.40	0.00	0.00	0.00

### 5.0 Energy Detail

#### 5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.10	0.89	0.40	0.01		0.00	0.07		0.00	0.07		1,128.06		0.02	0.02	1,134.93
NaturalGas Unmitigated	0.10	0.89	0.40	0.01		0.00	0.07		0.00	0.07		1,128.06		0.02	0.02	1,134.93
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 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	lb/day										lb/day					
Apartments Low Rise	2998.38	0.03	0.28	0.12	0.00		0.00	0.02		0.00	0.02		352.75		0.01	0.01	354.90
Apartments Low Rise	6042.9	0.07	0.56	0.24	0.00		0.00	0.05		0.00	0.05		710.93		0.01	0.01	715.26
Library	547.233	0.01	0.05	0.05	0.00		0.00	0.00		0.00	0.00		64.38		0.00	0.00	64.77
User Defined Recreational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.11	0.89	0.41	0.00		0.00	0.07		0.00	0.07		1,128.06		0.02	0.02	1,134.93

### 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	lb/day										lb/day					
Apartments Low Rise	2.99838	0.03	0.28	0.12	0.00		0.00	0.02		0.00	0.02		352.75		0.01	0.01	354.90
Apartments Low Rise	6.0429	0.07	0.56	0.24	0.00		0.00	0.05		0.00	0.05		710.93		0.01	0.01	715.26
Library	0.547233	0.01	0.05	0.05	0.00		0.00	0.00		0.00	0.00		64.38		0.00	0.00	64.77

User Defined Recreational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
<b>Total</b>		<b>0.11</b>	<b>0.89</b>	<b>0.41</b>	<b>0.00</b>		<b>0.00</b>	<b>0.07</b>		<b>0.00</b>	<b>0.07</b>		<b>1,128.06</b>		<b>0.02</b>	<b>0.02</b>	<b>1,134.93</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use only Natural Gas Hearths
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.85	0.21	17.25	0.00		0.00	0.56		0.00	0.56	0.00	7,500.53		0.18	0.14	7,546.72
Unmitigated	46.89	2.12	146.97	0.31		0.00	20.82		0.00	20.81	2,766.24	7,085.47		10.98	0.17	10,134.87
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

### 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	0.48					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.08					0.00	0.00		0.00	0.00						0.00
Hearth	41.72	1.91	129.76	0.31		0.00	20.73		0.00	20.72	2,766.24	7,056.00		10.95	0.17	10,104.68
Landscaping	0.60	0.21	17.21	0.00		0.00	0.09		0.00	0.09		29.47		0.03		30.20
<b>Total</b>	<b>46.88</b>	<b>2.12</b>	<b>146.97</b>	<b>0.31</b>		<b>0.00</b>	<b>20.82</b>		<b>0.00</b>	<b>20.81</b>	<b>2,766.24</b>	<b>7,085.47</b>		<b>10.98</b>	<b>0.17</b>	<b>10,134.88</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	lb/day										lb/day					
Architectural Coating	0.48					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.08					0.00	0.00		0.00	0.00						0.00
Hearth	0.68	0.00	0.04	0.00		0.00	0.47		0.00	0.47	0.00	7,471.06		0.14	0.14	7,516.53
Landscaping	0.60	0.21	17.21	0.00		0.00	0.09		0.00	0.09		29.47		0.03		30.20
<b>Total</b>	<b>5.84</b>	<b>0.21</b>	<b>17.25</b>	<b>0.00</b>		<b>0.00</b>	<b>0.56</b>		<b>0.00</b>	<b>0.56</b>	<b>0.00</b>	<b>7,500.53</b>		<b>0.17</b>	<b>0.14</b>	<b>7,546.73</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## **8.0 Waste Detail**

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### **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

## **9.0 Vegetation**

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- Off-road Equipment - CARB load factors
- Off-road Equipment - CARB load factors
- Trips and VMT - soil would be hauled across site
- Grading - maximum disturbed area = 5 acres per day
- Vehicle Trips - user defined = community services that would not generate trips
- Construction Off-road Equipment Mitigation -
- Mobile Land Use Mitigation - project would add a transit stop
- Area Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -

## 2.0 Emissions Summary

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### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	7.90	62.73	37.55	0.07	6.60	2.83	9.43	3.33	2.83	6.16	0.00	7,581.72	0.00	0.70	0.00	7,596.36
2015	44.17	28.69	30.46	0.06	2.89	1.78	4.67	0.12	1.78	1.90	0.00	5,694.31	0.00	0.44	0.00	5,703.62
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	7.90	62.73	37.55	0.07	2.93	2.83	5.76	1.43	2.83	4.26	0.00	7,581.72	0.00	0.70	0.00	7,596.36
2015	44.17	28.69	30.46	0.06	2.17	1.78	3.95	0.12	1.78	1.90	0.00	5,694.31	0.00	0.44	0.00	5,703.62
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 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	46.89	2.12	146.97	0.31		0.00	20.82		0.00	20.81	2,766.24	7,085.47		10.98	0.17	10,134.87
Energy	0.10	0.89	0.40	0.01		0.00	0.07		0.00	0.07		1,128.06		0.02	0.02	1,134.93
Mobile	12.48	35.84	115.76	0.15	17.88	1.24	19.12	0.62	1.24	1.86		16,191.59		0.87		16,209.76
Total	59.47	38.85	263.13	0.47	17.88	1.24	40.01	0.62	1.24	22.74	2,766.24	24,405.12		11.87	0.19	27,479.56

### 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	5.85	0.21	17.25	0.00		0.00	0.56		0.00	0.56	0.00	7,500.53		0.18	0.14	7,546.72
Energy	0.10	0.89	0.40	0.01		0.00	0.07		0.00	0.07		1,128.06		0.02	0.02	1,134.93
Mobile	11.54	32.47	105.91	0.13	15.93	1.11	17.04	0.55	1.11	1.66		14,477.34		0.78		14,493.78

Total	17.49	33.57	123.56	0.14	15.93	1.11	17.67	0.55	1.11	2.29	0.00	23,105.93		0.98	0.16	23,175.43
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### 3.0 Construction Detail

#### 3.1 Mitigation Measures Construction

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

#### 3.2 Grading - 2014

##### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					6.28	0.00	6.28	3.31	0.00	3.31						0.00
Off-Road	7.52	60.75	34.08	0.07		2.80	2.80		2.80	2.80		7,272.08		0.67		7,286.20
<b>Total</b>	<b>7.52</b>	<b>60.75</b>	<b>34.08</b>	<b>0.07</b>	<b>6.28</b>	<b>2.80</b>	<b>9.08</b>	<b>3.31</b>	<b>2.80</b>	<b>6.11</b>		<b>7,272.08</b>		<b>0.67</b>		<b>7,286.20</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
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Category	lb/day										lb/day				
	Hauling	0.26	1.85	2.29	0.00	0.02	0.02	0.04	0.00	0.02	0.02	97.66		0.01	
Vendor	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
Worker	0.12	0.13	1.18	0.00	0.31	0.01	0.32	0.01	0.01	0.02	211.98		0.01		212.22
<b>Total</b>	<b>0.38</b>	<b>1.98</b>	<b>3.47</b>	<b>0.00</b>	<b>0.33</b>	<b>0.03</b>	<b>0.36</b>	<b>0.01</b>	<b>0.03</b>	<b>0.04</b>	<b>309.64</b>		<b>0.02</b>		<b>310.15</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.68	0.00	2.68	1.42	0.00	1.42						0.00
Off-Road	7.52	60.75	34.08	0.07		2.80	2.80		2.80	2.80	0.00	7,272.08		0.67		7,286.20
<b>Total</b>	<b>7.52</b>	<b>60.75</b>	<b>34.08</b>	<b>0.07</b>	<b>2.68</b>	<b>2.80</b>	<b>5.48</b>	<b>1.42</b>	<b>2.80</b>	<b>4.22</b>	<b>0.00</b>	<b>7,272.08</b>		<b>0.67</b>		<b>7,286.20</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	0.26	1.85	2.29	0.00	0.01	0.02	0.03	0.00	0.02	0.02	97.66		0.01		97.93	
Vendor	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	
Worker	0.12	0.13	1.18	0.00	0.23	0.01	0.24	0.01	0.01	0.02	211.98		0.01		212.22	
<b>Total</b>	<b>0.38</b>	<b>1.98</b>	<b>3.47</b>	<b>0.00</b>	<b>0.24</b>	<b>0.03</b>	<b>0.27</b>	<b>0.01</b>	<b>0.03</b>	<b>0.04</b>	<b>309.64</b>		<b>0.02</b>		<b>310.15</b>	

**3.3 Paving - 2015**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.31	20.42	13.93	0.02		1.72	1.72		1.72	1.72		1,979.14		0.30		1,985.40
Paving	0.00					0.00	0.00		0.00	0.00						0.00
<b>Total</b>	<b>3.31</b>	<b>20.42</b>	<b>13.93</b>	<b>0.02</b>		<b>1.72</b>	<b>1.72</b>		<b>1.72</b>	<b>1.72</b>		<b>1,979.14</b>		<b>0.30</b>		<b>1,985.40</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.08	0.09	0.81	0.00	0.23	0.01	0.24	0.01	0.01	0.02		155.40		0.01		155.57
<b>Total</b>	<b>0.08</b>	<b>0.09</b>	<b>0.81</b>	<b>0.00</b>	<b>0.23</b>	<b>0.01</b>	<b>0.24</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>		<b>155.40</b>		<b>0.01</b>		<b>155.57</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.31	20.42	13.93	0.02		1.72	1.72		1.72	1.72	0.00	1,979.14		0.30		1,985.40
Paving	0.00					0.00	0.00		0.00	0.00						0.00
<b>Total</b>	<b>3.31</b>	<b>20.42</b>	<b>13.93</b>	<b>0.02</b>		<b>1.72</b>	<b>1.72</b>		<b>1.72</b>	<b>1.72</b>	<b>0.00</b>	<b>1,979.14</b>		<b>0.30</b>		<b>1,985.40</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.08	0.09	0.81	0.00	0.17	0.01	0.18	0.01	0.01	0.02		155.40		0.01		155.57
<b>Total</b>	<b>0.08</b>	<b>0.09</b>	<b>0.81</b>	<b>0.00</b>	<b>0.17</b>	<b>0.01</b>	<b>0.18</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>		<b>155.40</b>		<b>0.01</b>		<b>155.57</b>

**3.4 Building Construction - 2015**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.35	21.89	17.33	0.03		1.38	1.38		1.38	1.38		2,982.97		0.30		2,989.30
<b>Total</b>	<b>3.35</b>	<b>21.89</b>	<b>17.33</b>	<b>0.03</b>		<b>1.38</b>	<b>1.38</b>		<b>1.38</b>	<b>1.38</b>		<b>2,982.97</b>		<b>0.30</b>		<b>2,989.30</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.26	3.23	1.87	0.01	0.21	0.10	0.32	0.02	0.10	0.12		627.48		0.01		627.75

Worker	0.80	0.84	7.79	0.02	2.23	0.07	2.29	0.08	0.07	0.15		1,502.22		0.08		1,503.84
<b>Total</b>	<b>1.06</b>	<b>4.07</b>	<b>9.66</b>	<b>0.03</b>	<b>2.44</b>	<b>0.17</b>	<b>2.61</b>	<b>0.10</b>	<b>0.17</b>	<b>0.27</b>		<b>2,129.70</b>		<b>0.09</b>		<b>2,131.59</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.35	21.89	17.33	0.03		1.38	1.38		1.38	1.38	0.00	2,982.97		0.30		2,989.30
<b>Total</b>	<b>3.35</b>	<b>21.89</b>	<b>17.33</b>	<b>0.03</b>		<b>1.38</b>	<b>1.38</b>		<b>1.38</b>	<b>1.38</b>	<b>0.00</b>	<b>2,982.97</b>		<b>0.30</b>		<b>2,989.30</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.26	3.23	1.87	0.01	0.16	0.10	0.27	0.02	0.10	0.12		627.48		0.01		627.75
Worker	0.80	0.84	7.79	0.02	1.67	0.07	1.73	0.08	0.07	0.15		1,502.22		0.08		1,503.84
<b>Total</b>	<b>1.06</b>	<b>4.07</b>	<b>9.66</b>	<b>0.03</b>	<b>1.83</b>	<b>0.17</b>	<b>2.00</b>	<b>0.10</b>	<b>0.17</b>	<b>0.27</b>		<b>2,129.70</b>		<b>0.09</b>		<b>2,131.59</b>

**3.5 Architectural Coating - 2015**

**Unmitigated Construction On-Site**

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

Archit. Coating	39.18					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22		281.19		0.04		281.96
<b>Total</b>	<b>39.59</b>	<b>2.57</b>	<b>1.90</b>	<b>0.00</b>		<b>0.22</b>	<b>0.22</b>		<b>0.22</b>	<b>0.22</b>		<b>281.19</b>		<b>0.04</b>		<b>281.96</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.16	0.17	1.56	0.00	0.45	0.01	0.46	0.02	0.01	0.03		300.44		0.02		300.77
<b>Total</b>	<b>0.16</b>	<b>0.17</b>	<b>1.56</b>	<b>0.00</b>	<b>0.45</b>	<b>0.01</b>	<b>0.46</b>	<b>0.02</b>	<b>0.01</b>	<b>0.03</b>		<b>300.44</b>		<b>0.02</b>		<b>300.77</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	39.18					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19		0.04		281.96
<b>Total</b>	<b>39.59</b>	<b>2.57</b>	<b>1.90</b>	<b>0.00</b>		<b>0.22</b>	<b>0.22</b>		<b>0.22</b>	<b>0.22</b>	<b>0.00</b>	<b>281.19</b>		<b>0.04</b>		<b>281.96</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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.16	0.17	1.56	0.00	0.33	0.01	0.35	0.02	0.01	0.03		300.44		0.02		300.77
<b>Total</b>	<b>0.16</b>	<b>0.17</b>	<b>1.56</b>	<b>0.00</b>	<b>0.33</b>	<b>0.01</b>	<b>0.35</b>	<b>0.02</b>	<b>0.01</b>	<b>0.03</b>		<b>300.44</b>		<b>0.02</b>		<b>300.77</b>

## 4.0 Mobile Detail

### 4.1 Mitigation Measures Mobile

- Increase Density
- Increase Transit Accessibility
- Integrate Below Market Rate Housing
- Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.54	32.47	105.91	0.13	15.93	1.11	17.04	0.55	1.11	1.66		14,477.34		0.78		14,493.78
Unmitigated	12.48	35.84	115.76	0.15	17.88	1.24	19.12	0.62	1.24	1.86		16,191.59		0.87		16,209.76

Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	732.29	937.96	795.17	2,566,722	2,286,949
Apartments Low Rise	363.35	465.40	394.55	1,273,564	1,134,746
Library	337.44	279.30	152.94	650,944	579,991
User Defined Recreational	0.00	0.00	0.00		
Total	1,433.08	1,682.66	1,342.66	4,491,230	4,001,686

#### 4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Library	8.90	13.30	7.40	52.00	43.00	5.00
User Defined Recreational	8.90	13.30	7.40	0.00	0.00	0.00

### 5.0 Energy Detail

#### 5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.10	0.89	0.40	0.01		0.00	0.07		0.00	0.07		1,128.06		0.02	0.02	1,134.93
NaturalGas Unmitigated	0.10	0.89	0.40	0.01		0.00	0.07		0.00	0.07		1,128.06		0.02	0.02	1,134.93
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 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	lb/day										lb/day					
Apartments Low Rise	2998.38	0.03	0.28	0.12	0.00		0.00	0.02		0.00	0.02		352.75		0.01	0.01	354.90
Apartments Low Rise	6042.9	0.07	0.56	0.24	0.00		0.00	0.05		0.00	0.05		710.93		0.01	0.01	715.26
Library	547.233	0.01	0.05	0.05	0.00		0.00	0.00		0.00	0.00		64.38		0.00	0.00	64.77
User Defined Recreational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.11	0.89	0.41	0.00		0.00	0.07		0.00	0.07		1,128.06		0.02	0.02	1,134.93

### 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	lb/day										lb/day					
Apartments Low Rise	2.99838	0.03	0.28	0.12	0.00		0.00	0.02		0.00	0.02		352.75		0.01	0.01	354.90
Apartments Low Rise	6.0429	0.07	0.56	0.24	0.00		0.00	0.05		0.00	0.05		710.93		0.01	0.01	715.26
Library	0.547233	0.01	0.05	0.05	0.00		0.00	0.00		0.00	0.00		64.38		0.00	0.00	64.77

User Defined Recreational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
<b>Total</b>		<b>0.11</b>	<b>0.89</b>	<b>0.41</b>	<b>0.00</b>		<b>0.00</b>	<b>0.07</b>		<b>0.00</b>	<b>0.07</b>		<b>1,128.06</b>		<b>0.02</b>	<b>0.02</b>	<b>1,134.93</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use only Natural Gas Hearths
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.85	0.21	17.25	0.00		0.00	0.56		0.00	0.56	0.00	7,500.53		0.18	0.14	7,546.72
Unmitigated	46.89	2.12	146.97	0.31		0.00	20.82		0.00	20.81	2,766.24	7,085.47		10.98	0.17	10,134.87
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

### 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	0.48					0.00	0.00		0.00	0.00							0.00
Consumer Products	4.08					0.00	0.00		0.00	0.00							0.00
Hearth	41.72	1.91	129.76	0.31		0.00	20.73		0.00	20.72	2,766.24	7,056.00		10.95	0.17		10,104.68
Landscaping	0.60	0.21	17.21	0.00		0.00	0.09		0.00	0.09		29.47		0.03			30.20
<b>Total</b>	<b>46.88</b>	<b>2.12</b>	<b>146.97</b>	<b>0.31</b>		<b>0.00</b>	<b>20.82</b>		<b>0.00</b>	<b>20.81</b>	<b>2,766.24</b>	<b>7,085.47</b>		<b>10.98</b>	<b>0.17</b>		<b>10,134.88</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	lb/day										lb/day						
Architectural Coating	0.48					0.00	0.00		0.00	0.00							0.00
Consumer Products	4.08					0.00	0.00		0.00	0.00							0.00
Hearth	0.68	0.00	0.04	0.00		0.00	0.47		0.00	0.47	0.00	7,471.06		0.14	0.14		7,516.53
Landscaping	0.60	0.21	17.21	0.00		0.00	0.09		0.00	0.09		29.47		0.03			30.20
<b>Total</b>	<b>5.84</b>	<b>0.21</b>	<b>17.25</b>	<b>0.00</b>		<b>0.00</b>	<b>0.56</b>		<b>0.00</b>	<b>0.56</b>	<b>0.00</b>	<b>7,500.53</b>		<b>0.17</b>	<b>0.14</b>		<b>7,546.73</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

## **8.0 Waste Detail**

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### **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

## **9.0 Vegetation**

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