

January 4, 2022

Ms. Michelle Fox  
COZAD & FOX, INC.  
151 South Girard Street  
Hemet, CA 92544

**Subject: 2nd Street Improvement Project Air Quality, Greenhouse Gas and Energy Analysis, City of Beaumont, CA**

Dear Ms. Fox:

**1.0 Introduction**

RK ENGINEERING GROUP, INC. (RK) is pleased to provide this focused air quality, greenhouse gas and energy analysis for the proposed 2nd Street Improvement Project, located in the City of Beaumont.

The purpose of this study is to calculate the estimated criteria air pollutants and greenhouse gas emissions associated with the construction of the proposed project and compare the results to the established thresholds used by the South Coast Air Quality Management District (SCAQMD). This assessment was conducted within the context of the California Environmental Quality Act (CEQA) and the methodology and emission factors used in this analysis are endorsed by the SCAQMD and the California Air Resource Board (CARB).

**1.1 Project Description**

The project consists of extending 2nd Street, from the westerly boundary of the Home Depot shopping center to Pennsylvania Avenue. The improvements include extending 2<sup>nd</sup> Street approximately 1,622 linear feet from the current terminus at the westerly boundary of First Street Self and RV Storage, to Pennsylvania Avenue to add 4 new travel lanes. Also, this project entails widening approximately 846 linear feet of 2nd Street from its current

terminus to the westerly boundary of the Home Depot shopping center. The project will require construction of a new storm drain facility and may require improvements to existing drainage.

Table 1 summarizes the proposed improvements.

**Table 1**  
**Proposed Development**

<b>Proposed Improvements</b>	<b>Square Feet</b>
Proposed New Roadway	153,749
Proposed Concrete Sidewalk	8,829
<b>Total</b>	<b>162,578</b>

A location map is shown in Exhibit A.

Construction activity is expected to consist of demolishing the existing asphalt concrete on site (approximately 23,064 square feet), site preparation, grading, construction, paving, and roadway striping. Construction activities are expected to begin in year 2022 and last approximately for 14 months. The estimated project opening year is 2023.

## **1.2 Environmental Setting**

The project is located in the SCAQMD Banning Pass General Forecast Area and the Banning Pass Monitoring Area-29.

The nearest sensitive receptors to the project are residential land uses located south of 1st Street, approximately 550 feet from the project site (more than 25 meters away). Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. The SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24-hours or longer, such as residencies, hospitals, and schools.

## 2.0 Air Quality Analysis

The following section summarizes the results of the daily air quality emissions analysis. Air Quality emissions have been quantified using the California Emissions Estimator Model Version 2020.4.0 (CalEEMod). Project emissions are compared to the SCAQMD established thresholds of significance.

### 2.1 SCAQMD Air Quality Significance Thresholds

The SCAQMD has established air quality emissions thresholds for criteria air pollutants for the purposes of determining whether a project may have a significant effect on the environment per Section 15002(g) of the Guidelines for implementing CEQA. By reducing emissions to be below the thresholds of significance, the project would be in compliance with the SCAQMD Air Quality Management Plan (AQMP) and the federal and state air quality standards.

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health. Table 2 lists the air quality significance thresholds for the six air pollutants analyzed in this report.

**Table 2**  
**SCAQMD Regional Significance Thresholds**

Mass Daily Thresholds <sup>1</sup>		
Pollutant	Construction (lbs/day)	Operation (lbs/day)
NO <sub>x</sub>	100	55
VOC	75	55
PM <sub>10</sub>	150	150
PM <sub>2.5</sub>	55	55
SO <sub>x</sub>	150	150
CO	550	550

<sup>1</sup> Source: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significancethresholds.pdf>

## 2.2 Air Quality Emissions (lbs/day) – Construction

Project construction air quality emissions are calculated using CalEEMod Version 2020.4.0. CalEEMod default values are used for construction phasing, timing, equipment usage and emissions factors. Construction emissions include standard fugitive dust control measures that are required per SCAQMD Rule 403. Fugitive dust control design features are discussed in the recommendations section of this report. CalEEMod daily emissions output calculations are provided in Appendix A.

Table 3 shows the project’s construction related emissions. Daily emissions include both on-site and off-site emissions and represent the worst-case daily emissions during summer or winter. Air quality emissions are compared to the SCAQMD Regional Significance Thresholds.

**Table 3**  
**Daily Construction Air Quality Emissions**

Activity	Air Pollutant Emissions (lbs/day) <sup>1</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Demolition	2.71	26.47	21.34	0.04	1.95	1.30
Site Preparation	3.24	33.13	20.42	0.04	9.33	5.40
Grading	2.38	36.91	19.25	0.10	6.12	2.97
Construction	2.02	17.00	19.47	0.04	1.76	1.03
Paving	1.53	8.84	12.92	0.02	0.66	0.46
Architectural Coating	2.75	1.34	2.32	0.00	0.23	0.11
<b>Maximum<sup>1</sup></b>	<b>3.24</b>	<b>36.91</b>	<b>20.42</b>	<b>0.10</b>	<b>9.33</b>	<b>5.40</b>
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

<sup>1</sup> Air pollutant emissions include both on-site and off-site activities and represent the worst-case daily emissions during either summer or winter.

Table 4 illustrates the construction related localized emissions and compares the results to SCAQMD Localized Significance Thresholds (LST). As shown in Table 4, construction emissions will be below the SCAQMD thresholds of significance for localized construction emissions. The project must follow all standard SCAQMD rules and requirements with

regards to fugitive dust control, as described in Section 6.1.3. Compliance with the dust control is considered a standard requirement and included as part of the project’s design features, not mitigation. **The project’s short-term construction impact to localized air resources is less than significant.**

**Table 4  
 Localized Construction Emissions**

Maximum Daily Emissions (lbs/day) <sup>1</sup>				
Activity	NOx	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
On-site Emissions	33.08	20.59	9.13	5.35
SCAQMD Construction Threshold <sup>2</sup>	333.0	5,534.0	104.0	25.0
Exceeds Threshold (?)	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

<sup>1</sup> Maximum daily emission during summer or winter; includes on-site project emissions only.

<sup>2</sup> Reference 2006-2008 SCAQMD Mass Rate Localized Significant Thresholds for construction and operation. SRA-29, Banning Airport, 5-acre site, receptor distance 100 meters.

### 2.3 Air Quality Emissions (lbs/day) – Operations

The project is not expected to induce new automobile travel that would lead to area-wide increases in vehicle miles traveled (VMT) beyond what was already accounted for in the Beaumont General Plan EIR. The purpose of the project is to alleviate traffic congestion on 1st street and provide more direct access to/from the commercial developments (Home Depot, etc.) and Pennsylvania Avenue.

Hence, once the project is operational, it is not expected to generate new air quality or GHG emissions in any significant quantity. Hence, regional mobile emissions associated with VMT from the buildout of the project are not expected to change and are not included in the scope of this analysis.

Minimal amounts of operational sources of emissions include area sources, such as from the periodic re-application of paving and roadway striping.

Daily operational emissions represent the worst-case levels during summer or winter and are compared to the SCAQMD Significance Thresholds.

Table 5 shows the project’s operational emissions.

**Table 5  
 Daily Operational Air Quality Emissions**

Activity	Air Pollutant Emissions (lbs/day) <sup>1</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Sources	0.07	0.00	0.02	0.00	0.00	0.00
<b>Total</b>	<b>0.07</b>	<b>0.00</b>	<b>0.02</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold (?)	No	No	No	No	No	No

<sup>1</sup> Air pollutant emissions represent the worst-case daily emissions during either summer or winter.

### **3.0 Greenhouse Gas Analysis**

The following section summarizes the results of the annual GHG emissions analysis. GHG emissions have been quantified using the California Emissions Estimator Model Version 2020.4.0 (CalEEMod). Project emissions are compared to the interim SCAQMD thresholds of significance.

#### **3.1 SCAQMD GHG Interim Significance Thresholds**

The SCAQMD has published the *Interim CEQA Greenhouse Gas (GHG) Significance Thresholds, December 2008*, to assist local agencies with determining the impact of a project's GHG emissions. SCAQMD's objective in providing the GHG guidelines is to establish a performance standard that will ultimately contribute to reducing GHG emissions below 1990 levels, and thus achieve the requirements of the California Global Warming Solutions Act (AB 32).

In the absence of a formal threshold established by the State, SCAQMD's interim GHG threshold has been established for use by lead agencies in determining significance of GHG emissions in CEQA. SCAQMD recommends that if a project exceeds 3,000 MTCO<sub>2</sub>e/yr, then the impact is considered significant, and mitigation measures would be required to reduce emissions below the threshold.

For purposes of this analysis, a 3,000 MTCO<sub>2</sub>e/year threshold of significance is used for assessing GHG impacts.

### 3.2 Construction GHG Emissions (MTCO<sub>2</sub>e/yr)

Greenhouse gas emissions are estimated for on-site and off-site construction activity using CalEEMod. Table 6 shows the construction greenhouse gas emissions, including equipment and worker vehicle emissions for all phases of construction. Construction emissions are amortized over 30 years and added to the long-term operational emissions, pursuant to SCAQMD recommendations.

CalEEMod annual GHG output calculations are provided in Appendix B.

**Table 6**  
**Construction Greenhouse Gas Emissions**

Activity	Emissions (MTCO <sub>2</sub> e) <sup>1</sup>		
	On-site	Off-site	Total
Demolition	34.23	4.38	38.61
Site Preparation	8.43	0.39	8.82
Grading	10.51	28.24	38.75
Building Construction	268.08	125.31	393.39
Paving	14.86	1.54	16.40
Architectural Coating	2.30	1.08	3.38
Total	338.41	160.94	499.35
30 Year Amortization <sup>2</sup>	11.28	5.36	16.65

<sup>1</sup> MTCO<sub>2</sub>e = metric tons of carbon dioxide equivalents (includes carbon dioxide, methane, nitrous oxide, and/or hydrofluorocarbon).

<sup>2</sup> The emissions are amortized over 30 years and added to the operational emissions, pursuant to SCAQMD recommendations.

Because impacts from construction activities occur over a relatively short-term period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. By itself, the construction activities from this project are less than significant when compared to the thresholds recommended by SCAQMD. However, SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime and

added to the overall project operational emissions. In doing so, construction GHG emissions are included in the overall contribution of the project, as further discussed in the following section.

### 3.3 Operational GHG Emissions (MTCO<sub>2</sub>e/yr)

Greenhouse gas emissions are estimated for operational activity using CalEEMod. The roadway project is not expected to significantly change the vehicle miles traveled (VMT) in the vicinity of the site. Therefore, the operational impacts associated with mobile greenhouse gas emissions are considered to be nominal. The purpose of the project is to alleviate traffic congestion on 1st street and provide more direct access to/from the commercial developments (Home Depot, etc.) and Pennsylvania Avenue.

Hence, once the project is operational, it is not expected to generate new GHG emissions in any significant quantity. Hence, regional mobile emissions associated with VMT from the buildout of the project are not expected to change and are not included in the scope of this analysis.

Greenhouse gas emissions from area sources and energy sources (street lighting) are shown in Table 7. CalEEMod annual GHG output calculations are provided in Appendix B.

**Table 7**  
**Operational Greenhouse Gas Emissions**

Emission Source	GHG Emissions (MTCO <sub>2</sub> e) <sup>1</sup>
Energy Source <sup>3</sup>	13.78
Area Source	0.00
Construction (30-year amortization)	16.65
<b>Total Annual Emissions</b>	<b>30.43</b>
SCAQMD Tier 3 Screening Threshold <sup>2</sup>	3,000
Exceed Tier 3 Threshold?	No

<sup>1</sup> MTCO<sub>2</sub>e = metric tons of carbon dioxide equivalents

<sup>2</sup> Per South Coast Air Quality Management District (SCAQMD) Draft Guidance Document - Interim CEQA Greenhouse Gas (GHG) Significance Threshold, October 2008

<sup>3</sup> Electricity usage from street lighting.



#### **4.0 Energy Conservation Analysis**

A qualitative energy conservation analysis is provide to help ensure the project reduces wasteful, inefficient and unnecessary consumption of energy during construction and operation. CEQA Guidelines, Appendix F, Energy Conservation, describes the framework within which energy conservation should be analyzed. Conserving energy implies the wise and efficient use of energy through decreasing overall per capita energy consumption, decreasing reliance on fossil fuels (such as coal, natural gas and oil), and increasing reliance on renewable energy sources.

A potentially significant impact may occur due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation, or if the project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Temporary construction energy usage would primarily consist of petroleum usage (diesel and gasoline) for off-road equipment and worker/hauling vehicle trips. Several construction management recommendations are provided that will help minimize wasteful, inefficient or unnecessary energy consumption during construction. This includes minimizing engine idling times and the simultaneous operation of multiple pieces of equipment, establishing an electrical supply to the site, and utilizing recycled aggregate. See Section 5.0 for a complete list of the recommended project design features. With the implementation of the recommended design features, the project impact is considered less than significant.

Operational energy usage would primarily consist of electricity for street lighting. It is recommended that all street light luminaires to be LED. The project is not expected to induce new automobile travel that would lead to area-wide increases in vehicle miles traveled (VMT). Hence, increased gasoline usage associated with vehicle trips from the buildout of the project would be negligible. Therefore, it can be reasonably concluded that the project would not result in the wasteful, inefficient or unnecessary usage of energy during operation.

The project will also comply with Senate Bill (SB) 100, the State's landmark policy that require renewable energy and zero carbon resources supply 100 percent of electric retail sales by 2045. By obtaining electricity used for street lighting through Southern California Edison (SCE), the project will ensure compliance with SB 100. Therefore, the project is not expected to conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

## 5.0 Recommendations

The following recommendations included standard rules and requirements and general best practices for the project to follow during construction and operation.

### *Construction Recommendations*

1. Follow the standard SCAQMD rules and requirements with regards to fugitive dust control, which includes, but are not limited to the following:
  - All active construction areas shall be watered two (2) times daily.
  - Speed on unpaved roads shall be reduced to less than 15 mph.
  - Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.
  - Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered twice daily.
  - All operations on any unpaved surface shall be suspended if winds exceed 15 mph.
  - Access points shall be washed or swept daily.
  - Construction sites shall be sandbagged for erosion control.
  - Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
  - Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least 2 feet of freeboard space in accordance with the requirements of California Vehicle Code (CVC) section 23114.
  - Pave or gravel construction access roads at least 100 feet onto the site from the main road and use gravel aprons at truck exits.
  - Replace the ground cover of disturbed areas as quickly possible.
  - A fugitive dust control plan should be prepared and submitted to SCAQMD prior to the start of construction.
2. Construction equipment should be maintained in proper tune.
3. All construction vehicles should be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.
4. Minimize the simultaneous operation of multiple construction equipment units.

5. The use of heavy construction equipment and earthmoving activity should be suspended during Air Alerts when the Air Quality Index reaches the “Unhealthy” level.
6. Utilize low emission “clean diesel” equipment with new or modified engines that include diesel oxidation catalysts, diesel particulate filters or Moyer Program retrofits that meet CARB best available control technology. Tier 4 engines should be utilized, whenever possible.
7. Establish an electricity supply to the construction site and use electric powered equipment instead of diesel-powered equipment or generators, where feasible.
8. Use haul trucks with on-road engines instead of off-road engines for on-site hauling.
9. Use recycled concrete or asphalt aggregate from on-site demolition for road base or other applications, to the extent feasible.

*Operational Recommendations*

10. Install energy efficient LED street light luminaires.
11. Install drought tolerant parkway landscaping and utilize reclaimed or recycled water.

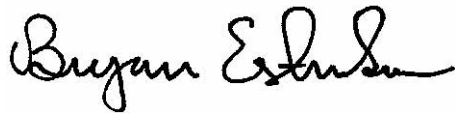
**6.0 Conclusion**

RK has completed this focused 2nd Street Improvement Project Air Quality, Greenhouse Gas, and Energy Impact Analysis. This assessment was conducted within the context of the California Environmental Quality Act (CEQA) and the methodology and emission factors used in this analysis are endorsed by the SCAQMD and the California Air Resource Board (CARB). Based upon this review, the proposed project impact is considered less than significant.

Ms. Michelle Fox  
COZAD & FOX, INC.  
RK16672.2

If you have any questions regarding this study, or would like further review, please do not hesitate to contact us at (949) 474-0809 or [be@rkengineer.com](mailto:be@rkengineer.com).

Sincerely,  
RK ENGINEERING GROUP, INC.



Bryan Estrada, AICP, PTP  
Principal



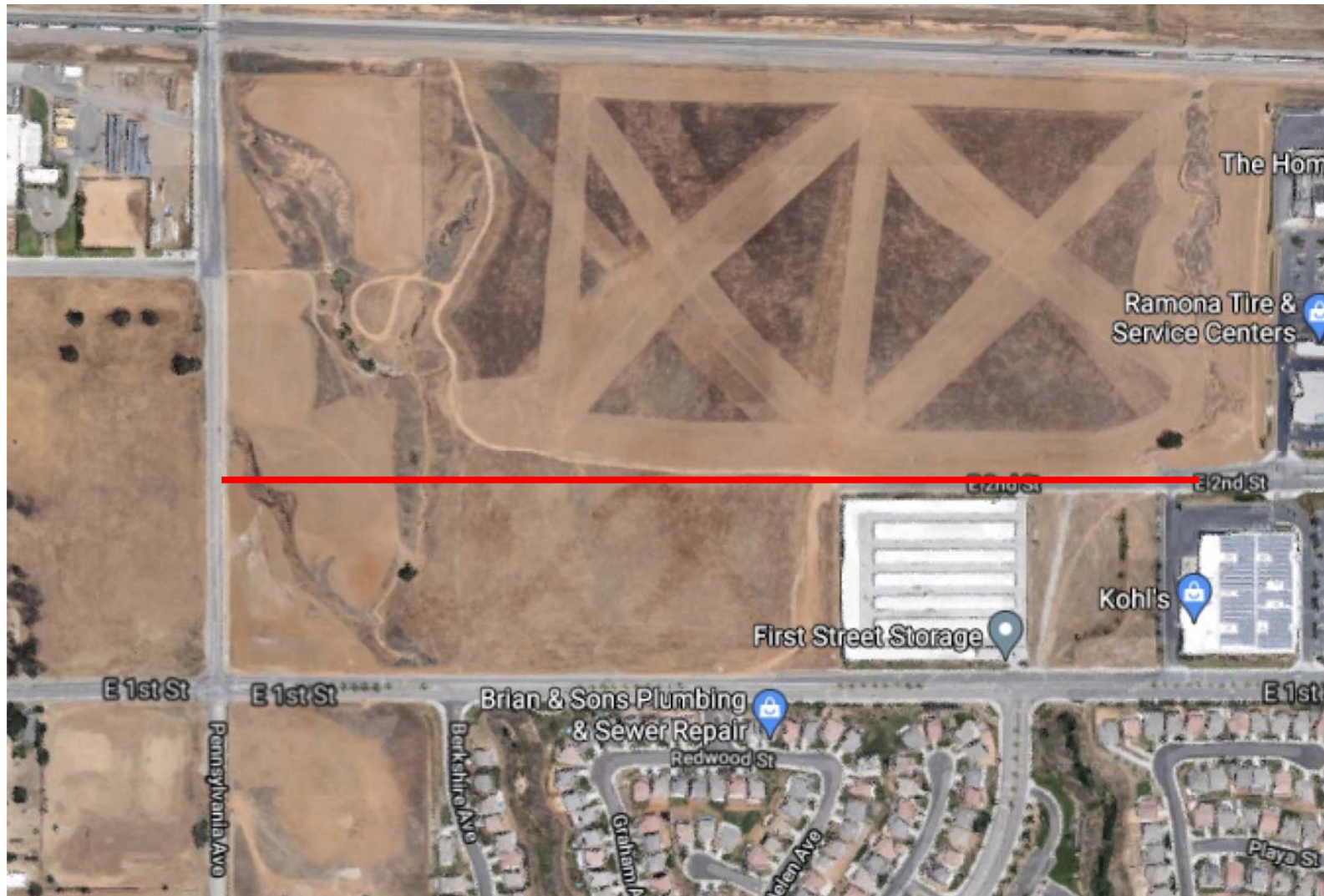
Darshan Shivaiah, M.S  
Environmental Specialist

Attachments  
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# Exhibits

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**Legend:**

— = Proposed 2nd Street Improvement



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# Appendices

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## **Appendix A**

Daily Criteria Air Pollutant  
Emissions Calculations (lbs/day)



2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2nd Street Improvement Project Air Quality and GHG Analysis**

**Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	162.58	1000sqft	3.73	162,578.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2023
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	531.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

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

Project Characteristics -

Land Use - Project consists of extending and widening 2nd Street from the westerly boundary of the Home Depot shopping center to Pennsylvania Avenue.

Grading - 3,054 cubic yards and fill: 10,666 cubic yards and total net adjusted: 7,608 cubic yards of import.

Demolition - The project is proposing to demolish approximately 23,064 square feet of roadway.

Construction Off-road Equipment Mitigation - Project will be required to comply with SCAQMD Rule 403 regarding Fugitive Dust Control.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialImported	0.00	7,608.00

**2.0 Emissions Summary**

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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					
2022	3.2411	36.0755	21.3412	0.0995	19.8582	1.6136	21.4718	10.1558	1.4845	11.6403	0.0000	10,318.29 85	10,318.29 85	1.1968	1.1524	10,687.49 17
2023	2.7547	15.4205	19.1018	0.0384	0.9330	0.7110	1.6440	0.2514	0.6691	0.9204	0.0000	3,739.659 7	3,739.659 7	0.6286	0.0899	3,782.155 8
<b>Maximum</b>	<b>3.2411</b>	<b>36.0755</b>	<b>21.3412</b>	<b>0.0995</b>	<b>19.8582</b>	<b>1.6136</b>	<b>21.4718</b>	<b>10.1558</b>	<b>1.4845</b>	<b>11.6403</b>	<b>0.0000</b>	<b>10,318.29 85</b>	<b>10,318.29 85</b>	<b>1.1968</b>	<b>1.1524</b>	<b>10,687.49 17</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.2411	36.0755	21.3412	0.0995	7.7200	1.6136	9.3336	3.9176	1.4845	5.4020	0.0000	10,318.29 85	10,318.29 85	1.1968	1.1524	10,687.49 17
2023	2.7547	15.4205	19.1018	0.0384	0.9330	0.7110	1.6440	0.2514	0.6691	0.9204	0.0000	3,739.659 7	3,739.659 7	0.6286	0.0899	3,782.155 7
<b>Maximum</b>	<b>3.2411</b>	<b>36.0755</b>	<b>21.3412</b>	<b>0.0995</b>	<b>7.7200</b>	<b>1.6136</b>	<b>9.3336</b>	<b>3.9176</b>	<b>1.4845</b>	<b>5.4020</b>	<b>0.0000</b>	<b>10,318.29 85</b>	<b>10,318.29 85</b>	<b>1.1968</b>	<b>1.1524</b>	<b>10,687.49 17</b>

## 2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	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	58.38	0.00	52.51	59.94	0.00	49.66	0.00	0.00	0.00	0.00	0.00	0.00

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	0.0715	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379
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	0.0000
<b>Total</b>	<b>0.0715</b>	<b>1.5000e-004</b>	<b>0.0166</b>	<b>0.0000</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>0.0356</b>	<b>0.0356</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.0379</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	0.0715	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379
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	0.0000
<b>Total</b>	<b>0.0715</b>	<b>1.5000e-004</b>	<b>0.0166</b>	<b>0.0000</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>0.0356</b>	<b>0.0356</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.0379</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	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	Demolition	Demolition	1/3/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/4/2022	5	5	
3	Grading	Grading	2/5/2022	2/16/2022	5	8	
4	Building Construction	Building Construction	2/17/2022	1/4/2023	5	230	
5	Paving	Paving	1/5/2023	1/30/2023	5	18	
6	Architectural Coating	Architectural Coating	1/31/2023	2/23/2023	5	18	

**Acres of Grading (Site Preparation Phase): 7.5**

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

**Acres of Paving: 3.73**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 9,755 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	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
Demolition	6	15.00	0.00	105.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	951.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	68.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Soil Stabilizer

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1422	0.0000	1.1422	0.1729	0.0000	0.1729			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>1.1422</b>	<b>1.2427</b>	<b>2.3848</b>	<b>0.1729</b>	<b>1.1553</b>	<b>1.3282</b>		<b>3,746.781 2</b>	<b>3,746.781 2</b>	<b>1.0524</b>		<b>3,773.092 0</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2022**

**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	0.0166	0.6705	0.1491	3.0200e-003	0.0919	7.7900e-003	0.0997	0.0252	7.4600e-003	0.0327		322.0098	322.0098	4.3600e-003	0.0507	337.2348
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
Worker	0.0591	0.0383	0.5980	1.5200e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		155.0309	155.0309	3.8400e-003	3.8100e-003	156.2632
<b>Total</b>	<b>0.0757</b>	<b>0.7088</b>	<b>0.7471</b>	<b>4.5400e-003</b>	<b>0.2596</b>	<b>8.6300e-003</b>	<b>0.2682</b>	<b>0.0697</b>	<b>8.2300e-003</b>	<b>0.0779</b>		<b>477.0406</b>	<b>477.0406</b>	<b>8.2000e-003</b>	<b>0.0545</b>	<b>493.4980</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4369	0.0000	0.4369	0.0662	0.0000	0.0662			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>0.4369</b>	<b>1.2427</b>	<b>1.6795</b>	<b>0.0662</b>	<b>1.1553</b>	<b>1.2214</b>	<b>0.0000</b>	<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>



2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2022**

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	0.0166	0.6705	0.1491	3.0200e-003	0.0919	7.7900e-003	0.0997	0.0252	7.4600e-003	0.0327		322.0098	322.0098	4.3600e-003	0.0507	337.2348
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
Worker	0.0591	0.0383	0.5980	1.5200e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		155.0309	155.0309	3.8400e-003	3.8100e-003	156.2632
<b>Total</b>	<b>0.0757</b>	<b>0.7088</b>	<b>0.7471</b>	<b>4.5400e-003</b>	<b>0.2596</b>	<b>8.6300e-003</b>	<b>0.2682</b>	<b>0.0697</b>	<b>8.2300e-003</b>	<b>0.0779</b>		<b>477.0406</b>	<b>477.0406</b>	<b>8.2000e-003</b>	<b>0.0545</b>	<b>493.4980</b>

**3.3 Site Preparation - 2022**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>19.6570</b>	<b>1.6126</b>	<b>21.2696</b>	<b>10.1025</b>	<b>1.4836</b>	<b>11.5860</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2022**

**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	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
Worker	0.0709	0.0460	0.7176	1.8300e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		186.0370	186.0370	4.6100e-003	4.5800e-003	187.5158
<b>Total</b>	<b>0.0709</b>	<b>0.0460</b>	<b>0.7176</b>	<b>1.8300e-003</b>	<b>0.2012</b>	<b>1.0000e-003</b>	<b>0.2022</b>	<b>0.0534</b>	<b>9.2000e-004</b>	<b>0.0543</b>		<b>186.0370</b>	<b>186.0370</b>	<b>4.6100e-003</b>	<b>4.5800e-003</b>	<b>187.5158</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.5188	0.0000	7.5188	3.8642	0.0000	3.8642			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>7.5188</b>	<b>1.6126</b>	<b>9.1314</b>	<b>3.8642</b>	<b>1.4836</b>	<b>5.3478</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2022**

**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	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
Worker	0.0709	0.0460	0.7176	1.8300e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		186.0370	186.0370	4.6100e-003	4.5800e-003	187.5158
<b>Total</b>	<b>0.0709</b>	<b>0.0460</b>	<b>0.7176</b>	<b>1.8300e-003</b>	<b>0.2012</b>	<b>1.0000e-003</b>	<b>0.2022</b>	<b>0.0534</b>	<b>9.2000e-004</b>	<b>0.0543</b>		<b>186.0370</b>	<b>186.0370</b>	<b>4.6100e-003</b>	<b>4.5800e-003</b>	<b>187.5158</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2030	0.0000	7.2030	3.4430	0.0000	3.4430			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>7.2030</b>	<b>0.9409</b>	<b>8.1439</b>	<b>3.4430</b>	<b>0.8656</b>	<b>4.3086</b>		<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2022**

**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	0.3759	15.1821	3.3761	0.0684	2.0806	0.1765	2.2571	0.5704	0.1688	0.7393		7,291.221 2	7,291.221 2	0.0986	1.1486	7,635.960 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0591	0.0383	0.5980	1.5200e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		155.0309	155.0309	3.8400e-003	3.8100e-003	156.2632
<b>Total</b>	<b>0.4350</b>	<b>15.2204</b>	<b>3.9741</b>	<b>0.0699</b>	<b>2.2483</b>	<b>0.1773</b>	<b>2.4256</b>	<b>0.6149</b>	<b>0.1696</b>	<b>0.7845</b>		<b>7,446.252 1</b>	<b>7,446.252 1</b>	<b>0.1025</b>	<b>1.1524</b>	<b>7,792.223 3</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					2.7552	0.0000	2.7552	1.3169	0.0000	1.3169			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>2.7552</b>	<b>0.9409</b>	<b>3.6960</b>	<b>1.3169</b>	<b>0.8656</b>	<b>2.1825</b>	<b>0.0000</b>	<b>2,872.046 4</b>	<b>2,872.046 4</b>	<b>0.9289</b>		<b>2,895.268 4</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2022**

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	0.3759	15.1821	3.3761	0.0684	2.0806	0.1765	2.2571	0.5704	0.1688	0.7393		7,291.221 2	7,291.221 2	0.0986	1.1486	7,635.960 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0591	0.0383	0.5980	1.5200e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		155.0309	155.0309	3.8400e-003	3.8100e-003	156.2632
<b>Total</b>	<b>0.4350</b>	<b>15.2204</b>	<b>3.9741</b>	<b>0.0699</b>	<b>2.2483</b>	<b>0.1773</b>	<b>2.4256</b>	<b>0.6149</b>	<b>0.1696</b>	<b>0.7845</b>		<b>7,446.252 1</b>	<b>7,446.252 1</b>	<b>0.1025</b>	<b>1.1524</b>	<b>7,792.223 3</b>

**3.5 Building Construction - 2022**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.333 6</b>	<b>2,554.333 6</b>	<b>0.6120</b>		<b>2,569.632 2</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**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	0.0000
Vendor	0.0439	1.1417	0.3970	4.9200e-003	0.1729	0.0165	0.1894	0.0498	0.0158	0.0655		520.9524	520.9524	5.5100e-003	0.0773	544.1122
Worker	0.2680	0.1737	2.7109	6.9100e-003	0.7601	3.7900e-003	0.7639	0.2016	3.4900e-003	0.2051		702.8066	702.8066	0.0174	0.0173	708.3930
<b>Total</b>	<b>0.3119</b>	<b>1.3154</b>	<b>3.1079</b>	<b>0.0118</b>	<b>0.9330</b>	<b>0.0203</b>	<b>0.9533</b>	<b>0.2514</b>	<b>0.0192</b>	<b>0.2706</b>		<b>1,223.7590</b>	<b>1,223.7590</b>	<b>0.0229</b>	<b>0.0945</b>	<b>1,252.5052</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**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	0.0000
Vendor	0.0439	1.1417	0.3970	4.9200e-003	0.1729	0.0165	0.1894	0.0498	0.0158	0.0655		520.9524	520.9524	5.5100e-003	0.0773	544.1122
Worker	0.2680	0.1737	2.7109	6.9100e-003	0.7601	3.7900e-003	0.7639	0.2016	3.4900e-003	0.2051		702.8066	702.8066	0.0174	0.0173	708.3930
<b>Total</b>	<b>0.3119</b>	<b>1.3154</b>	<b>3.1079</b>	<b>0.0118</b>	<b>0.9330</b>	<b>0.0203</b>	<b>0.9533</b>	<b>0.2514</b>	<b>0.0192</b>	<b>0.2706</b>		<b>1,223.7590</b>	<b>1,223.7590</b>	<b>0.0229</b>	<b>0.0945</b>	<b>1,252.5052</b>

**3.5 Building Construction - 2023**

**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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2023**

**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	0.0000
Vendor	0.0304	0.8821	0.3632	4.7200e-003	0.1729	7.6800e-003	0.1806	0.0498	7.3500e-003	0.0571		500.2317	500.2317	5.1000e-003	0.0739	522.3872
Worker	0.2484	0.1535	2.4946	6.6900e-003	0.7601	3.5700e-003	0.7637	0.2016	3.2800e-003	0.2049		684.2181	684.2181	0.0156	0.0160	689.3625
<b>Total</b>	<b>0.2789</b>	<b>1.0356</b>	<b>2.8578</b>	<b>0.0114</b>	<b>0.9330</b>	<b>0.0113</b>	<b>0.9443</b>	<b>0.2514</b>	<b>0.0106</b>	<b>0.2620</b>		<b>1,184.4498</b>	<b>1,184.4498</b>	<b>0.0207</b>	<b>0.0899</b>	<b>1,211.7497</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>



2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2023**

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	0.0000
Vendor	0.0304	0.8821	0.3632	4.7200e-003	0.1729	7.6800e-003	0.1806	0.0498	7.3500e-003	0.0571		500.2317	500.2317	5.1000e-003	0.0739	522.3872
Worker	0.2484	0.1535	2.4946	6.6900e-003	0.7601	3.5700e-003	0.7637	0.2016	3.2800e-003	0.2049		684.2181	684.2181	0.0156	0.0160	689.3625
<b>Total</b>	<b>0.2789</b>	<b>1.0356</b>	<b>2.8578</b>	<b>0.0114</b>	<b>0.9330</b>	<b>0.0113</b>	<b>0.9443</b>	<b>0.2514</b>	<b>0.0106</b>	<b>0.2620</b>		<b>1,184.4498</b>	<b>1,184.4498</b>	<b>0.0207</b>	<b>0.0899</b>	<b>1,211.7497</b>

**3.6 Paving - 2023**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.5429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4610</b>	<b>8.7903</b>	<b>12.1905</b>	<b>0.0189</b>		<b>0.4357</b>	<b>0.4357</b>		<b>0.4025</b>	<b>0.4025</b>		<b>1,805.4304</b>	<b>1,805.4304</b>	<b>0.5673</b>		<b>1,819.6122</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2023**

**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	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
Worker	0.0731	0.0452	0.7337	1.9700e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		201.2406	201.2406	4.5900e-003	4.6900e-003	202.7537
<b>Total</b>	<b>0.0731</b>	<b>0.0452</b>	<b>0.7337</b>	<b>1.9700e-003</b>	<b>0.2236</b>	<b>1.0500e-003</b>	<b>0.2246</b>	<b>0.0593</b>	<b>9.7000e-004</b>	<b>0.0603</b>		<b>201.2406</b>	<b>201.2406</b>	<b>4.5900e-003</b>	<b>4.6900e-003</b>	<b>202.7537</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.5429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4610</b>	<b>8.7903</b>	<b>12.1905</b>	<b>0.0189</b>		<b>0.4357</b>	<b>0.4357</b>		<b>0.4025</b>	<b>0.4025</b>	<b>0.0000</b>	<b>1,805.4304</b>	<b>1,805.4304</b>	<b>0.5673</b>		<b>1,819.6122</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2023**

**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	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
Worker	0.0731	0.0452	0.7337	1.9700e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		201.2406	201.2406	4.5900e-003	4.6900e-003	202.7537
<b>Total</b>	<b>0.0731</b>	<b>0.0452</b>	<b>0.7337</b>	<b>1.9700e-003</b>	<b>0.2236</b>	<b>1.0500e-003</b>	<b>0.2246</b>	<b>0.0593</b>	<b>9.7000e-004</b>	<b>0.0603</b>		<b>201.2406</b>	<b>201.2406</b>	<b>4.5900e-003</b>	<b>4.6900e-003</b>	<b>202.7537</b>

**3.7 Architectural Coating - 2023**

**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	2.5119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>2.7036</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2023**

**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	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
Worker	0.0512	0.0316	0.5136	1.3800e-003	0.1565	7.3000e-004	0.1572	0.0415	6.8000e-004	0.0422		140.8684	140.8684	3.2200e-003	3.2800e-003	141.9276
<b>Total</b>	<b>0.0512</b>	<b>0.0316</b>	<b>0.5136</b>	<b>1.3800e-003</b>	<b>0.1565</b>	<b>7.3000e-004</b>	<b>0.1572</b>	<b>0.0415</b>	<b>6.8000e-004</b>	<b>0.0422</b>		<b>140.8684</b>	<b>140.8684</b>	<b>3.2200e-003</b>	<b>3.2800e-003</b>	<b>141.9276</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	2.5119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>2.7036</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2023**

**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	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
Worker	0.0512	0.0316	0.5136	1.3800e-003	0.1565	7.3000e-004	0.1572	0.0415	6.8000e-004	0.0422		140.8684	140.8684	3.2200e-003	3.2800e-003	141.9276
<b>Total</b>	<b>0.0512</b>	<b>0.0316</b>	<b>0.5136</b>	<b>1.3800e-003</b>	<b>0.1565</b>	<b>7.3000e-004</b>	<b>0.1572</b>	<b>0.0415</b>	<b>6.8000e-004</b>	<b>0.0422</b>		<b>140.8684</b>	<b>140.8684</b>	<b>3.2200e-003</b>	<b>3.2800e-003</b>	<b>141.9276</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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

**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					
Parking Lot	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>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.2 Energy by Land Use - NaturalGas**

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					
Parking Lot	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**

	ROG	NOx	CO	SO2	Fugitive 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	0.0715	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379
Unmitigated	0.0715	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379



2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	0.0124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5400e-003	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379
<b>Total</b>	<b>0.0715</b>	<b>1.5000e-004</b>	<b>0.0166</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>0.0356</b>	<b>0.0356</b>	<b>9.0000e-005</b>		<b>0.0379</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	0.0124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5400e-003	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379
<b>Total</b>	<b>0.0715</b>	<b>1.5000e-004</b>	<b>0.0166</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>0.0356</b>	<b>0.0356</b>	<b>9.0000e-005</b>		<b>0.0379</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**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
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2nd Street Improvement Project Air Quality and GHG Analysis**

**Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	162.58	1000sqft	3.73	162,578.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2023
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	531.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

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

Project Characteristics -

Land Use - Project consists of extending and widening 2nd Street from the westerly boundary of the Home Depot shopping center to Pennsylvania Avenue.

Grading - 3,054 cubic yards and fill: 10,666 cubic yards and total net adjusted: 7,608 cubic yards of import.

Demolition - The project is proposing to demolish approximately 23,064 square feet of roadway.

Construction Off-road Equipment Mitigation - Project will be required to comply with SCAQMD Rule 403 regarding Fugitive Dust Control.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialImported	0.00	7,608.00

**2.0 Emissions Summary**

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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					
2022	3.2364	36.9085	21.2319	0.0994	19.8582	1.6136	21.4718	10.1558	1.4845	11.6403	0.0000	10,309.2599	10,309.2599	1.1967	1.1534	10,678.7217
2023	2.7515	15.4797	18.6451	0.0377	0.9330	0.7110	1.6440	0.2514	0.6691	0.9205	0.0000	3,676.6461	3,676.6461	0.6284	0.0905	3,719.3232
<b>Maximum</b>	<b>3.2364</b>	<b>36.9085</b>	<b>21.2319</b>	<b>0.0994</b>	<b>19.8582</b>	<b>1.6136</b>	<b>21.4718</b>	<b>10.1558</b>	<b>1.4845</b>	<b>11.6403</b>	<b>0.0000</b>	<b>10,309.2599</b>	<b>10,309.2599</b>	<b>1.1967</b>	<b>1.1534</b>	<b>10,678.7217</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.2364	36.9085	21.2319	0.0994	7.7200	1.6136	9.3336	3.9176	1.4845	5.4020	0.0000	10,309.2599	10,309.2599	1.1967	1.1534	10,678.7217
2023	2.7515	15.4797	18.6451	0.0377	0.9330	0.7110	1.6440	0.2514	0.6691	0.9205	0.0000	3,676.6461	3,676.6461	0.6284	0.0905	3,719.3232
<b>Maximum</b>	<b>3.2364</b>	<b>36.9085</b>	<b>21.2319</b>	<b>0.0994</b>	<b>7.7200</b>	<b>1.6136</b>	<b>9.3336</b>	<b>3.9176</b>	<b>1.4845</b>	<b>5.4020</b>	<b>0.0000</b>	<b>10,309.2599</b>	<b>10,309.2599</b>	<b>1.1967</b>	<b>1.1534</b>	<b>10,678.7217</b>

## 2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	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	58.38	0.00	52.51	59.94	0.00	49.66	0.00	0.00	0.00	0.00	0.00	0.00

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	0.0715	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379
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	0.0000
<b>Total</b>	<b>0.0715</b>	<b>1.5000e-004</b>	<b>0.0166</b>	<b>0.0000</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>0.0356</b>	<b>0.0356</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.0379</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	0.0715	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379
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	0.0000
<b>Total</b>	<b>0.0715</b>	<b>1.5000e-004</b>	<b>0.0166</b>	<b>0.0000</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>0.0356</b>	<b>0.0356</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.0379</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	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	Demolition	Demolition	1/3/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/4/2022	5	5	
3	Grading	Grading	2/5/2022	2/16/2022	5	8	
4	Building Construction	Building Construction	2/17/2022	1/4/2023	5	230	
5	Paving	Paving	1/5/2023	1/30/2023	5	18	
6	Architectural Coating	Architectural Coating	1/31/2023	2/23/2023	5	18	

**Acres of Grading (Site Preparation Phase): 7.5**

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

**Acres of Paving: 3.73**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 9,755 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38



2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	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
Demolition	6	15.00	0.00	105.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	951.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	68.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Soil Stabilizer

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1422	0.0000	1.1422	0.1729	0.0000	0.1729			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>1.1422</b>	<b>1.2427</b>	<b>2.3848</b>	<b>0.1729</b>	<b>1.1553</b>	<b>1.3282</b>		<b>3,746.781 2</b>	<b>3,746.781 2</b>	<b>1.0524</b>		<b>3,773.092 0</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2022**

**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	0.0158	0.7072	0.1532	3.0200e-003	0.0919	7.8000e-003	0.0997	0.0252	7.4700e-003	0.0327		322.2556	322.2556	4.3200e-003	0.0508	337.4914
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
Worker	0.0552	0.0398	0.4846	1.3800e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		140.4261	140.4261	3.8100e-003	3.9000e-003	141.6847
<b>Total</b>	<b>0.0710</b>	<b>0.7470</b>	<b>0.6378</b>	<b>4.4000e-003</b>	<b>0.2596</b>	<b>8.6400e-003</b>	<b>0.2682</b>	<b>0.0697</b>	<b>8.2400e-003</b>	<b>0.0779</b>		<b>462.6817</b>	<b>462.6817</b>	<b>8.1300e-003</b>	<b>0.0547</b>	<b>479.1760</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4369	0.0000	0.4369	0.0662	0.0000	0.0662			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>0.4369</b>	<b>1.2427</b>	<b>1.6795</b>	<b>0.0662</b>	<b>1.1553</b>	<b>1.2214</b>	<b>0.0000</b>	<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2022**

**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	0.0158	0.7072	0.1532	3.0200e-003	0.0919	7.8000e-003	0.0997	0.0252	7.4700e-003	0.0327		322.2556	322.2556	4.3200e-003	0.0508	337.4914
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
Worker	0.0552	0.0398	0.4846	1.3800e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		140.4261	140.4261	3.8100e-003	3.9000e-003	141.6847
<b>Total</b>	<b>0.0710</b>	<b>0.7470</b>	<b>0.6378</b>	<b>4.4000e-003</b>	<b>0.2596</b>	<b>8.6400e-003</b>	<b>0.2682</b>	<b>0.0697</b>	<b>8.2400e-003</b>	<b>0.0779</b>		<b>462.6817</b>	<b>462.6817</b>	<b>8.1300e-003</b>	<b>0.0547</b>	<b>479.1760</b>

**3.3 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>19.6570</b>	<b>1.6126</b>	<b>21.2696</b>	<b>10.1025</b>	<b>1.4836</b>	<b>11.5860</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2022**

**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	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
Worker	0.0663	0.0477	0.5816	1.6600e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		168.5113	168.5113	4.5800e-003	4.6800e-003	170.0216
<b>Total</b>	<b>0.0663</b>	<b>0.0477</b>	<b>0.5816</b>	<b>1.6600e-003</b>	<b>0.2012</b>	<b>1.0000e-003</b>	<b>0.2022</b>	<b>0.0534</b>	<b>9.2000e-004</b>	<b>0.0543</b>		<b>168.5113</b>	<b>168.5113</b>	<b>4.5800e-003</b>	<b>4.6800e-003</b>	<b>170.0216</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.5188	0.0000	7.5188	3.8642	0.0000	3.8642			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>7.5188</b>	<b>1.6126</b>	<b>9.1314</b>	<b>3.8642</b>	<b>1.4836</b>	<b>5.3478</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2022**

**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	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
Worker	0.0663	0.0477	0.5816	1.6600e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		168.5113	168.5113	4.5800e-003	4.6800e-003	170.0216
<b>Total</b>	<b>0.0663</b>	<b>0.0477</b>	<b>0.5816</b>	<b>1.6600e-003</b>	<b>0.2012</b>	<b>1.0000e-003</b>	<b>0.2022</b>	<b>0.0534</b>	<b>9.2000e-004</b>	<b>0.0543</b>		<b>168.5113</b>	<b>168.5113</b>	<b>4.5800e-003</b>	<b>4.6800e-003</b>	<b>170.0216</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2030	0.0000	7.2030	3.4430	0.0000	3.4430			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>7.2030</b>	<b>0.9409</b>	<b>8.1439</b>	<b>3.4430</b>	<b>0.8656</b>	<b>4.3086</b>		<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2022**

**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	0.3580	16.0136	3.4688	0.0684	2.0806	0.1767	2.2573	0.5704	0.1691	0.7395		7,296.787 4	7,296.787 4	0.0978	1.1495	7,641.768 7
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
Worker	0.0552	0.0398	0.4846	1.3800e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		140.4261	140.4261	3.8100e-003	3.9000e-003	141.6847
<b>Total</b>	<b>0.4132</b>	<b>16.0533</b>	<b>3.9534</b>	<b>0.0698</b>	<b>2.2483</b>	<b>0.1775</b>	<b>2.4258</b>	<b>0.6149</b>	<b>0.1698</b>	<b>0.7847</b>		<b>7,437.213 5</b>	<b>7,437.213 5</b>	<b>0.1016</b>	<b>1.1534</b>	<b>7,783.453 4</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					2.7552	0.0000	2.7552	1.3169	0.0000	1.3169			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>2.7552</b>	<b>0.9409</b>	<b>3.6960</b>	<b>1.3169</b>	<b>0.8656</b>	<b>2.1825</b>	<b>0.0000</b>	<b>2,872.046 4</b>	<b>2,872.046 4</b>	<b>0.9289</b>		<b>2,895.268 4</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2022**

**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	0.3580	16.0136	3.4688	0.0684	2.0806	0.1767	2.2573	0.5704	0.1691	0.7395		7,296.787 4	7,296.787 4	0.0978	1.1495	7,641.768 7
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
Worker	0.0552	0.0398	0.4846	1.3800e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		140.4261	140.4261	3.8100e-003	3.9000e-003	141.6847
<b>Total</b>	<b>0.4132</b>	<b>16.0533</b>	<b>3.9534</b>	<b>0.0698</b>	<b>2.2483</b>	<b>0.1775</b>	<b>2.4258</b>	<b>0.6149</b>	<b>0.1698</b>	<b>0.7847</b>		<b>7,437.213 5</b>	<b>7,437.213 5</b>	<b>0.1016</b>	<b>1.1534</b>	<b>7,783.453 4</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.333 6</b>	<b>2,554.333 6</b>	<b>0.6120</b>		<b>2,569.632 2</b>



2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**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	0.0000
Vendor	0.0421	1.2028	0.4122	4.9200e-003	0.1729	0.0165	0.1894	0.0498	0.0158	0.0656		521.5206	521.5206	5.4300e-003	0.0774	544.7215
Worker	0.2503	0.1803	2.1970	6.2600e-003	0.7601	3.7900e-003	0.7639	0.2016	3.4900e-003	0.2051		636.5982	636.5982	0.0173	0.0177	642.3037
<b>Total</b>	<b>0.2924</b>	<b>1.3831</b>	<b>2.6092</b>	<b>0.0112</b>	<b>0.9330</b>	<b>0.0203</b>	<b>0.9533</b>	<b>0.2514</b>	<b>0.0193</b>	<b>0.2706</b>		<b>1,158.1188</b>	<b>1,158.1188</b>	<b>0.0227</b>	<b>0.0951</b>	<b>1,187.0252</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**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	0.0000
Vendor	0.0421	1.2028	0.4122	4.9200e-003	0.1729	0.0165	0.1894	0.0498	0.0158	0.0656		521.5206	521.5206	5.4300e-003	0.0774	544.7215
Worker	0.2503	0.1803	2.1970	6.2600e-003	0.7601	3.7900e-003	0.7639	0.2016	3.4900e-003	0.2051		636.5982	636.5982	0.0173	0.0177	642.3037
<b>Total</b>	<b>0.2924</b>	<b>1.3831</b>	<b>2.6092</b>	<b>0.0112</b>	<b>0.9330</b>	<b>0.0203</b>	<b>0.9533</b>	<b>0.2514</b>	<b>0.0193</b>	<b>0.2706</b>		<b>1,158.1188</b>	<b>1,158.1188</b>	<b>0.0227</b>	<b>0.0951</b>	<b>1,187.0252</b>

**3.5 Building Construction - 2023**

**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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2023**

**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	0.0000
Vendor	0.0282	0.9355	0.3754	4.7300e-003	0.1729	7.7100e-003	0.1806	0.0498	7.3800e-003	0.0572		501.4732	501.4732	5.0000e-003	0.0742	523.6995
Worker	0.2329	0.1593	2.0257	6.0600e-003	0.7601	3.5700e-003	0.7637	0.2016	3.2800e-003	0.2049		619.9630	619.9630	0.0156	0.0163	625.2177
<b>Total</b>	<b>0.2610</b>	<b>1.0948</b>	<b>2.4011</b>	<b>0.0108</b>	<b>0.9330</b>	<b>0.0113</b>	<b>0.9443</b>	<b>0.2514</b>	<b>0.0107</b>	<b>0.2620</b>		<b>1,121.4362</b>	<b>1,121.4362</b>	<b>0.0206</b>	<b>0.0905</b>	<b>1,148.9171</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2023**

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	0.0000
Vendor	0.0282	0.9355	0.3754	4.7300e-003	0.1729	7.7100e-003	0.1806	0.0498	7.3800e-003	0.0572		501.4732	501.4732	5.0000e-003	0.0742	523.6995
Worker	0.2329	0.1593	2.0257	6.0600e-003	0.7601	3.5700e-003	0.7637	0.2016	3.2800e-003	0.2049		619.9630	619.9630	0.0156	0.0163	625.2177
<b>Total</b>	<b>0.2610</b>	<b>1.0948</b>	<b>2.4011</b>	<b>0.0108</b>	<b>0.9330</b>	<b>0.0113</b>	<b>0.9443</b>	<b>0.2514</b>	<b>0.0107</b>	<b>0.2620</b>		<b>1,121.4362</b>	<b>1,121.4362</b>	<b>0.0206</b>	<b>0.0905</b>	<b>1,148.9171</b>

**3.6 Paving - 2023**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.5429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4610</b>	<b>8.7903</b>	<b>12.1905</b>	<b>0.0189</b>		<b>0.4357</b>	<b>0.4357</b>		<b>0.4025</b>	<b>0.4025</b>		<b>1,805.4304</b>	<b>1,805.4304</b>	<b>0.5673</b>		<b>1,819.6122</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2023**

**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	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
Worker	0.0685	0.0469	0.5958	1.7800e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		182.3421	182.3421	4.5800e-003	4.8000e-003	183.8876
<b>Total</b>	<b>0.0685</b>	<b>0.0469</b>	<b>0.5958</b>	<b>1.7800e-003</b>	<b>0.2236</b>	<b>1.0500e-003</b>	<b>0.2246</b>	<b>0.0593</b>	<b>9.7000e-004</b>	<b>0.0603</b>		<b>182.3421</b>	<b>182.3421</b>	<b>4.5800e-003</b>	<b>4.8000e-003</b>	<b>183.8876</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.5429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4610</b>	<b>8.7903</b>	<b>12.1905</b>	<b>0.0189</b>		<b>0.4357</b>	<b>0.4357</b>		<b>0.4025</b>	<b>0.4025</b>	<b>0.0000</b>	<b>1,805.4304</b>	<b>1,805.4304</b>	<b>0.5673</b>		<b>1,819.6122</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2023**

**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	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
Worker	0.0685	0.0469	0.5958	1.7800e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		182.3421	182.3421	4.5800e-003	4.8000e-003	183.8876
<b>Total</b>	<b>0.0685</b>	<b>0.0469</b>	<b>0.5958</b>	<b>1.7800e-003</b>	<b>0.2236</b>	<b>1.0500e-003</b>	<b>0.2246</b>	<b>0.0593</b>	<b>9.7000e-004</b>	<b>0.0603</b>		<b>182.3421</b>	<b>182.3421</b>	<b>4.5800e-003</b>	<b>4.8000e-003</b>	<b>183.8876</b>

**3.7 Architectural Coating - 2023**

**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	2.5119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>2.7036</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2023**

**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	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
Worker	0.0479	0.0328	0.4171	1.2500e-003	0.1565	7.3000e-004	0.1572	0.0415	6.8000e-004	0.0422		127.6395	127.6395	3.2100e-003	3.3600e-003	128.7213
<b>Total</b>	<b>0.0479</b>	<b>0.0328</b>	<b>0.4171</b>	<b>1.2500e-003</b>	<b>0.1565</b>	<b>7.3000e-004</b>	<b>0.1572</b>	<b>0.0415</b>	<b>6.8000e-004</b>	<b>0.0422</b>		<b>127.6395</b>	<b>127.6395</b>	<b>3.2100e-003</b>	<b>3.3600e-003</b>	<b>128.7213</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	2.5119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>2.7036</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2023**

**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	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
Worker	0.0479	0.0328	0.4171	1.2500e-003	0.1565	7.3000e-004	0.1572	0.0415	6.8000e-004	0.0422		127.6395	127.6395	3.2100e-003	3.3600e-003	128.7213
<b>Total</b>	<b>0.0479</b>	<b>0.0328</b>	<b>0.4171</b>	<b>1.2500e-003</b>	<b>0.1565</b>	<b>7.3000e-004</b>	<b>0.1572</b>	<b>0.0415</b>	<b>6.8000e-004</b>	<b>0.0422</b>		<b>127.6395</b>	<b>127.6395</b>	<b>3.2100e-003</b>	<b>3.3600e-003</b>	<b>128.7213</b>



2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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

**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					
Parking Lot	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	
<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>	

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	lb/day										lb/day					
Parking Lot	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**

	ROG	NOx	CO	SO2	Fugitive 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	0.0715	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379
Unmitigated	0.0715	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	0.0124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5400e-003	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379
<b>Total</b>	<b>0.0715</b>	<b>1.5000e-004</b>	<b>0.0166</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>0.0356</b>	<b>0.0356</b>	<b>9.0000e-005</b>		<b>0.0379</b>

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	0.0124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5400e-003	1.5000e-004	0.0166	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0356	0.0356	9.0000e-005		0.0379
<b>Total</b>	<b>0.0715</b>	<b>1.5000e-004</b>	<b>0.0166</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>0.0356</b>	<b>0.0356</b>	<b>9.0000e-005</b>		<b>0.0379</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**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
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## **Appendix B**

Annual Greenhouse Gas (GHG)  
Emissions Calculations (MTCO<sub>2</sub>e/yr)

2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2nd Street Improvement Project Air Quality and GHG Analysis  
Riverside-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	162.58	1000sqft	3.73	162,578.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2023
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	531.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

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

Project Characteristics -

Land Use - Project consists of extending and widening 2nd Street from the westerly boundary of the Home Depot shopping center to Pennsylvania Avenue.

Grading - 3,054 cubic yards and fill: 10,666 cubic yards and total net adjusted: 7,608 cubic yards of import.

Demolition - The project is proposing to demolish approximately 23,064 square feet of roadway.

Construction Off-road Equipment Mitigation - Project will be required to comply with SCAQMD Rule 403 regarding Fugitive Dust Control.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialImported	0.00	7,608.00

**2.0 Emissions Summary**



2nd Street Improvement Project Air Quality and GHG Analysis - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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					
2022	0.2702	2.4245	2.5061	5.2700e-003	0.2055	0.1151	0.3206	0.0721	0.1081	0.1802	0.0000	468.1283	468.1283	0.0814	0.0145	474.4886
2023	0.0412	0.1148	0.1637	2.8000e-004	4.7400e-003	5.6400e-003	0.0104	1.2600e-003	5.2800e-003	6.5400e-003	0.0000	24.6502	24.6502	5.6900e-003	1.9000e-004	24.8494
<b>Maximum</b>	<b>0.2702</b>	<b>2.4245</b>	<b>2.5061</b>	<b>5.2700e-003</b>	<b>0.2055</b>	<b>0.1151</b>	<b>0.3206</b>	<b>0.0721</b>	<b>0.1081</b>	<b>0.1802</b>	<b>0.0000</b>	<b>468.1283</b>	<b>468.1283</b>	<b>0.0814</b>	<b>0.0145</b>	<b>474.4886</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					
2022	0.2701	2.4245	2.5061	5.2700e-003	0.1503	0.1151	0.2654	0.0470	0.1081	0.1550	0.0000	468.1279	468.1279	0.0814	0.0145	474.4882
2023	0.0412	0.1148	0.1637	2.8000e-004	4.7400e-003	5.6400e-003	0.0104	1.2600e-003	5.2800e-003	6.5400e-003	0.0000	24.6502	24.6502	5.6900e-003	1.9000e-004	24.8494
<b>Maximum</b>	<b>0.2701</b>	<b>2.4245</b>	<b>2.5061</b>	<b>5.2700e-003</b>	<b>0.1503</b>	<b>0.1151</b>	<b>0.2654</b>	<b>0.0470</b>	<b>0.1081</b>	<b>0.1550</b>	<b>0.0000</b>	<b>468.1279</b>	<b>468.1279</b>	<b>0.0814</b>	<b>0.0145</b>	<b>474.4882</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	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	26.25	0.00	16.67	34.29	0.00	13.48	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-3-2022	4-2-2022	0.8354	0.8354
2	4-3-2022	7-2-2022	0.6158	0.6158
3	7-3-2022	10-2-2022	0.6227	0.6227
4	10-3-2022	1-2-2023	0.6230	0.6230
5	1-3-2023	4-2-2023	0.1437	0.1437
		Highest	0.8354	0.8354

**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	0.0130	2.0000e-005	2.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.0300e-003	4.0300e-003	1.0000e-005	0.0000	4.3000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	13.7306	13.7306	8.5000e-004	1.0000e-004	13.7827
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>0.0130</b>	<b>2.0000e-005</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>13.7347</b>	<b>13.7347</b>	<b>8.6000e-004</b>	<b>1.0000e-004</b>	<b>13.7870</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	0.0130	2.0000e-005	2.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.0300e-003	4.0300e-003	1.0000e-005	0.0000	4.3000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	13.7306	13.7306	8.5000e-004	1.0000e-004	13.7827
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>0.0130</b>	<b>2.0000e-005</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>13.7347</b>	<b>13.7347</b>	<b>8.6000e-004</b>	<b>1.0000e-004</b>	<b>13.7870</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/3/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/4/2022	5	5	
3	Grading	Grading	2/5/2022	2/16/2022	5	8	

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4	Building Construction	Building Construction	2/17/2022	1/4/2023	5	230
5	Paving	Paving	1/5/2023	1/30/2023	5	18
6	Architectural Coating	Architectural Coating	1/31/2023	2/23/2023	5	18

**Acres of Grading (Site Preparation Phase): 7.5**

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

**Acres of Paving: 3.73**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 9,755 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	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
Demolition	6	15.00	0.00	105.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	951.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	68.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0114	0.0000	0.0114	1.7300e-003	0.0000	1.7300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
<b>Total</b>	<b>0.0264</b>	<b>0.2572</b>	<b>0.2059</b>	<b>3.9000e-004</b>	<b>0.0114</b>	<b>0.0124</b>	<b>0.0239</b>	<b>1.7300e-003</b>	<b>0.0116</b>	<b>0.0133</b>	<b>0.0000</b>	<b>33.9902</b>	<b>33.9902</b>	<b>9.5500e-003</b>	<b>0.0000</b>	<b>34.2289</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	7.0700e-003	1.5100e-003	3.0000e-005	9.1000e-004	8.0000e-005	9.8000e-004	2.5000e-004	7.0000e-005	3.2000e-004	0.0000	2.9222	2.9222	4.0000e-005	4.6000e-004	3.0603
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.1000e-004	5.1100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3037	1.3037	3.0000e-005	4.0000e-005	1.3153
<b>Total</b>	<b>6.8000e-004</b>	<b>7.4800e-003</b>	<b>6.6200e-003</b>	<b>4.0000e-005</b>	<b>2.5600e-003</b>	<b>9.0000e-005</b>	<b>2.6400e-003</b>	<b>6.9000e-004</b>	<b>8.0000e-005</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>4.2258</b>	<b>4.2258</b>	<b>7.0000e-005</b>	<b>5.0000e-004</b>	<b>4.3756</b>

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**3.2 Demolition - 2022**

**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					4.3700e-003	0.0000	4.3700e-003	6.6000e-004	0.0000	6.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
<b>Total</b>	<b>0.0264</b>	<b>0.2572</b>	<b>0.2059</b>	<b>3.9000e-004</b>	<b>4.3700e-003</b>	<b>0.0124</b>	<b>0.0168</b>	<b>6.6000e-004</b>	<b>0.0116</b>	<b>0.0122</b>	<b>0.0000</b>	<b>33.9902</b>	<b>33.9902</b>	<b>9.5500e-003</b>	<b>0.0000</b>	<b>34.2289</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	1.6000e-004	7.0700e-003	1.5100e-003	3.0000e-005	9.1000e-004	8.0000e-005	9.8000e-004	2.5000e-004	7.0000e-005	3.2000e-004	0.0000	2.9222	2.9222	4.0000e-005	4.6000e-004	3.0603
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.1000e-004	5.1100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3037	1.3037	3.0000e-005	4.0000e-005	1.3153
<b>Total</b>	<b>6.8000e-004</b>	<b>7.4800e-003</b>	<b>6.6200e-003</b>	<b>4.0000e-005</b>	<b>2.5600e-003</b>	<b>9.0000e-005</b>	<b>2.6400e-003</b>	<b>6.9000e-004</b>	<b>8.0000e-005</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>4.2258</b>	<b>4.2258</b>	<b>7.0000e-005</b>	<b>5.0000e-004</b>	<b>4.3756</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e-003	0.0827	0.0492	1.0000e-004		4.0300e-003	4.0300e-003		3.7100e-003	3.7100e-003	0.0000	8.3599	8.3599	2.7000e-003	0.0000	8.4274
<b>Total</b>	<b>7.9300e-003</b>	<b>0.0827</b>	<b>0.0492</b>	<b>1.0000e-004</b>	<b>0.0491</b>	<b>4.0300e-003</b>	<b>0.0532</b>	<b>0.0253</b>	<b>3.7100e-003</b>	<b>0.0290</b>	<b>0.0000</b>	<b>8.3599</b>	<b>8.3599</b>	<b>2.7000e-003</b>	<b>0.0000</b>	<b>8.4274</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.5300e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3911	0.3911	1.0000e-005	1.0000e-005	0.3946
<b>Total</b>	<b>1.6000e-004</b>	<b>1.2000e-004</b>	<b>1.5300e-003</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>5.0000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.3911</b>	<b>0.3911</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.3946</b>



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**3.3 Site Preparation - 2022**

**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					0.0188	0.0000	0.0188	9.6600e-003	0.0000	9.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e-003	0.0827	0.0492	1.0000e-004		4.0300e-003	4.0300e-003		3.7100e-003	3.7100e-003	0.0000	8.3598	8.3598	2.7000e-003	0.0000	8.4274
<b>Total</b>	<b>7.9300e-003</b>	<b>0.0827</b>	<b>0.0492</b>	<b>1.0000e-004</b>	<b>0.0188</b>	<b>4.0300e-003</b>	<b>0.0228</b>	<b>9.6600e-003</b>	<b>3.7100e-003</b>	<b>0.0134</b>	<b>0.0000</b>	<b>8.3598</b>	<b>8.3598</b>	<b>2.7000e-003</b>	<b>0.0000</b>	<b>8.4274</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.5300e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3911	0.3911	1.0000e-005	1.0000e-005	0.3946
<b>Total</b>	<b>1.6000e-004</b>	<b>1.2000e-004</b>	<b>1.5300e-003</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>5.0000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.3911</b>	<b>0.3911</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.3946</b>

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**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0288	0.0000	0.0288	0.0138	0.0000	0.0138	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.0834	0.0611	1.2000e-004		3.7600e-003	3.7600e-003		3.4600e-003	3.4600e-003	0.0000	10.4219	10.4219	3.3700e-003	0.0000	10.5062
<b>Total</b>	<b>7.7900e-003</b>	<b>0.0834</b>	<b>0.0611</b>	<b>1.2000e-004</b>	<b>0.0288</b>	<b>3.7600e-003</b>	<b>0.0326</b>	<b>0.0138</b>	<b>3.4600e-003</b>	<b>0.0172</b>	<b>0.0000</b>	<b>10.4219</b>	<b>10.4219</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>10.5062</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4700e-003	0.0640	0.0137	2.7000e-004	8.2000e-003	7.1000e-004	8.9100e-003	2.2500e-003	6.8000e-004	2.9300e-003	0.0000	26.4664	26.4664	3.6000e-004	4.1700e-003	27.7178
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.6000e-004	2.0400e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5215	0.5215	1.0000e-005	1.0000e-005	0.5261
<b>Total</b>	<b>1.6800e-003</b>	<b>0.0642</b>	<b>0.0157</b>	<b>2.8000e-004</b>	<b>8.8600e-003</b>	<b>7.1000e-004</b>	<b>9.5700e-003</b>	<b>2.4300e-003</b>	<b>6.8000e-004</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>26.9879</b>	<b>26.9879</b>	<b>3.7000e-004</b>	<b>4.1800e-003</b>	<b>28.2439</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2022**

**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					0.0110	0.0000	0.0110	5.2700e-003	0.0000	5.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.0834	0.0611	1.2000e-004		3.7600e-003	3.7600e-003		3.4600e-003	3.4600e-003	0.0000	10.4219	10.4219	3.3700e-003	0.0000	10.5062
<b>Total</b>	<b>7.7900e-003</b>	<b>0.0834</b>	<b>0.0611</b>	<b>1.2000e-004</b>	<b>0.0110</b>	<b>3.7600e-003</b>	<b>0.0148</b>	<b>5.2700e-003</b>	<b>3.4600e-003</b>	<b>8.7300e-003</b>	<b>0.0000</b>	<b>10.4219</b>	<b>10.4219</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>10.5062</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	1.4700e-003	0.0640	0.0137	2.7000e-004	8.2000e-003	7.1000e-004	8.9100e-003	2.2500e-003	6.8000e-004	2.9300e-003	0.0000	26.4664	26.4664	3.6000e-004	4.1700e-003	27.7178
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.6000e-004	2.0400e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5215	0.5215	1.0000e-005	1.0000e-005	0.5261
<b>Total</b>	<b>1.6800e-003</b>	<b>0.0642</b>	<b>0.0157</b>	<b>2.8000e-004</b>	<b>8.8600e-003</b>	<b>7.1000e-004</b>	<b>9.5700e-003</b>	<b>2.4300e-003</b>	<b>6.8000e-004</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>26.9879</b>	<b>26.9879</b>	<b>3.7000e-004</b>	<b>4.1800e-003</b>	<b>28.2439</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1937	1.7724	1.8573	3.0600e-003		0.0918	0.0918		0.0864	0.0864	0.0000	263.0082	263.0082	0.0630	0.0000	264.5834
<b>Total</b>	<b>0.1937</b>	<b>1.7724</b>	<b>1.8573</b>	<b>3.0600e-003</b>		<b>0.0918</b>	<b>0.0918</b>		<b>0.0864</b>	<b>0.0864</b>	<b>0.0000</b>	<b>263.0082</b>	<b>263.0082</b>	<b>0.0630</b>	<b>0.0000</b>	<b>264.5834</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8700e-003	0.1360	0.0458	5.6000e-004	0.0194	1.8700e-003	0.0212	5.5900e-003	1.7900e-003	7.3800e-003	0.0000	53.6648	53.6648	5.6000e-004	7.9600e-003	56.0520
Worker	0.0270	0.0210	0.2629	7.3000e-004	0.0848	4.3000e-004	0.0853	0.0225	4.0000e-004	0.0229	0.0000	67.0785	67.0785	1.7900e-003	1.8600e-003	67.6766
<b>Total</b>	<b>0.0319</b>	<b>0.1570</b>	<b>0.3087</b>	<b>1.2900e-003</b>	<b>0.1042</b>	<b>2.3000e-003</b>	<b>0.1065</b>	<b>0.0281</b>	<b>2.1900e-003</b>	<b>0.0303</b>	<b>0.0000</b>	<b>120.7433</b>	<b>120.7433</b>	<b>2.3500e-003</b>	<b>9.8200e-003</b>	<b>123.7286</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**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	0.1937	1.7724	1.8572	3.0600e-003		0.0918	0.0918		0.0864	0.0864	0.0000	263.0078	263.0078	0.0630	0.0000	264.5831
<b>Total</b>	<b>0.1937</b>	<b>1.7724</b>	<b>1.8572</b>	<b>3.0600e-003</b>		<b>0.0918</b>	<b>0.0918</b>		<b>0.0864</b>	<b>0.0864</b>	<b>0.0000</b>	<b>263.0078</b>	<b>263.0078</b>	<b>0.0630</b>	<b>0.0000</b>	<b>264.5831</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8700e-003	0.1360	0.0458	5.6000e-004	0.0194	1.8700e-003	0.0212	5.5900e-003	1.7900e-003	7.3800e-003	0.0000	53.6648	53.6648	5.6000e-004	7.9600e-003	56.0520
Worker	0.0270	0.0210	0.2629	7.3000e-004	0.0848	4.3000e-004	0.0853	0.0225	4.0000e-004	0.0229	0.0000	67.0785	67.0785	1.7900e-003	1.8600e-003	67.6766
<b>Total</b>	<b>0.0319</b>	<b>0.1570</b>	<b>0.3087</b>	<b>1.2900e-003</b>	<b>0.1042</b>	<b>2.3000e-003</b>	<b>0.1065</b>	<b>0.0281</b>	<b>2.1900e-003</b>	<b>0.0303</b>	<b>0.0000</b>	<b>120.7433</b>	<b>120.7433</b>	<b>2.3500e-003</b>	<b>9.8200e-003</b>	<b>123.7286</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2023**

**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	2.3600e-003	0.0216	0.0244	4.0000e-005		1.0500e-003	1.0500e-003		9.9000e-004	9.9000e-004	0.0000	3.4771	3.4771	8.3000e-004	0.0000	3.4978
<b>Total</b>	<b>2.3600e-003</b>	<b>0.0216</b>	<b>0.0244</b>	<b>4.0000e-005</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>		<b>9.9000e-004</b>	<b>9.9000e-004</b>	<b>0.0000</b>	<b>3.4771</b>	<b>3.4771</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>3.4978</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.3900e-003	5.5000e-004	1.0000e-005	2.6000e-004	1.0000e-005	2.7000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6814	0.6814	1.0000e-005	1.0000e-004	0.7116
Worker	3.3000e-004	2.5000e-004	3.2000e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.8633	0.8633	2.0000e-005	2.0000e-005	0.8705
<b>Total</b>	<b>3.7000e-004</b>	<b>1.6400e-003</b>	<b>3.7500e-003</b>	<b>2.0000e-005</b>	<b>1.3800e-003</b>	<b>2.0000e-005</b>	<b>1.4000e-003</b>	<b>3.7000e-004</b>	<b>1.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>1.5447</b>	<b>1.5447</b>	<b>3.0000e-005</b>	<b>1.2000e-004</b>	<b>1.5822</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2023**

**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	2.3600e-003	0.0216	0.0244	4.0000e-005		1.0500e-003	1.0500e-003		9.9000e-004	9.9000e-004	0.0000	3.4771	3.4771	8.3000e-004	0.0000	3.4978
<b>Total</b>	<b>2.3600e-003</b>	<b>0.0216</b>	<b>0.0244</b>	<b>4.0000e-005</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>		<b>9.9000e-004</b>	<b>9.9000e-004</b>	<b>0.0000</b>	<b>3.4771</b>	<b>3.4771</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>3.4978</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.3900e-003	5.5000e-004	1.0000e-005	2.6000e-004	1.0000e-005	2.7000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6814	0.6814	1.0000e-005	1.0000e-004	0.7116
Worker	3.3000e-004	2.5000e-004	3.2000e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.8633	0.8633	2.0000e-005	2.0000e-005	0.8705
<b>Total</b>	<b>3.7000e-004</b>	<b>1.6400e-003</b>	<b>3.7500e-003</b>	<b>2.0000e-005</b>	<b>1.3800e-003</b>	<b>2.0000e-005</b>	<b>1.4000e-003</b>	<b>3.7000e-004</b>	<b>1.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>1.5447</b>	<b>1.5447</b>	<b>3.0000e-005</b>	<b>1.2000e-004</b>	<b>1.5822</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2023**

**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	8.2600e-003	0.0791	0.1097	1.7000e-004		3.9200e-003	3.9200e-003		3.6200e-003	3.6200e-003	0.0000	14.7407	14.7407	4.6300e-003	0.0000	14.8565
Paving	4.8900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0132</b>	<b>0.0791</b>	<b>0.1097</b>	<b>1.7000e-004</b>		<b>3.9200e-003</b>	<b>3.9200e-003</b>		<b>3.6200e-003</b>	<b>3.6200e-003</b>	<b>0.0000</b>	<b>14.7407</b>	<b>14.7407</b>	<b>4.6300e-003</b>	<b>0.0000</b>	<b>14.8565</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	5.6500e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.3000e-004	0.0000	1.5234	1.5234	4.0000e-005	4.0000e-005	1.5362
<b>Total</b>	<b>5.8000e-004</b>	<b>4.3000e-004</b>	<b>5.6500e-003</b>	<b>2.0000e-005</b>	<b>1.9800e-003</b>	<b>1.0000e-005</b>	<b>1.9900e-003</b>	<b>5.3000e-004</b>	<b>1.0000e-005</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>1.5234</b>	<b>1.5234</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>1.5362</b>



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2023**

**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	8.2600e-003	0.0791	0.1097	1.7000e-004		3.9200e-003	3.9200e-003		3.6200e-003	3.6200e-003	0.0000	14.7407	14.7407	4.6300e-003	0.0000	14.8565
Paving	4.8900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0132</b>	<b>0.0791</b>	<b>0.1097</b>	<b>1.7000e-004</b>		<b>3.9200e-003</b>	<b>3.9200e-003</b>		<b>3.6200e-003</b>	<b>3.6200e-003</b>	<b>0.0000</b>	<b>14.7407</b>	<b>14.7407</b>	<b>4.6300e-003</b>	<b>0.0000</b>	<b>14.8565</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	5.6500e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.3000e-004	0.0000	1.5234	1.5234	4.0000e-005	4.0000e-005	1.5362
<b>Total</b>	<b>5.8000e-004</b>	<b>4.3000e-004</b>	<b>5.6500e-003</b>	<b>2.0000e-005</b>	<b>1.9800e-003</b>	<b>1.0000e-005</b>	<b>1.9900e-003</b>	<b>5.3000e-004</b>	<b>1.0000e-005</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>1.5234</b>	<b>1.5234</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>1.5362</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2023**

**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	0.0226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7200e-003	0.0117	0.0163	3.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	2.2979	2.2979	1.4000e-004	0.0000	2.3014
<b>Total</b>	<b>0.0243</b>	<b>0.0117</b>	<b>0.0163</b>	<b>3.0000e-005</b>		<b>6.4000e-004</b>	<b>6.4000e-004</b>		<b>6.4000e-004</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.3014</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.0000e-004	3.9600e-003	1.0000e-005	1.3800e-003	1.0000e-005	1.3900e-003	3.7000e-004	1.0000e-005	3.7000e-004	0.0000	1.0664	1.0664	3.0000e-005	3.0000e-005	1.0754
<b>Total</b>	<b>4.1000e-004</b>	<b>3.0000e-004</b>	<b>3.9600e-003</b>	<b>1.0000e-005</b>	<b>1.3800e-003</b>	<b>1.0000e-005</b>	<b>1.3900e-003</b>	<b>3.7000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.0664</b>	<b>1.0664</b>	<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>1.0754</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2023**

**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	0.0226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7200e-003	0.0117	0.0163	3.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	2.2979	2.2979	1.4000e-004	0.0000	2.3014
<b>Total</b>	<b>0.0243</b>	<b>0.0117</b>	<b>0.0163</b>	<b>3.0000e-005</b>		<b>6.4000e-004</b>	<b>6.4000e-004</b>		<b>6.4000e-004</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.3014</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.0000e-004	3.9600e-003	1.0000e-005	1.3800e-003	1.0000e-005	1.3900e-003	3.7000e-004	1.0000e-005	3.7000e-004	0.0000	1.0664	1.0664	3.0000e-005	3.0000e-005	1.0754
<b>Total</b>	<b>4.1000e-004</b>	<b>3.0000e-004</b>	<b>3.9600e-003</b>	<b>1.0000e-005</b>	<b>1.3800e-003</b>	<b>1.0000e-005</b>	<b>1.3900e-003</b>	<b>3.7000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.0664</b>	<b>1.0664</b>	<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>1.0754</b>

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**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468





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**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	56902.3	13.7306	8.5000e-004	1.0000e-004	13.7827
<b>Total</b>		<b>13.7306</b>	<b>8.5000e-004</b>	<b>1.0000e-004</b>	<b>13.7827</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	56902.3	13.7306	8.5000e-004	1.0000e-004	13.7827
<b>Total</b>		<b>13.7306</b>	<b>8.5000e-004</b>	<b>1.0000e-004</b>	<b>13.7827</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive 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	0.0130	2.0000e-005	2.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.0300e-003	4.0300e-003	1.0000e-005	0.0000	4.3000e-003
Unmitigated	0.0130	2.0000e-005	2.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.0300e-003	4.0300e-003	1.0000e-005	0.0000	4.3000e-003

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.2600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0105					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9000e-004	2.0000e-005	2.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.0300e-003	4.0300e-003	1.0000e-005	0.0000	4.3000e-003
<b>Total</b>	<b>0.0130</b>	<b>2.0000e-005</b>	<b>2.0700e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.0300e-003</b>	<b>4.0300e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.3000e-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	tons/yr										MT/yr					
Architectural Coating	2.2600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0105					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9000e-004	2.0000e-005	2.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.0300e-003	4.0300e-003	1.0000e-005	0.0000	4.3000e-003
<b>Total</b>	<b>0.0130</b>	<b>2.0000e-005</b>	<b>2.0700e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.0300e-003</b>	<b>4.0300e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.3000e-003</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	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			
Parking Lot	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			
Parking Lot	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			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Mitigated

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

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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