



Focused Air Quality and Greenhouse Gas Emission Analysis for East Avenue Homes, City of Rancho Cucamonga

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1.0 EXISTING AIR QUALITY

1.1 Project Description

The proposed project consists of 17 single family homes on 10.05 gross acres. The project also includes a 0.46 acre Water Quality/Community Park plus Natural Open Space. The project site is bordered on the west by East Avenue and is approximately 0.32 miles north of the Foothill Freeway. A vicinity map is presented as Exhibit 1 and a site plan is presented as Exhibit 2. Existing residential areas are nearby on all sides of the project.

This report focuses on the potential air quality impacts associated with the construction and operation of this project. Greenhouse gas emissions due to construction and operation are also assessed.

2.0 POTENTIAL CONSTRUCTION IMPACTS

2.1 Thresholds of Significance

2.1.1 Regional Air Quality

In their "1993 CEQA Air Quality Handbook", the SCAQMD has established significance thresholds to assess the impact of project related air pollutant emissions. Table 1 presents these significance thresholds. There are separate thresholds for short-term construction and long-term operational emissions. A project with daily emission rates below these thresholds is considered to have a less than significant effect on air quality. It should be noted the thresholds recommended by the SCAQMD are very low and subject to controversy. It is up to the individual lead agencies to determine if the SCAQMD thresholds are appropriate for their projects.

Table 1 SCAQMD Regional Pollutant Emission Thresholds of Significance

	Pollutant Emissions (lbs./day)					
	CO	ROG	NOx	PM10	PM2.5	SOx
<i>Construction</i>	550	75	100	150	55	150
<i>Operation</i>	550	55	55	150	55	150

Exhibit 1 - Vicinity Map

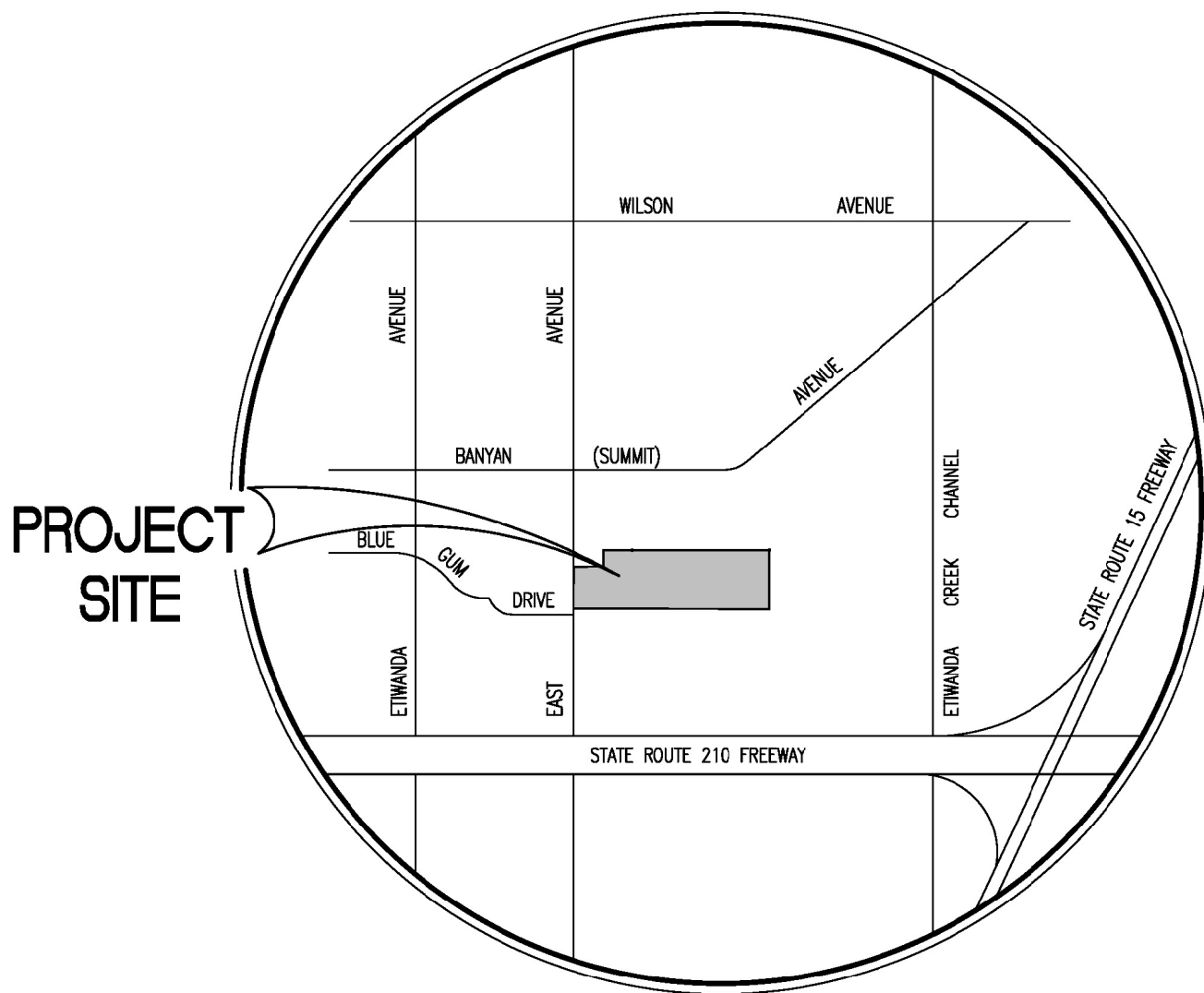
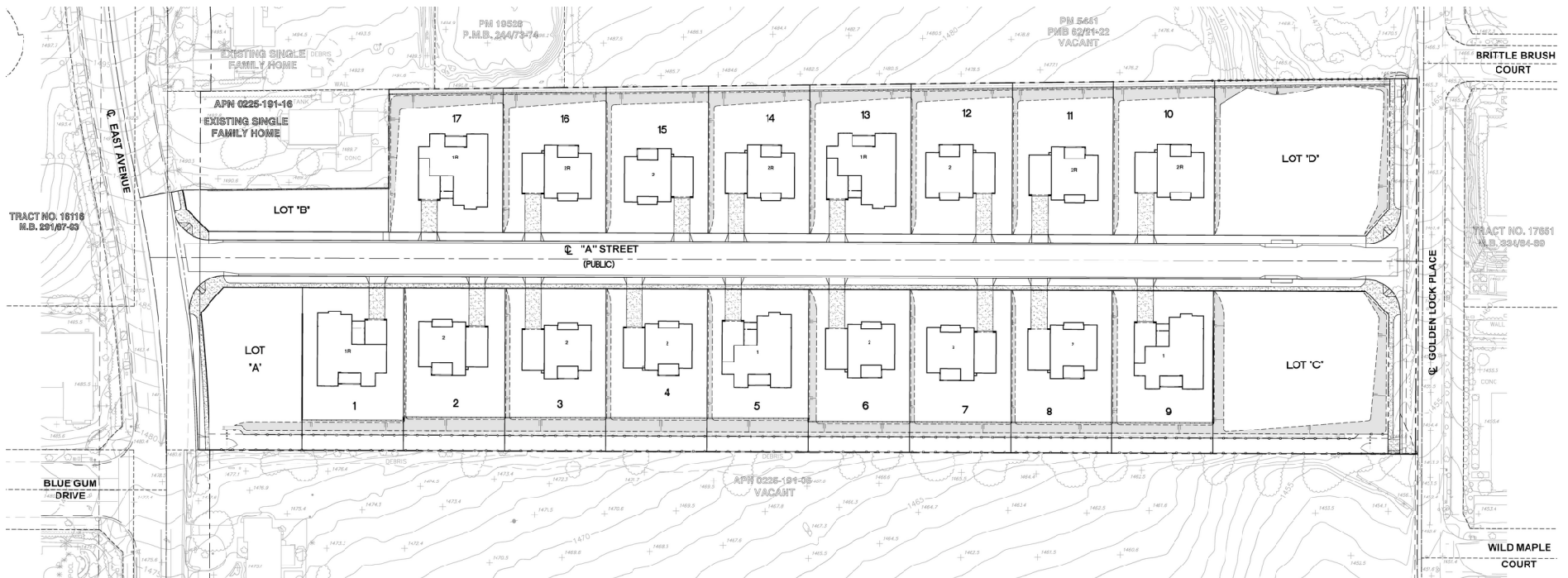


Exhibit 2 - Site Plan



2.1.2 Localized Significance Thresholds

As part of the SCAQMD's environmental justice program, attention was focused on localized effects of air quality. In accordance with Governing Board direction, SCAQMD staff developed localized significance threshold (LST) methodology and mass rate look-up tables by Source Receptor Area (SRA) that can be used to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area. The LST methodology is described in "Final Localized Significance Threshold Methodology" updated in 2009 by the SCAQMD and is available at the SCAQMD website (<http://aqmd.gov/ceqa/handbook/LST/LST.html>).

The LST mass rate look-up tables provided by the SCAQMD allow one to determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts. If the calculated on-site emissions for the proposed construction or operational activities are below the LST emission levels found on the LST mass rate look-up tables and no potentially significant impacts are found to be associated with other environmental issues, then the proposed construction or operation activity is not significant for local air quality.

The LST mass rate look-up tables are applicable to the following pollutants only: oxides of nitrogen (NO_x), carbon monoxide (CO), particulate matter less than 10 microns in aerodynamic diameter (PM₁₀), and particulate matter less than 2.5 microns (PM_{2.5}). LSTs are derived based on the location of the activity (i.e., the source/receptor area); the emission rates of NO_x, CO, PM_{2.5} and PM₁₀; and the distance to the nearest exposed individual.

The LST methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds. If receptors are within 25 meters of the site, the methodology document says that the threshold for the 25 meter distance should be used.

The project is located in Source Receptor Area (SRA) 32. The nearest existing sensitive land use are directly adjacent to construction areas. Table 2 summarizes the LSTs for construction and operation. A project with daily emission rates below the thresholds during construction and operation is considered to have a less than significant effect on local air quality.

Table 2 Localized Significance Thresholds at the Nearest Receptors

Description	Localized Significance Threshold (lbs./day)			
	NOx	CO	PM10	PM2.5
Construction Activities	270	2,193	16	9
Operation	270	2,193	4	2

2.2 Construction Impacts

Temporary impacts can result from project construction activities. Air pollutants are emitted by construction equipment and fugitive dust is generated during grading and construction.

Emissions during the phases of construction were calculated using the California Emissions Estimator Model (CalEEMod version 2016.3.2). CalEEMod is a computer program developed by the SCAQMD in conjunction with the California Air Resources Board (CARB). The model calculates emissions for construction and operation of various projects. For on-road vehicular emissions, the CalEEMod model utilizes the EMFAC emission rates that have also been developed by CARB.

2.2.1 Regional Emissions

CalEEMod considers the following phases in its calculation of construction emissions; site preparation, grading, building construction, paving, and painting. (No significant demolition will occur as part of this project.) The appropriate number of acres, duration of each construction phase, and other key elements of the project were input into the CalEEMod to generate the estimate of emissions. It was assumed that the overlap between construction phases would be minimal. It was assumed that the construction would begin September 2020 and end in March 2022. (A delay in construction start time would reduce emissions a slight amount due to the legislated reduction in diesel emissions for heavy construction equipment.) Work would proceed at 5 days per week. CalEEMod printouts are included in the Appendix, and contain construction and operational information.

Table 3 presents the results of the total emissions calculations for the construction activities discussed above. The highest construction emissions are presented below and represent a worst-case scenario. The projected emissions are compared to the Significance Thresholds described in Section 2.1.2. The CalEEMod printouts are included in the Appendix.

Table 3 Peak Construction Emissions

Activity	ROG	Pollutant Emissions (Pounds Per Day)				
		NOx	CO	SOx	PM10	PM2.5
Site Preparation	4.2	42.5	22.2	0.0	9.4	5.9
Grading	4.5	50.3	32.7	0.1	5.8	3.5
Building Construction	2.3	20.4	18.3	0.0	1.5	1.2
Paving	1.3	11.2	15.0	0.0	0.7	0.6
Architectural Coating	10.4	1.4	2.0	0.0	0.1	0.1
Maximum Daily Emissions	10.4	50.3	32.7	0.1	9.4	5.9
SCAQMD Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No

The projected construction emissions are all well below the significance thresholds established by the SCAQMD. Therefore, there will be no regional air quality impacts due to construction.

2.2.2 Local Air Quality Impacts Due to Construction

The on-site construction emissions were calculated utilizing CalEEMod. The emissions presented in Table 4 are those that would be emitted from activity for the project site. The construction emissions for each phase are compared to the Localized Significance Thresholds (LSTs) described in Section 2.1.2. Worksheets showing the emission calculations are presented in the appendix.

Table 4 On-Site Emissions By Construction Activity

Activity	Daily Emissions (lbs./day)			
	NOx	CO	PM10	PM2.5
Site Preparation	42.4	21.5	9.2	5.9
Grading	50.2	32.0	5.6	3.4
Building Const.	19.2	16.8	1.1	1.1
Paving	11.1	14.6	0.6	0.5
Architectural Coating	1.4	1.8	0.1	0.1
<i>LST Thresholds</i>	270	2,193	16	9
Exceed Threshold?	No	No	No	No

The local emissions generated by the project will all be below the Local Significance Thresholds. The calculations do include watering the site three times per day during grading which is usually a requirement of the SCAQMD. A mitigation measure is proposed in Section

4.1 that ensures that the site will be watered during grading activities. Therefore, the nearby residences will not be adversely affected during construction. Local air quality impacts during construction will be less than significant with the proposed mitigation measure.

2.2.3 Diesel Particulate Matter Emissions During Construction

In 1998, the California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines (Diesel Particulate Matter or DPM) as a Toxic Air Contaminant (TAC). It is assumed that the majority of the heavy construction equipment utilized during construction would be diesel fueled and emit DPM. The South Coast Air Quality Management District (SCAQMD) recommends significance thresholds for new sources of toxic air contaminants at its CEQA Air Quality Analysis Guidance Handbook website (<http://www.aqmd.gov/ceqa/hdbk.html>). SCAQMD's recommended significance threshold for increased cancer risk is an increase due to the project of greater than 10 in a million. The cancer risk is determined by multiplying the Dose with the Cancer Risk Potency Factor. The Cancer Risk Potency Factor describes the potential risk of developing cancer per unit of average daily dose over a 70-year lifetime. There is no recommendation or requirement by the SCAQMD to evaluate the cancer risk for the type of project proposed.

Impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime (California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Guide to Health Risk Assessment.) Grading for the project, when the peak diesel exhaust emissions would occur, is expected to take less than 3 months with all construction expected to be completed in less than 2 years. Because of the relatively short duration of construction compared to a 70-year lifespan, diesel emissions resulting from the construction of the project, including truck traffic associated with the project, are not expected to result in a significant impact.

2.3 Operational Impacts

2.3.1 Regional Operational Impacts

Air pollutant emissions due to the project were calculated using the CalEEMod program. The program calculated operational emissions for the proposed project. The primary source of emissions generated by the proposed project will be from motor vehicles. Natural gas combustion and re-current painting of the facilities will also contribute to the emissions. The modeling is based on an operational year of March 2022 (see Appendix for further operational details). Delays in the project would result in lower emissions due to lower emission factors for motor vehicles.

CalEEMod calculates maximum daily emissions for the summertime and wintertime periods. The results presented below are from the summer or winter emissions, whichever are the higher emissions. Output files from the CalEEMod program are presented in the appendix.

Table 5 presents the results of the CalEEMod model showing the maximum daily air pollutant emissions projected for buildout year. The specific data utilized in calculating the emissions are provided in the appendix.

Table 5 Project Emissions (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Total Project Emissions	1.1	2.0	5.4	0.0	1.3	0.4
<i>SCQAMD Thresholds</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
<i>Exceed Thresholds</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Table 5 shows that the total project emissions are below the SCAQMD thresholds for all criterion pollutants. Therefore, the project will not result in a significant regional air impact and mitigation is not necessary to reduce operational emissions.

Table 6 compares the net change in emissions due to the project to the projected basinwide emissions from the 2016 AQMP. This comparison shows that the project would result in a net increase in emissions that is insignificant in comparison to basinwide emissions.

Table 6 Comparison of Project Emissions with SCAB Emissions

	Pollutant Emissions (tons/day)					
	ROG	NOx	CO	SOx	PM10	PM2.5
Project Emissions	0.0005	0.0010	0.0027	0.0000	0.0007	0.0002
2031 South Coast Air Basin*	345.0	214.0	1,188.0	18.0	N/A	65.0
Project as Percentage of Basin	0.0002%	0.0005%	0.0002%	0.0000%	N/A	0.0003%

* Source: Table 3-4E Final 2016 AQMP

2.3.2 Local Air Quality Impacts Due to Operation

The on-site operational emissions were calculated utilizing CalEEMod. The emissions presented in Table 7 are those that would be emitted from activity by the project site. The total on-site operational emissions are compared to the Localized Significance Thresholds (LSTs) described in Section 2.1.2. Worksheets showing the emission calculations are presented in the appendix.

Table 7 On-Site Emissions By Operations

Activity	Daily Emissions (lbs./day)			
	NOx	CO	PM10	PM2.5
On-Site Emissions	0.4	1.6	0.04	0.04
<i>LST Thresholds</i>	270	2193	4	2
<i>Exceed Threshold?</i>	No	No	No	No

None of the emissions will exceed the LST significance thresholds. Therefore, the nearby residences will not be adversely affected during operations. Local air quality impacts during operation will be less than significant, and mitigation measures are not needed.

2.3.3 Compliance with Air Quality Planning

The following section deals with the major air planning requirements for this project. Specifically, consistency of the project with the AQMP is addressed. As discussed below, consistency with the AQMP is a requirement of the California Environmental Quality Act (CEQA).

An air quality assessment must discuss any inconsistencies between the proposed project and applicable General Plans and regional plans (California Environmental Quality Act (CEQA) guidelines (Section 15125(d)). Regional plans that apply to the proposed project include the South Coast Air Quality Management Plan (AQMP). In this regard, this section will discuss any inconsistencies between the proposed project and the General Plan and AQMP.

The project site and surrounding area is zoned very low residential density. The proposed project proposes 17 residential units over a 10 acre parcel. The 1.7 du per acre density is consistent with the current General Plan.

The purpose of the consistency discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-maker determines that the project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD's CEQA Handbook states "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the plan if it furthers one or more policies and does not obstruct other policies. The Handbook identifies two key indicators of consistency:

- (1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or

delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

- (2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criterion 1 - Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis contained in this report, with mitigation there will not be significant short-term construction impacts regional scale. Additionally, there will not be exceedances of the SCAQMD localized significance thresholds (LST), and therefore, local concentrations of pollutants will not be impacted by the project. Therefore, short-term construction activities will not increase the frequency or severity of existing air quality violations.

The proposed project operation will increase regional emissions, but will increase regional emissions by an amount less than the SCAQMD regional thresholds. Additionally, the operational LST analysis indicates that no significant local air quality impacts will result. Because the project is not projected to impact the local or regional air quality, the project is found to be consistent with the AQMP for the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the project with the assumptions in the AQMP. Thus, the emphasis of this criterion is to ensure that the analyses conducted for the project are based on the same forecasts as the AQMP. The "Final 2008 Regional Comprehensive Plan" (RCP) presents a "holistic, strategic plan for defining and solving our inter-related housing, traffic, water, air quality, and other regional challenges." The RCP builds off the local AQMP. It supports technology-based control measures, supports local initiatives to reduce greenhouse emissions, and emphasizes the need for better coordination of land use and transportation planning.

Since the SCAG forecasts are not detailed, the test for consistency of this project is not specific. The AQMP assumptions are based upon projections from local general plans. Projects that are consistent with the local general plan are consistent with the AQMP assumptions. The site is currently zoned very low residential with development allowed for up to 2 dwelling units per acre. The project is consistent with this land use designation. Therefore, the second criterion is met for consistency with the AQMP.

3.0 GREENHOUSE GAS EMISSIONS

3.1 Significance Threshold

The Significance Threshold that will be used for this project is based on SCAQMD's suggested tiered approach, which is consistent with CARB's recommendations. On December 5, 2008, the South Coast Air Quality Management District (SCAQMD) adopted GHG significance threshold for Stationary Sources, Rules and Plans where the SCAQMD is lead agency. The threshold uses a tiered approach. The project is compared with the requirements of each tier sequentially and if it complies with any tier, it is determined to not result in a significant impact.

Tier 1 excludes projects that are specifically exempt from SB97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. Tier 4 consists of three decision tree options. Under the first option, the project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. Under the second option, the project would be excluded if it had early compliance with AB 32 through early implementation of CARB's Scoping Plan measures. Under the third option, project would be excluded if it met sector based performance standards. However, the specifics of the Tier 4 compliance options were not adopted by the SCAQMD board to allow further time to develop the options and coordinate with CARB's GHG significance threshold development efforts. Tier 5 would exclude projects that implement offsite mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

The guidance document prepared for the stationary source threshold recommended using the same tiered approach for residential and commercial projects with a 3,000 metric ton CO₂ Equivalent per year (MTCO₂EQ/year) Tier 3 screening threshold. However, this was not adopted as the SCAQMD Board felt that more analysis was required along with coordination with CARB's GHG significance threshold development. At subsequent meetings of the SCAQMD GHG Working Group SCAQMD staff recommended two options for the Tier 3 screening threshold for residential and commercial projects. The first option would use a 3,500 MTCO₂EQ/year threshold for residential projects, a 1,400 MTCO₂EQ/year threshold for commercial projects and a 3,000 MTCO₂EQ/year for mixed-use projects. The second option would apply the 3,000 MTCO₂EQ/year for all commercial and residential projects.

The SCAQMD proposed compliance options for Tier 4 of the significance thresholds at subsequent GHG Working Group meetings. The first option would be a reduction of 23.9% in GHG emissions over the base case. This percentage reduction is the land use sector portion of the CARB Scoping Plan's overall reduction of 28%. This target would be updated as the AB 32 Scoping Plan is revised. The base case scenario for this reduction still needs to be defined. Residual emissions would need to be less than 25,000 MTCO₂EQ/year to comply with the option. Staff proposed efficiency targets for the third option of 4.6 MTCO₂EQ/year per service

population (the population of residential portions of projects plus the number of employees of commercial portions of projects.) for project level analysis and 6.6 MTCO₂EQ/year for plan level analyses. For project level analyses, residual emissions would need to be less than 25,000 MTCO₂EQ/year to comply with this option.

The project is not specifically exempted in SB97. The project is not subject to any GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Therefore, the project is not compliant with Tiers 1 or 2. The significance of the project will be determined based on compliance with the Tier 3 and 4 requirements. The project will be considered to have a significant impact if total annual GHG emissions exceed 3,000 MT CO₂EQ. If the 3,000 threshold is exceeded then the annual emissions per service population (the number of residents for residential projects and persons employed for commercial projects) should not exceed 4.6 MT CO₂EQ/yr./person, or a significant impact will be determined. Note that the methodology recommends that total construction emissions be amortized over a 30-year period or the project's expected lifetime if it is less than 30 years.

3.2 Project Emissions

Temporary impacts will result from construction activities. The primary source of GHG emissions generated by construction activities is from the use of diesel-powered construction equipment. Typical emission rates for construction equipment were obtained from CalEEMod (California Emissions Estimator Model). CalEEMod is a computer program that can be used to estimate emissions including operation (vehicle and area) sources, as well as construction projects associated with land development projects in California.

Using CalEEMod, the emissions from construction for the proposed project were calculated and are presented in Table 8. These emissions represent the total level of emissions based on the construction schedule. According to the SCAQMD's CEQA Handbook (Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group #5, August 27, 2008), construction emissions are amortized over the life of the project, defined by SCAQMD as 30 years, and are added to the annual operation emissions. Thus, the project's annualized construction emissions will be added to the operation emissions and compared to the applicable GHG significance threshold. Worksheets showing the specific data used to calculate the construction emissions are presented in the appendix.

Table 8 Construction GHG Emissions (Metric Tons Per Year)

	CO2	CH4	N2O	CO2EQ
Total Construction Emissions (Metric Tons)	594.6	0.1	0.0	598.0
Averaged Over 30 Years (Metric Tons Per Year)	19.8	0.0	0.0	19.9

MTCO2EQ = metric tons equivalent carbon dioxide (CO2).

The California Emissions Model (CalEEMod) developed by the SCAQMD in conjunction with the ARB was used to estimate the operational GHG emissions. The results are presented in Table 9. A complete breakdown of the emissions is provided in the Appendix.

Table 9 Annual Project Emissions (Metric Tons)

	CO2	CH4	N2O	CO2EQ
Annual Operational Emissions	330.3	0.3	0.0	338.2
Annualized Construction Emissions	19.8	0.0	0.0	19.9
Total Annual Emissions	350.1	0.3	0.0	358.1

Table 9 shows that the GHG emissions for the project will be about 358 MTCO2EQ per year. This is substantially lower than the SCAQMD Tier 3 screening threshold of 3,000 MTCO2EQ per year. The project emissions are below the SCAQMD threshold of 3,000 MTCO2EQ per year, and therefore, no significant climate change impacts are anticipated.

4.0 MITIGATION MEASURES

4.1 Construction Impacts

During site preparation and grading activities, it was assumed that the site would be watered three times per day. This is a standard requirement of the SCAQMD. Project construction-source air quality modeling assumes watering of the site three times per day during grading activities. Consistent with the construction-source emissions modeling assumptions presented herein, the following Mitigation Measure is incorporated:

AQ-1: During grading activities, work area(s) shall be watered a minimum of three times per day.

4.2 Operational Impacts

No air impacts will occur during operation, and therefore, mitigation measures are not needed.

4.3 Climate Change Impacts

Emissions of greenhouse gas are below established thresholds, and therefore, mitigation measures are not needed.

APPENDIX

Manning - East Avenue Homes - South Coast AQMD Air District, Winter

Manning - East Avenue Homes
South Coast AQMD Air District, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	17.00	Dwelling Unit	8.70	30,600.00	49.0
Parking Lot	0.93	Acre	0.93	40,510.80	0.0
City Park	0.42	Acre	0.42	18,295.20	0.0
	0.00		0.00	0.00	0.0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31.0
Climate Zone	10.0			Operational Year	2022.0
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.4	CH4 Intensity (lb/MW hr)	0.0	N2O Intensity (lb/MW hr)	0.0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreages adjusted for actual site plan.

Construction Phase - No demolition.

Woodstoves - Only natural gas fireplaces.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
------------	-------------	---------------	-----------

tblFireplaces	NumberGas	14.45	17.00
tblFireplaces	NumberNoFireplace	1.70	0.00
tblFireplaces	NumberWood	0.85	0.00
tblLandUse	LotAcreage	5.52	8.70
tblWoodstoves	NumberCatalytic	0.85	0.00
tblWoodstoves	NumberNoncatalytic	0.85	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5488	50.2641	32.6945	0.0642	18.2675	2.1989	20.4664	9.9840	2.0230	12.0071	0.0000	6,219.9383	6,219.9383	1.9486	0.0000	6,268.6522
2021	2.0761	18.5708	17.9033	0.0329	0.4169	0.9634	1.3803	0.1122	0.9057	1.0179	0.0000	3,165.4262	3,165.4262	0.6441	0.0000	3,181.5284
2022	10.3675	16.6914	17.5955	0.0327	0.4169	0.8134	1.2303	0.1122	0.7653	0.8774	0.0000	3,152.2936	3,152.2936	0.7178	0.0000	3,168.2547
Maximum	10.3675	50.2641	32.6945	0.0642	18.2675	2.1989	20.4664	9.9840	2.0230	12.0071	0.0000	6,219.9383	6,219.9383	1.9486	0.0000	6,268.6522

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					

2020	4.5488	50.2641	32.6945	0.0642	7.2470	2.1989	9.4460	3.9263	2.0230	5.9494	0.0000	6,219.9383	6,219.9383	1.9486	0.0000	6,268.6522
2021	2.0761	18.5708	17.9033	0.0329	0.4169	0.9634	1.3803	0.1122	0.9057	1.0179	0.0000	3,165.4262	3,165.4262	0.6441	0.0000	3,181.5284
2022	10.3675	16.6914	17.5955	0.0327	0.4169	0.8134	1.2303	0.1122	0.7653	0.8774	0.0000	3,152.2936	3,152.2936	0.7178	0.0000	3,168.2547
Maximum	10.3675	50.2641	32.6945	0.0642	7.2470	2.1989	9.4460	3.9263	2.0230	5.9494	0.0000	6,219.9383	6,219.9383	1.9486	0.0000	6,268.6522

	ROG	NOx	CO	SO2	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	57.69	0.00	47.76	59.34	0.00	43.57	0.00	0.00	0.00	0.00	0.00	0.00

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	0.7521	0.2982	1.5242	1.8700e-003		0.0306	0.0306		0.0306	0.0306	0.0000	362.5257	362.5257	9.3400e-003	6.6000e-003	364.7259
Energy	0.0154	0.1313	0.0559	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.6501	167.6501	3.2100e-003	3.0700e-003	168.6464
Mobile	0.2934	1.6094	3.8413	0.0148	1.2826	0.0119	1.2945	0.3432	0.0111	0.3543		1,506.9993	1,506.9993	0.0732		1,508.8296
Total	1.0609	2.0389	5.4213	0.0175	1.2826	0.0531	1.3357	0.3432	0.0523	0.3955	0.0000	2,037.1751	2,037.1751	0.0858	9.6700e-003	2,042.2019

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	0.7521	0.2982	1.5242	1.8700e-003		0.0306	0.0306		0.0306	0.0306	0.0000	362.5257	362.5257	9.3400e-003	6.6000e-003	364.7259
Energy	0.0154	0.1313	0.0559	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.6501	167.6501	3.2100e-003	3.0700e-003	168.6464
Mobile	0.2934	1.6094	3.8413	0.0148	1.2826	0.0119	1.2945	0.3432	0.0111	0.3543		1,506.9993	1,506.9993	0.0732		1,508.8296
Total	1.0609	2.0389	5.4213	0.0175	1.2826	0.0531	1.3357	0.3432	0.0523	0.3955	0.0000	2,037.1751	2,037.1751	0.0858	9.6700e-003	2,042.2019

	ROG	NOx	CO	SO2	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
1.0	Demolition	Demolition	9/1/2020	9/28/2020	5.0	20.0	
2.0	Site Preparation	Site Preparation	9/29/2020	10/12/2020	5.0	10.0	
3.0	Grading	Grading	10/13/2020	11/23/2020	5.0	30.0	
4.0	Building Construction	Building Construction	11/24/2020	1/17/2022	5.0	300.0	
5.0	Paving	Paving	1/18/2022	2/14/2022	5.0	20.0	
6.0	Architectural Coating	Architectural Coating	2/15/2022	3/14/2022	5.0	20.0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0.93

Residential Indoor: 61,965; Residential Outdoor: 20,655; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,431

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1.0	6.00	78.0	0.48
Demolition	Excavators	3.0	8.00	158.0	0.38
Demolition	Concrete/Industrial Saws	1.0	8.00	81.0	0.73

Grading	Excavators	2.0	8.00	158.0	0.38
Building Construction	Cranes	1.0	7.00	231.0	0.29
Building Construction	Forklifts	3.0	8.00	89.0	0.20
Building Construction	Generator Sets	1.0	8.00	84.0	0.74
Paving	Pavers	2.0	8.00	130.0	0.42
Paving	Rollers	2.0	8.00	80.0	0.38
Demolition	Rubber Tired Dozers	2.0	8.00	247.0	0.40
Grading	Rubber Tired Dozers	1.0	8.00	247.0	0.40
Building Construction	Tractors/Loaders/Backhoes	3.0	7.00	97.0	0.37
Grading	Graders	1.0	8.00	187.0	0.41
Grading	Tractors/Loaders/Backhoes	2.0	8.00	97.0	0.37
Paving	Paving Equipment	2.0	8.00	132.0	0.36
Site Preparation	Tractors/Loaders/Backhoes	4.0	8.00	97.0	0.37
Site Preparation	Rubber Tired Dozers	3.0	8.00	247.0	0.40
Grading	Scrapers	2.0	8.00	367.0	0.48
Building Construction	Welders	1.0	8.00	46.0	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	6.0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7.0	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8.0	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9.0	31.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6.0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1.0	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699
Total	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699

Mitigated Construction On-Site

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

Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699
Total	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.0599	0.6626	1.9300e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		192.6657	192.6657	5.5300e-003		192.8038
Total	0.0888	0.0599	0.6626	1.9300e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		192.6657	192.6657	5.5300e-003		192.8038

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	7.0458	2.1974	9.2433	3.8730	2.0216	5.8946	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.0599	0.6626	1.9300e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		192.6657	192.6657	5.5300e-003		192.8038
Total	0.0888	0.0599	0.6626	1.9300e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		192.6657	192.6657	5.5300e-003		192.8038

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0666	0.7362	2.1500e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5600e-003	0.0609		214.0730	214.0730	6.1400e-003		214.2265
Total	0.0987	0.0666	0.7362	2.1500e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5600e-003	0.0609		214.0730	214.0730	6.1400e-003		214.2265

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					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.3826	2.1739	5.5565	1.4026	2.0000	3.4026	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0666	0.7362	2.1500e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5600e-003	0.0609		214.0730	214.0730	6.1400e-003		214.2265
Total	0.0987	0.0666	0.7362	2.1500e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5600e-003	0.0609		214.0730	214.0730	6.1400e-003		214.2265

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0378	1.1531	0.3064	2.7500e-003	0.0704	5.8000e-003	0.0762	0.0203	5.5500e-003	0.0258		293.1641	293.1641	0.0204		293.6730
Worker	0.1530	0.1032	1.1411	3.3300e-003	0.3465	2.6300e-003	0.3491	0.0919	2.4200e-003	0.0943		331.8131	331.8131	9.5200e-003		332.0510
Total	0.1908	1.2563	1.4475	6.0800e-003	0.4169	8.4300e-003	0.4254	0.1122	7.9700e-003	0.1201		624.9772	624.9772	0.0299		625.7240

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0378	1.1531	0.3064	2.7500e-003	0.0704	5.8000e-003	0.0762	0.0203	5.5500e-003	0.0258		293.1641	293.1641	0.0204		293.6730
Worker	0.1530	0.1032	1.1411	3.3300e-003	0.3465	2.6300e-003	0.3491	0.0919	2.4200e-003	0.0943		331.8131	331.8131	9.5200e-003		332.0510
Total	0.1908	1.2563	1.4475	6.0800e-003	0.4169	8.4300e-003	0.4254	0.1122	7.9700e-003	0.1201		624.9772	624.9772	0.0299		625.7240

3.5 Building Construction - 2021

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0322	1.0458	0.2786	2.7300e-003	0.0704	2.1800e-003	0.0726	0.0203	2.0900e-003	0.0224		291.0052	291.0052	0.0195		291.4920
Worker	0.1430	0.0929	1.0495	3.2200e-003	0.3465	2.5500e-003	0.3491	0.0919	2.3500e-003	0.0942		321.0570	321.0570	8.6000e-003		321.2722
Total	0.1752	1.1387	1.3281	5.9500e-003	0.4169	4.7300e-003	0.4216	0.1122	4.4400e-003	0.1166		612.0623	612.0623	0.0281		612.7641

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0322	1.0458	0.2786	2.7300e-003	0.0704	2.1800e-003	0.0726	0.0203	2.0900e-003	0.0224		291.0052	291.0052	0.0195		291.4920
Worker	0.1430	0.0929	1.0495	3.2200e-003	0.3465	2.5500e-003	0.3491	0.0919	2.3500e-003	0.0942		321.0570	321.0570	8.6000e-003		321.2722

Total	0.1752	1.1387	1.3281	5.9500e-003	0.4169	4.7300e-003	0.4216	0.1122	4.4400e-003	0.1166		612.0623	612.0623	0.0281		612.7641
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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		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	0.9919	0.2634	2.7000e-003	0.0704	1.8900e-003	0.0723	0.0203	1.8100e-003	0.0221		288.4137	288.4137	0.0187		288.8819
Worker	0.1345	0.0839	0.9687	3.1100e-003	0.3465	2.4800e-003	0.3490	0.0919	2.2800e-003	0.0942		309.5463	309.5463	7.7700e-003		309.7406
Total	0.1647	1.0758	1.2321	5.8100e-003	0.4169	4.3700e-003	0.4213	0.1122	4.0900e-003	0.1163		597.9600	597.9600	0.0265		598.6225

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
Total	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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	0.9919	0.2634	2.7000e-003	0.0704	1.8900e-003	0.0723	0.0203	1.8100e-003	0.0221		288.4137	288.4137	0.0187		288.8819
Worker	0.1345	0.0839	0.9687	3.1100e-003	0.3465	2.4800e-003	0.3490	0.0919	2.2800e-003	0.0942		309.5463	309.5463	7.7700e-003		309.7406
Total	0.1647	1.0758	1.2321	5.8100e-003	0.4169	4.3700e-003	0.4213	0.1122	4.0900e-003	0.1163		597.9600	597.9600	0.0265		598.6225

3.6 Paving - 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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1218					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Total	1.2247	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0406	0.4687	1.5000e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		149.7805	149.7805	3.7600e-003		149.8745
Total	0.0651	0.0406	0.4687	1.5000e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		149.7805	149.7805	3.7600e-003		149.8745

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1218					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2247	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0406	0.4687	1.5000e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		149.7805	149.7805	3.7600e-003		149.8745
Total	0.0651	0.0406	0.4687	1.5000e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		149.7805	149.7805	3.7600e-003		149.8745

3.7 Architectural Coating - 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					
Archit. Coating	10.1370					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	10.3415	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Unmitigated Construction Off-Site

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

Worker	0.0260	0.0162	0.1875	6.0000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		59.9122	59.9122	1.5000e-003		59.9498
Total	0.0260	0.0162	0.1875	6.0000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		59.9122	59.9122	1.5000e-003		59.9498

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	10.1370					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	10.3415	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0260	0.0162	0.1875	6.0000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		59.9122	59.9122	1.5000e-003		59.9498
Total	0.0260	0.0162	0.1875	6.0000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		59.9122	59.9122	1.5000e-003		59.9498

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	0.2934	1.6094	3.8413	0.0148	1.2826	0.0119	1.2945	0.3432	0.0111	0.3543		1,506.9993	1,506.9993	0.0732		1,508.8296
Unmitigated	0.2934	1.6094	3.8413	0.0148	1.2826	0.0119	1.2945	0.3432	0.0111	0.3543		1,506.9993	1,506.9993	0.0732		1,508.8296

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.79	9.56	7.03	8,450	8,450
Parking Lot	0.00	0.00	0.00		
Single Family Housing	161.84	168.47	146.54	548,799	548,799
Total	162.63	178.03	153.57	557,249	557,249

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66.0	28.0	6.0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0.0	0.0	0.0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86.0	11.0	3.0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
City Park	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Parking Lot	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

Single Family Housing	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
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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	0.0154	0.1313	0.0559	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.6501	167.6501	3.2100e-003	3.0700e-003	168.6464
NaturalGas Unmitigated	0.0154	0.1313	0.0559	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.6501	167.6501	3.2100e-003	3.0700e-003	168.6464

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					
City Park	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
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
Single Family Housing	1425.03	0.0154	0.1313	0.0559	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.6501	167.6501	3.2100e-003	3.0700e-003	168.6464
Total		0.0154	0.1313	0.0559	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.6501	167.6501	3.2100e-003	3.0700e-003	168.6464

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					
City Park	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
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
Single Family Housing	1.42503	0.0154	0.1313	0.0559	8.4000e- 004		0.0106	0.0106		0.0106	0.0106		167.6501	167.6501	3.2100e- 003	3.0700e- 003	168.6464
Total		0.0154	0.1313	0.0559	8.4000e- 004		0.0106	0.0106		0.0106	0.0106		167.6501	167.6501	3.2100e- 003	3.0700e- 003	168.6464

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	0.7521	0.2982	1.5242	1.8700e- 003		0.0306	0.0306		0.0306	0.0306	0.0000	362.5257	362.5257	9.3400e- 003	6.6000e- 003	364.7259
Unmitigated	0.7521	0.2982	1.5242	1.8700e- 003		0.0306	0.0306		0.0306	0.0306	0.0000	362.5257	362.5257	9.3400e- 003	6.6000e- 003	364.7259

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	0.0556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6212					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0330	0.2820	0.1200	1.8000e-003		0.0228	0.0228		0.0228	0.0228	0.0000	360.0000	360.0000	6.9000e-003	6.6000e-003	362.1393
Landscaping	0.0424	0.0162	1.4042	7.0000e-005		7.7600e-003	7.7600e-003		7.7600e-003	7.7600e-003		2.5257	2.5257	2.4400e-003		2.5866
Total	0.7521	0.2982	1.5242	1.8700e-003		0.0306	0.0306		0.0306	0.0306	0.0000	362.5257	362.5257	9.3400e-003	6.6000e-003	364.7259

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	0.0556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6212					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0330	0.2820	0.1200	1.8000e-003		0.0228	0.0228		0.0228	0.0228	0.0000	360.0000	360.0000	6.9000e-003	6.6000e-003	362.1393
Landscaping	0.0424	0.0162	1.4042	7.0000e-005		7.7600e-003	7.7600e-003		7.7600e-003	7.7600e-003		2.5257	2.5257	2.4400e-003		2.5866
Total	0.7521	0.2982	1.5242	1.8700e-003		0.0306	0.0306		0.0306	0.0306	0.0000	362.5257	362.5257	9.3400e-003	6.6000e-003	364.7259

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

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

Manning - East Avenue Homes - South Coast AQMD Air District, Annual

Manning - East Avenue Homes
South Coast AQMD Air District, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	17.00	Dwelling Unit	8.70	30,600.00	49
Parking Lot	0.93	Acre	0.93	40,510.80	0
City Park	0.42	Acre	0.42	18,295.20	0
	0.00		0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreages adjusted for actual site plan.

Construction Phase - No demolition.

Woodstoves - Only natural gas fireplaces.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
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tblFireplaces	NumberGas	14.45	17.00
tblFireplaces	NumberNoFireplace	1.70	0.00
tblFireplaces	NumberWood	0.85	0.00
tblLandUse	LotAcreage	5.52	8.70
tblWoodstoves	NumberCatalytic	0.85	0.00
tblWoodstoves	NumberNoncatalytic	0.85	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1548	1.5854	1.0813	2.0300e-003	0.2321	0.0760	0.3081	0.1067	0.0704	0.1771	0.0000	178.2733	178.2733	0.0499	0.0000	179.5201
2021	0.2690	2.4263	2.3385	4.3000e-003	0.0534	0.1257	0.1791	0.0144	0.1182	0.1326	0.0000	375.9951	375.9951	0.0762	0.0000	377.8997
2022	0.1267	0.2178	0.2676	4.6000e-004	4.5600e-003	0.0110	0.0155	1.2200e-003	0.0103	0.0115	0.0000	40.2957	40.2957	9.8700e-003	0.0000	40.5426
Maximum	0.2690	2.4263	2.3385	4.3000e-003	0.2321	0.1257	0.3081	0.1067	0.1182	0.1771	0.0000	375.9951	375.9951	0.0762	0.0000	377.8997

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					

2020	0.1548	1.5854	1.0813	2.0300e-003	0.0976	0.0760	0.1736	0.0435	0.0704	0.1139	0.0000	178.2731	178.2731	0.0499	0.0000	179.5199
2021	0.2690	2.4263	2.3385	4.3000e-003	0.0534	0.1257	0.1791	0.0144	0.1182	0.1326	0.0000	375.9947	375.9947	0.0762	0.0000	377.8993
2022	0.1267	0.2178	0.2676	4.6000e-004	4.5600e-003	0.0110	0.0155	1.2200e-003	0.0103	0.0115	0.0000	40.2957	40.2957	9.8700e-003	0.0000	40.5425
Maximum	0.2690	2.4263	2.3385	4.3000e-003	0.0976	0.1257	0.1791	0.0435	0.1182	0.1326	0.0000	375.9947	375.9947	0.0762	0.0000	377.8993

	ROG	NOx	CO	SO2	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	46.36	0.00	26.74	51.66	0.00	19.67	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	9-1-2020	11-30-2020	1.4785	1.4785
2	12-1-2020	2-28-2021	0.6870	0.6870
3	3-1-2021	5-31-2021	0.6780	0.6780
4	6-1-2021	8-31-2021	0.6778	0.6778
5	9-1-2021	11-30-2021	0.6708	0.6708
6	12-1-2021	2-28-2022	0.5248	0.5248
7	3-1-2022	5-31-2022	0.0590	0.0590
		Highest	1.4785	1.4785

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	0.1292	5.5500e-003	0.1770	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	4.3687	4.3687	3.5000e-004	7.0000e-005	4.3999
Energy	2.8000e-003	0.0240	0.0102	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	79.4874	79.4874	2.6700e-003	9.5000e-004	79.8374
Mobile	0.0482	0.2748	0.6558	2.5200e-003	0.2117	2.0000e-003	0.2137	0.0567	1.8600e-003	0.0586	0.0000	233.1566	233.1566	0.0111	0.0000	233.4336
Waste						0.0000	0.0000		0.0000	0.0000	4.0862	0.0000	4.0862	0.2415	0.0000	10.1234

Water						0.0000	0.0000		0.0000	0.0000	0.3514	8.8385	9.1899	0.0365	9.3000e-004	10.3778
Total	0.1802	0.3043	0.8430	2.7000e-003	0.2117	5.1900e-003	0.2169	0.0567	5.0500e-003	0.0618	4.4376	325.8513	330.2889	0.2921	1.9500e-003	338.1722

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	0.1292	5.5500e-003	0.1770	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	4.3687	4.3687	3.5000e-004	7.0000e-005	4.3999
Energy	2.8000e-003	0.0240	0.0102	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	79.4874	79.4874	2.6700e-003	9.5000e-004	79.8374
Mobile	0.0482	0.2748	0.6558	2.5200e-003	0.2117	2.0000e-003	0.2137	0.0567	1.8600e-003	0.0586	0.0000	233.1566	233.1566	0.0111	0.0000	233.4336
Waste						0.0000	0.0000		0.0000	0.0000	4.0862	0.0000	4.0862	0.2415	0.0000	10.1234
Water						0.0000	0.0000		0.0000	0.0000	0.3514	8.8385	9.1899	0.0365	9.3000e-004	10.3778
Total	0.1802	0.3043	0.8430	2.7000e-003	0.2117	5.1900e-003	0.2169	0.0567	5.0500e-003	0.0618	4.4376	325.8513	330.2889	0.2921	1.9500e-003	338.1722

	ROG	NOx	CO	SO2	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	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/12/2020	5	10	
3	Grading	Grading	10/13/2020	11/23/2020	5	30	
4	Building Construction	Building Construction	11/24/2020	1/17/2022	5	300	

5	Paving	Paving	1/18/2022	2/14/2022	5	20
6	Architectural Coating	Architectural Coating	2/15/2022	3/14/2022	5	20

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0.93

Residential Indoor: 61,965; Residential Outdoor: 20,655; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,431

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	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	0.00	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	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	31.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	5.1000e-004	5.6800e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4815	1.4815	4.0000e-005	0.0000	1.4826
Total	6.7000e-004	5.1000e-004	5.6800e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4815	1.4815	4.0000e-005	0.0000	1.4826

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	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	5.1000e-004	5.6800e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4815	1.4815	4.0000e-005	0.0000	1.4826
Total	6.7000e-004	5.1000e-004	5.6800e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4815	1.4815	4.0000e-005	0.0000	1.4826

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e-004	0.0903	0.0110	0.1013	0.0497	0.0101	0.0598	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

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	4.0000e-004	3.1000e-004	3.4100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8889	0.8889	3.0000e-005	0.0000	0.8895
Total	4.0000e-004	3.1000e-004	3.4100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8889	0.8889	3.0000e-005	0.0000	0.8895

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e-004	0.0352	0.0110	0.0462	0.0194	0.0101	0.0295	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

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	4.0000e-004	3.1000e-004	3.4100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8889	0.8889	3.0000e-005	0.0000	0.8895
Total	4.0000e-004	3.1000e-004	3.4100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8889	0.8889	3.0000e-005	0.0000	0.8895

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872
Total	0.0668	0.7530	0.4794	9.3000e-004	0.1301	0.0326	0.1627	0.0540	0.0300	0.0840	0.0000	81.7264	81.7264	0.0264	0.0000	82.3872

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	1.3400e-003	1.0300e-003	0.0114	3.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.9630	2.9630	9.0000e-005	0.0000	2.9651
Total	1.3400e-003	1.0300e-003	0.0114	3.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.9630	2.9630	9.0000e-005	0.0000	2.9651

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					0.0507	0.0000	0.0507	0.0210	0.0000	0.0210	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871
Total	0.0668	0.7530	0.4794	9.3000e-004	0.0507	0.0326	0.0834	0.0210	0.0300	0.0510	0.0000	81.7263	81.7263	0.0264	0.0000	82.3871

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
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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	1.3400e-003	1.0300e-003	0.0114	3.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.9630	2.9630	9.0000e-005	0.0000	2.9651
Total	1.3400e-003	1.0300e-003	0.0114	3.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.9630	2.9630	9.0000e-005	0.0000	2.9651

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0297	0.2686	0.2359	3.8000e-004		0.0156	0.0156		0.0147	0.0147	0.0000	32.4254	32.4254	7.9100e-003	0.0000	32.6232
Total	0.0297	0.2686	0.2359	3.8000e-004		0.0156	0.0156		0.0147	0.0147	0.0000	32.4254	32.4254	7.9100e-003	0.0000	32.6232

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2000e-004	0.0164	4.0700e-003	4.0000e-005	9.7000e-004	8.0000e-005	1.0500e-003	2.8000e-004	8.0000e-005	3.6000e-004	0.0000	3.7877	3.7877	2.5000e-004	0.0000	3.7939
Worker	1.9400e-003	1.4900e-003	0.0164	5.0000e-005	4.7600e-003	4.0000e-005	4.8000e-003	1.2600e-003	3.0000e-005	1.3000e-003	0.0000	4.2865	4.2865	1.2000e-004	0.0000	4.2896

Total	2.4600e-003	0.0179	0.0205	9.0000e-005	5.7300e-003	1.2000e-004	5.8500e-003	1.5400e-003	1.1000e-004	1.6600e-003	0.0000	8.0741	8.0741	3.7000e-004	0.0000	8.0834
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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	0.0297	0.2686	0.2359	3.8000e-004		0.0156	0.0156		0.0147	0.0147	0.0000	32.4254	32.4254	7.9100e-003	0.0000	32.6231
Total	0.0297	0.2686	0.2359	3.8000e-004		0.0156	0.0156		0.0147	0.0147	0.0000	32.4254	32.4254	7.9100e-003	0.0000	32.6231

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2000e-004	0.0164	4.0700e-003	4.0000e-005	9.7000e-004	8.0000e-005	1.0500e-003	2.8000e-004	8.0000e-005	3.6000e-004	0.0000	3.7877	3.7877	2.5000e-004	0.0000	3.7939
Worker	1.9400e-003	1.4900e-003	0.0164	5.0000e-005	4.7600e-003	4.0000e-005	4.8000e-003	1.2600e-003	3.0000e-005	1.3000e-003	0.0000	4.2865	4.2865	1.2000e-004	0.0000	4.2896
Total	2.4600e-003	0.0179	0.0205	9.0000e-005	5.7300e-003	1.2000e-004	5.8500e-003	1.5400e-003	1.1000e-004	1.6600e-003	0.0000	8.0741	8.0741	3.7000e-004	0.0000	8.0834

3.5 Building Construction - 2021

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	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

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	4.0800e-003	0.1389	0.0344	3.6000e-004	9.0500e-003	2.8000e-004	9.3300e-003	2.6100e-003	2.7000e-004	2.8800e-003	0.0000	35.0472	35.0472	2.2200e-003	0.0000	35.1026
Worker	0.0169	0.0125	0.1410	4.3000e-004	0.0444	3.3000e-004	0.0447	0.0118	3.1000e-004	0.0121	0.0000	38.6612	38.6612	1.0400e-003	0.0000	38.6872
Total	0.0209	0.1514	0.1754	7.9000e-004	0.0534	6.1000e-004	0.0541	0.0144	5.8000e-004	0.0150	0.0000	73.7085	73.7085	3.2600e-003	0.0000	73.7898

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	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

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	4.0800e-003	0.1389	0.0344	3.6000e-004	9.0500e-003	2.8000e-004	9.3300e-003	2.6100e-003	2.7000e-004	2.8800e-003	0.0000	35.0472	35.0472	2.2200e-003	0.0000	35.1026
Worker	0.0169	0.0125	0.1410	4.3000e-004	0.0444	3.3000e-004	0.0447	0.0118	3.1000e-004	0.0121	0.0000	38.6612	38.6612	1.0400e-003	0.0000	38.6872
Total	0.0209	0.1514	0.1754	7.9000e-004	0.0534	6.1000e-004	0.0541	0.0144	5.8000e-004	0.0150	0.0000	73.7085	73.7085	3.2600e-003	0.0000	73.7898

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	9.3800e-003	0.0859	0.0900	1.5000e-004		4.4500e-003	4.4500e-003		4.1900e-003	4.1900e-003	0.0000	12.7449	12.7449	3.0500e-003	0.0000	12.8212
Total	9.3800e-003	0.0859	0.0900	1.5000e-004		4.4500e-003	4.4500e-003		4.1900e-003	4.1900e-003	0.0000	12.7449	12.7449	3.0500e-003	0.0000	12.8212

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.5500e-003	1.3700e-003	2.0000e-005	3.8000e-004	1.0000e-005	3.9000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4641	1.4641	9.0000e-005	0.0000	1.4663
Worker	6.7000e-004	4.7000e-004	5.4900e-003	2.0000e-005	1.8700e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.5710	1.5710	4.0000e-005	0.0000	1.5720
Total	8.3000e-004	6.0200e-003	6.8600e-003	4.0000e-005	2.2500e-003	2.0000e-005	2.2700e-003	6.1000e-004	2.0000e-005	6.3000e-004	0.0000	3.0351	3.0351	1.3000e-004	0.0000	3.0383

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	9.3800e-003	0.0859	0.0900	1.5000e-004		4.4500e-003	4.4500e-003		4.1900e-003	4.1900e-003	0.0000	12.7449	12.7449	3.0500e-003	0.0000	12.8212
Total	9.3800e-003	0.0859	0.0900	1.5000e-004		4.4500e-003	4.4500e-003		4.1900e-003	4.1900e-003	0.0000	12.7449	12.7449	3.0500e-003	0.0000	12.8212

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.5500e-003	1.3700e-003	2.0000e-005	3.8000e-004	1.0000e-005	3.9000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4641	1.4641	9.0000e-005	0.0000	1.4663

Worker	6.7000e-004	4.7000e-004	5.4900e-003	2.0000e-005	1.8700e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.5710	1.5710	4.0000e-005	0.0000	1.5720
Total	8.3000e-004	6.0200e-003	6.8600e-003	4.0000e-005	2.2500e-003	2.0000e-005	2.2700e-003	6.1000e-004	2.0000e-005	6.3000e-004	0.0000	3.0351	3.0351	1.3000e-004	0.0000	3.0383

3.6 Paving - 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	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	1.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0123	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895

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	5.9000e-004	4.2000e-004	4.8300e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3821	1.3821	3.0000e-005	0.0000	1.3830
Total	5.9000e-004	4.2000e-004	4.8300e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3821	1.3821	3.0000e-005	0.0000	1.3830

Mitigated Construction On-Site

Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	0.1034	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

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	2.3000e-004	1.7000e-004	1.9300e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5528	0.5528	1.0000e-005	0.0000	0.5532
Total	2.3000e-004	1.7000e-004	1.9300e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5528	0.5528	1.0000e-005	0.0000	0.5532

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	0.1014					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	0.1034	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

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	2.3000e-004	1.7000e-004	1.9300e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5528	0.5528	1.0000e-005	0.0000	0.5532
Total	2.3000e-004	1.7000e-004	1.9300e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5528	0.5528	1.0000e-005	0.0000	0.5532

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	0.0482	0.2748	0.6558	2.5200e-003	0.2117	2.0000e-003	0.2137	0.0567	1.8600e-003	0.0586	0.0000	233.1566	233.1566	0.0111	0.0000	233.4336
Unmitigated	0.0482	0.2748	0.6558	2.5200e-003	0.2117	2.0000e-003	0.2137	0.0567	1.8600e-003	0.0586	0.0000	233.1566	233.1566	0.0111	0.0000	233.4336

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.79	9.56	7.03	8,450	8,450
Parking Lot	0.00	0.00	0.00		

Single Family Housing	161.84	168.47	146.54	548,799	548,799
Total	162.63	178.03	153.57	557,249	557,249

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
City Park	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Parking Lot	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Single Family Housing	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	51.7310	51.7310	2.1400e-003	4.4000e-004	51.9161
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	51.7310	51.7310	2.1400e-003	4.4000e-004	51.9161
Natural Gas Mitigated	2.8000e-003	0.0240	0.0102	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.7564	27.7564	5.3000e-004	5.1000e-004	27.9213

NaturalGas Unmitigated	2.8000e- 003	0.0240	0.0102	1.5000e- 004		1.9400e- 003	1.9400e- 003		1.9400e- 003	1.9400e- 003	0.0000	27.7564	27.7564	5.3000e- 004	5.1000e- 004	27.9213
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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	0.0000
Single Family Housing	520135	2.8000e- 003	0.0240	0.0102	1.5000e- 004		1.9400e- 003	1.9400e- 003		1.9400e- 003	1.9400e-003	0.0000	27.7564	27.7564	5.3000e- 004	5.1000e- 004	27.9213
Total		2.8000e- 003	0.0240	0.0102	1.5000e- 004		1.9400e- 003	1.9400e- 003		1.9400e- 003	1.9400e-003	0.0000	27.7564	27.7564	5.3000e- 004	5.1000e- 004	27.9213

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	0.0000
Single Family Housing	520135	2.8000e- 003	0.0240	0.0102	1.5000e- 004		1.9400e- 003	1.9400e- 003		1.9400e- 003	1.9400e-003	0.0000	27.7564	27.7564	5.3000e- 004	5.1000e- 004	27.9213
Total		2.8000e- 003	0.0240	0.0102	1.5000e- 004		1.9400e- 003	1.9400e- 003		1.9400e- 003	1.9400e-003	0.0000	27.7564	27.7564	5.3000e- 004	5.1000e- 004	27.9213

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	14178.8	4.5177	1.9000e-004	4.0000e-005	4.5338
Single Family Housing	148180	47.2134	1.9500e-003	4.0000e-004	47.3823
Total		51.7310	2.1400e-003	4.4000e-004	51.9161

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	14178.8	4.5177	1.9000e-004	4.0000e-005	4.5338
Single Family Housing	148180	47.2134	1.9500e-003	4.0000e-004	47.3823
Total		51.7310	2.1400e-003	4.4000e-004	51.9161

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1292	5.5500e-003	0.1770	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	4.3687	4.3687	3.5000e-004	7.0000e-005	4.3999
Unmitigated	0.1292	5.5500e-003	0.1770	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	4.3687	4.3687	3.5000e-004	7.0000e-005	4.3999

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1134					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.1000e-004	3.5200e-003	1.5000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0823	4.0823	8.0000e-005	7.0000e-005	4.1066
Landscaping	5.3000e-003	2.0200e-003	0.1755	1.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	0.2864	0.2864	2.8000e-004	0.0000	0.2933
Total	0.1292	5.5400e-003	0.1770	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	4.3687	4.3687	3.6000e-004	7.0000e-005	4.3999

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1134					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.1000e-004	3.5200e-003	1.5000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0823	4.0823	8.0000e-005	7.0000e-005	4.1066
Landscaping	5.3000e-003	2.0200e-003	0.1755	1.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	0.2864	0.2864	2.8000e-004	0.0000	0.2933
Total	0.1292	5.5400e-003	0.1770	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	4.3687	4.3687	3.6000e-004	7.0000e-005	4.3999

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.1899	0.0365	9.3000e-004	10.3778
Unmitigated	9.1899	0.0365	9.3000e-004	10.3778

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
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Land Use	Mgal	MT/yr			
City Park	0 / 0.500422	1.7714	7.0000e-005	2.0000e-005	1.7778
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.10762 / 0.698281	7.4185	0.0364	9.1000e-004	8.6000
Total		9.1899	0.0365	9.3000e-004	10.3778

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.500422	1.7714	7.0000e-005	2.0000e-005	1.7778
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.10762 / 0.698281	7.4185	0.0364	9.1000e-004	8.6000
Total		9.1899	0.0365	9.3000e-004	10.3778

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			

Mitigated	4.0862	0.2415	0.0000	10.1234
Unmitigated	4.0862	0.2415	0.0000	10.1234

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.04	8.1200e-003	4.8000e-004	0.0000	0.0201
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	20.09	4.0781	0.2410	0.0000	10.1033
Total		4.0862	0.2415	0.0000	10.1234

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.04	8.1200e-003	4.8000e-004	0.0000	0.0201
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	20.09	4.0781	0.2410	0.0000	10.1033
Total		4.0862	0.2415	0.0000	10.1234

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

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
